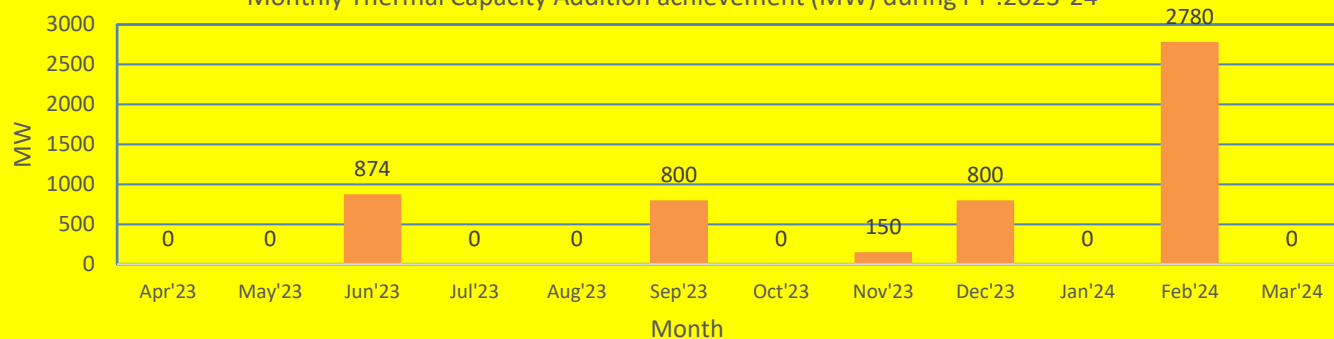


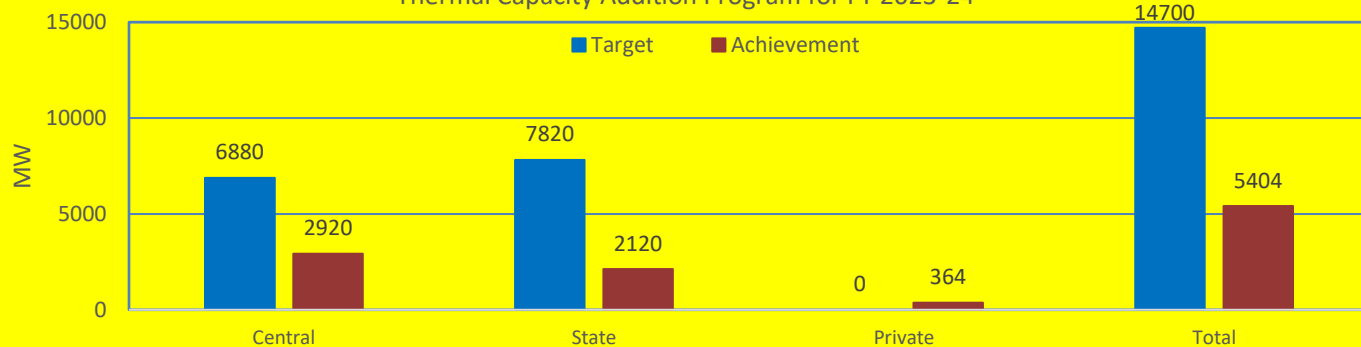


# BROAD STATUS REPORT OF UNDER CONSTRUCTION THERMAL POWER PROJECTS (MARCH, 2024)

Monthly Thermal Capacity Addition achievement (MW) during FY :2023-24



Thermal Capacity Addition Program for FY 2023-24



**Thermal Project Monitoring Division**  
**Central Electricity Authority**  
**New Delhi**

**Ministry of Power**  
**Government of India**

[www.cea.nic.in](http://www.cea.nic.in)

(In fulfillment of CEA's obligation under section 73(f) of Electricity Act, 2003)

## **FOREWORD**

As per clause 73(f) of the Electricity Act 2003, Central Electricity Authority is to “promote and assist in the timely completion of schemes and projects”. The Thermal Project Monitoring (TPM) Division of CEA is entrusted with the responsibility of monitoring the progress of construction/erection activities of all the thermal power projects in the country till the units are commissioned. Visits are also made by CEA officers to the sites for assessing the on the spot progress of works and rendering the advice/assistance in solving the problems being faced by the project authorities, thereby helping the project authorities to avoid / minimize the time and cost overrunsof the thermal power projects.

In this context, Thermal Project Monitoring Division, Central Electricity Authority has been bringing out the monthly report titled “Broad Status of Thermal Power Projects in the Country”. This report gives year-wise details of thermal power projects commissioned during the last five years. Further, the Report includes up-to- date information on thermal power projects under construction in the country wherein the details regarding name of the Project, capacity, location, implementing agency, commissioning schedule, type of fuel, estimated cost, physical and financial progress, the milestones achieved as on date etc. are available. The critical issues requiring immediate attention of concerned authorities in the implementation of these thermal power projects have also been highlighted.

The Broad Status Report is being brought out regularly by TPM Division on the basis of the data forwarded by various project authorities, visits made by CEA officers to various power projects, discussions held with the executing agencies and suppliers of equipment from time to time.

CEA welcomes feedback for further improvement in the Broad Status Report.

**Chief Engineer (TPM)**

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## EXECUTIVE SUMMARY

### I. All India Installed Capacity (MW)\*

|                  | Thermal |         |       |        |        | Nuclear | Hydro  | RES    | Grand total |
|------------------|---------|---------|-------|--------|--------|---------|--------|--------|-------------|
| Sector           | Coal    | Lignite | Gas   | Diesel | Total  |         |        |        |             |
| State            | 69438   | 1150    | 7012  | 280    | 77880  | 0       | 27254  | 2535   | 107669      |
| Private          | 73512   | 1830    | 10788 | 309    | 86439  | 0       | 3931   | 139477 | 229847      |
| Central          | 68020   | 3640    | 7238  | 0      | 78898  | 8180    | 15743  | 1632   | 104453      |
| Total            | 210969  | 6620    | 25038 | 589    | 243217 | 8180    | 46928  | 143645 | 441970      |
| % of Grand Total | 47.73%  | 1.50%   | 5.67% | 0.13%  | 55.03% | 1.85%   | 10.62% | 32.50% | 100.00%     |

\*Compiled from Installed Capacity Report on CEA's website (as on 31.03.2024).

### II. Tentative Year-wise Target of Thermal Capacity to be included into National Capacity :

(as on 31.03.2024)

| FY      | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | Total (MW) |
|---------|---------|---------|---------|---------|---------|---------|---------|------------|
| Central | 2920    | 6740    | 1600    | 660     | 1460    | 2400    | 2400    | 18180      |
| State   | 2120    | 9620    | 800     | 1320    | 0       | 0       | 800     | 13660      |
| Private | 0       | 0       | 0       | 800     | 800     | 0       | 0       | 1600       |
| Total   | 5040    | 15360   | 2400    | 2780    | 2260    | 2400    | 3200    | 33440*     |

\*Yelahanka CCPP (370 MW), Uppur SCTPP (2x800 MW) and Ennore Exp TPP (1x660 MW) have not been included in this capacity.

### III. Details of Technology wise Under Construction TPPs (excluding stressed TPPs) in the country:

(as on 31.03.2024)

| Sector  | Super Critical # |               | Sub-Critical    |               | Total           |               |
|---------|------------------|---------------|-----------------|---------------|-----------------|---------------|
|         | No. of Projects  | Capacity (MW) | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) |
|         | [Units]          |               | [Units]         |               | [Units]         |               |
| Central | 10 [21]          | 15260         | 0               | 0             | 10 [21]         | 15260         |
| State   | 12 [19]          | 13800         | 1 [1]           | 370           | 13 [20]         | 14170         |
| Private | 1 [2]            | 1600          | 0               | 0             | 1 [2]           | 1600          |
| Total   | 23 [42]          | 30660         | 1 [1]           | 370           | 24 [43]         | 31030         |

# Out of the 23 Supercritical TPPs, 10 projects (19 units) of total capacity 14360 MW are based on Ultra Super critical technology.

[ 6 projects (14 units) in Central sector of capacity 10640 MW,

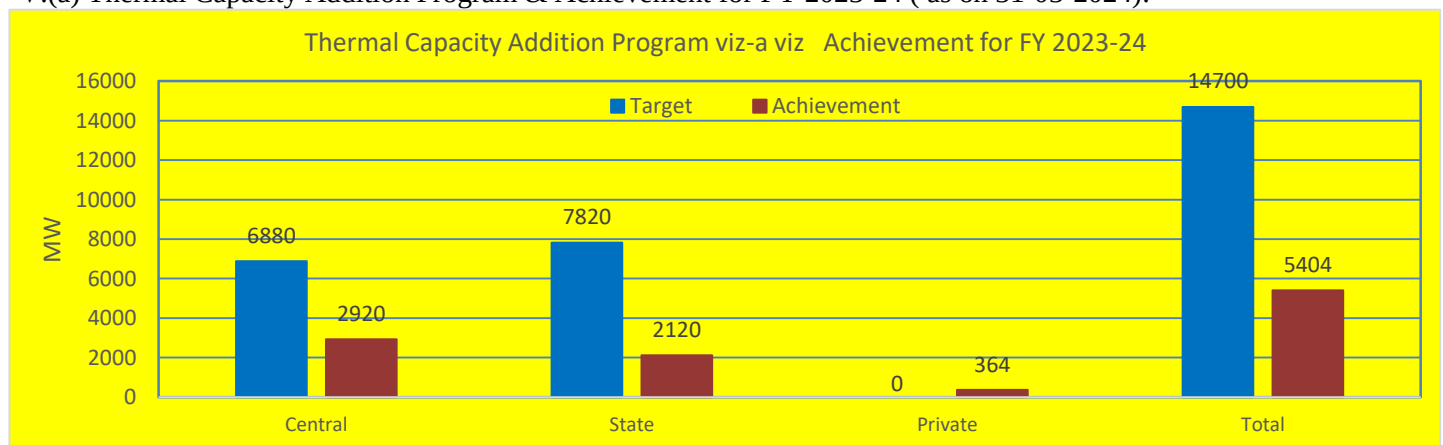
[ 3 projects (3 units) in State sector of capacity 2120 MW and

[ 1 project (2 units) in Private sector of capacity 1600 MW]. The details of these projects are given in Table 1.2

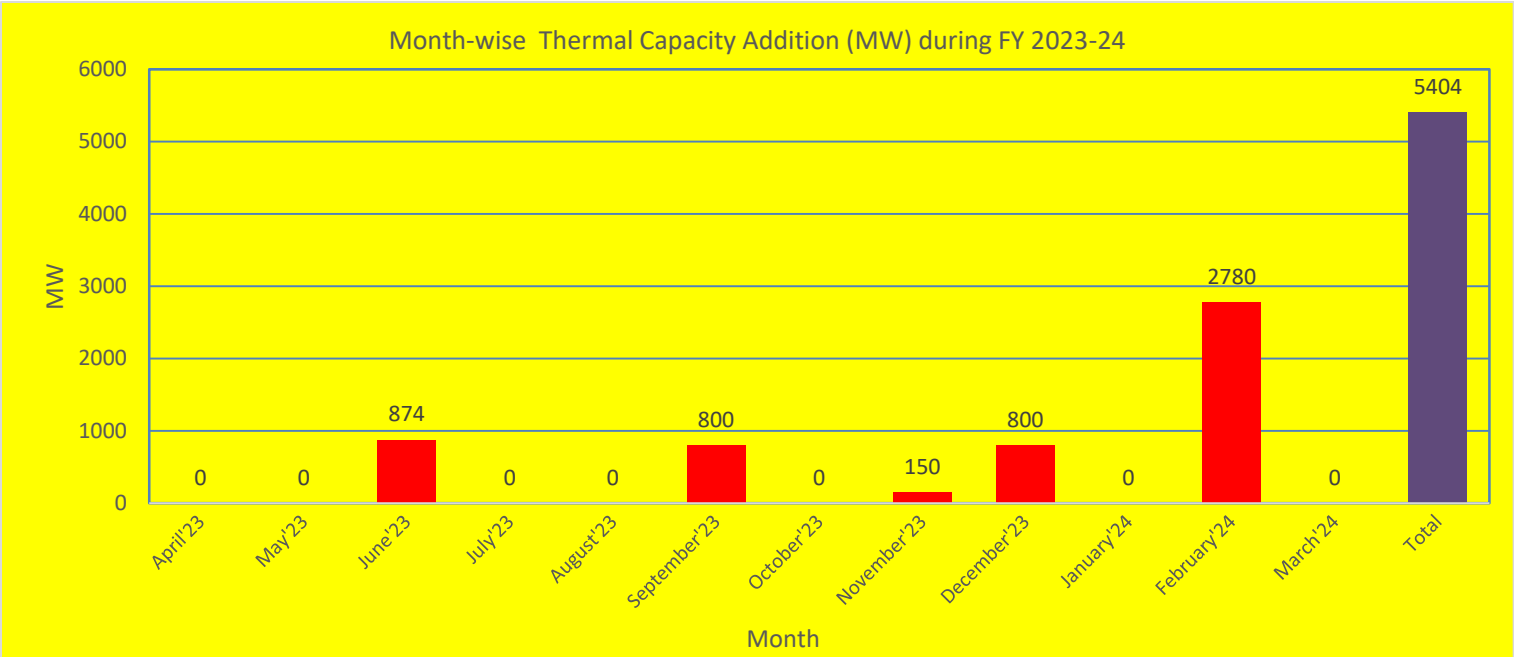
### IV. Sector-wise Thermal Capacity Addition during last five years :

|         | FY:2018 -19 |             | FY:2019-20 |             | FY:2020-21 |             | FY:2021-22 |             | FY:2022-23 |             |
|---------|-------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| Sector  | Target      | Achievement | Target     | Achievement | Target     | Achievement | Target     | Achievement | Target     | Achievement |
| Central | 2760        | 1960        | 6040       | 3940        | 5790       | 4080        | 5400       | 2370        | 3580       | 660         |
| State   | 4506        | 2850        | 4256       | 2780        | 4276       | 846         | 4360       | 1590        | 2770       | 800         |
| Private | Nil         | 972         | Nil        | 45          | 525        | 0           | 525        | 525         | 0          | 0           |
| Total   | 7266        | 5782        | 10296      | 6765        | 10591      | 4926        | 10285      | 4485        | 6350       | 1460        |

### V.(a) Thermal Capacity Addition Program & Achievement for FY 2023-24 ( as on 31-03-2024):



V.(b) Month-wise Thermal Capacity Addition upto March-2024 (FY 2023-24):



### 1.1 Tentative Thermal Capacity Addition Program and Actual Achievement for FY 2023-24:

(as on 31.03.2024)

| S. No.                  | Project Name                 | Implementing Agency | State             | Boiler (SG) & Turbine(TG) Make  | Unit No | Targeted Capacity (MW) | Anticipated Trial Run (as on 01-04-2023) | Trial Run Assessment as per latest review by CEA | Capacity Achieved (MW) | Actual Date of Capacity Addition |
|-------------------------|------------------------------|---------------------|-------------------|---------------------------------|---------|------------------------|------------------------------------------|--------------------------------------------------|------------------------|----------------------------------|
| CENTRAL SECTOR          |                              |                     |                   |                                 |         |                        |                                          |                                                  |                        |                                  |
| 1                       | Barh STPP, St-I              | NTPC                | Bihar             | SG-TPE/DPSI   TG-Power Machines | U-2     | 660                    | Apr-2023                                 | Jun-2023                                         | 660                    | 30.06.2023                       |
| 2                       | Telangana STPP, St- I        | NTPC                | Telangana         | SG-BHEL   TG-GE                 | U-1     | 800                    | Jun-2023                                 | Sep-2023                                         | 800                    | 05.09.2023                       |
|                         |                              |                     |                   |                                 | U-2     | 800                    | Jul-2023                                 | Feb-2024                                         | 800                    | 11.02.2024                       |
| 3                       | North Karanpura STPP         | NTPC                | Jharkhand         | SG-BHEL (EPC)   TG-BHEL (EPC)   | U-2     | 660                    | Nov-2023                                 | Feb-2024                                         | 660                    | 28.02.2024                       |
| 4                       | Buxar TPP                    | SJVN                | Bihar             | SG-L&T (EPC)   TG-L&T (EPC)     | U-1     | 660                    | Dec-2023                                 | Sep-2024                                         | slipped                |                                  |
|                         |                              |                     |                   |                                 | U-2     | 660                    | Mar-2024                                 | Dec-2024                                         | slipped                |                                  |
| 5                       | Ghatampur TPP                | NUPPL               | Uttar Pradesh     | SG-L&T-MHI   TG-GE              | U-1     | 660                    | Jul-2023                                 | Jun-2024                                         | slipped                |                                  |
|                         |                              |                     |                   |                                 | U-2     | 660                    | Oct-2023                                 | Nov-2024                                         | slipped                |                                  |
|                         |                              |                     |                   |                                 | U-3     | 660                    | Dec-2023                                 | Mar-2025                                         | slipped                |                                  |
| 6                       | Khurja SCTPP                 | THDC                | Uttar Pradesh     | SG-L&T-MHI   TG-BHEL            | U-1     | 660                    | Feb-2024                                 | Sept-2024                                        | slipped                |                                  |
| Total (Central Sector)  |                              |                     | No. of Units : 10 |                                 |         | 6880                   | 6880 (10)                                | 2920 (4)                                         | 2920 (4)               |                                  |
| STATE SECTOR            |                              |                     |                   |                                 |         |                        |                                          |                                                  |                        |                                  |
| 7                       | Dr. Narla Tata Rao TPS, St-V | APGENCO             | Andhra Pradesh    | SG-BHEL   TG-BHEL               | U-8     | 800                    | Jun-2023                                 | Dec-2023                                         | 800                    | 20.12.2023                       |
| 8                       | Jawaharpur STPP              | UPRVUNL             | Uttar Pradesh     | SG-DPSI (EPC)   TG-DPSI (EPC)   | U-1     | 660                    | Jun-2023                                 | Feb-2024                                         | 660                    | 09.02.2024                       |
|                         |                              |                     |                   |                                 | U-2     | 660                    | Dec-2023                                 | Jun-2024                                         | slipped                |                                  |
| 9                       | Obra-C STPP                  | UPRVUNL             | Uttar Pradesh     | SG-DPSI (EPC)   TG-DPSI (EPC)   | U-1     | 660                    | Jun-2023                                 | Feb-2024                                         | 660                    | 02.02.2024                       |
|                         |                              |                     |                   |                                 | U-2     | 660                    | Jan-2024                                 | Jul-2024                                         | slipped                |                                  |
| 10                      | Panki TPS Extn.              | UPRVUNL             | Uttar Pradesh     | SG-BHEL (EPC)   TG-BHEL (EPC)   | U-1     | 660                    | Jan-2024                                 | Sep-2024                                         | slipped                |                                  |
| 11                      | North Chennai TPP, St-III    | TANGEDCO            | Tamil Nadu        | SG-BHEL   TG-BHEL               | U-1     | 800                    | Sep-2023                                 | Apr-2024                                         | slipped                |                                  |
| 12                      | Udangudi STPP, St-I          | TANGEDCO            | Tamil Nadu        | SG-BHEL (EPC)   TG-BHEL (EPC)   | U-1     | 660                    | Mar-2024                                 | Oct-2024                                         | slipped                |                                  |
| 13                      | Yadadri TPS                  | TSGENCO             | Telangana         | SG-BHEL (EPC)   TG-BHEL (EPC)   | U-1     | 800                    | Dec-2023                                 | Sept-2024                                        | slipped                |                                  |
|                         |                              |                     |                   |                                 | U-2     | 800                    | Dec-2023                                 | Sept-2024                                        | slipped                |                                  |
| 14                      | Bhusawal TPS                 | MAHAGENCO           | Maharashtra       | SG-BHEL (EPC)   TG-BHEL (EPC)   | U-6     | 660                    | Jul-2023                                 | Sept-2024                                        | slipped                |                                  |
| Total (State Sector)    |                              |                     | No. of Units : 11 |                                 |         | 7820                   | 7820 (11)                                | 2120 (3)                                         | 2120 (3)               |                                  |
| Total Targeted Capacity |                              |                     | No. of Units : 21 |                                 |         | 14700*                 | 14700 (21)                               | 5040 (7)                                         | 5040 (7)               |                                  |

\*Yelahanka CCPP (KPCL) (370 MW) has not been included in this capacity. It has been constructed and its trial run is pending due to non-availability of gas from M/s GAIL (Anticipated in June.-2024)

| S. No.                                      | Project Name         | Implementing Agency | State                   | Boiler (SG) & Turbine(TG) Make                                                             | Unit No | Targeted Capacity (MW) | Anticipated Trial Run (In the beginning of FY 2023-24) | Trial Run Assessment as per latest review by CEA | Capacity Achieved (MW) | Actual Date of Capacity Addition |
|---------------------------------------------|----------------------|---------------------|-------------------------|--------------------------------------------------------------------------------------------|---------|------------------------|--------------------------------------------------------|--------------------------------------------------|------------------------|----------------------------------|
| <b>ADDITIONAL CAPACITY (PRIVATE SECTOR)</b> |                      |                     |                         |                                                                                            |         |                        |                                                        |                                                  |                        |                                  |
| 1                                           | Kashipur CCPP, Ph-II | M/s SEPL            | Uttarakhand             | GTG - GE, France   STG - Hang Zhou Steam Turbine Co. Ltd., China   HRSG - Greens Power, UK | Mod-2   | -                      | -                                                      | -                                                | 214                    | 13.06.2023                       |
| 2                                           | Shirpur TPP          | M/s JPL             | Maharashtra             | SG-BHEL   TG-BHEL                                                                          | U-2     | -                      | -                                                      | -                                                | 150                    | 22.11.2023                       |
| <b>Total (State Sector)</b>                 |                      |                     | <b>No. of Units : 2</b> |                                                                                            |         | <b>375</b>             | <b>-</b>                                               | <b>-</b>                                         | <b>364 (2)</b>         |                                  |

## 1.2 Under Construction Thermal Power Projects in the Country:

(as on 31.03.2024)

| S.No.                 | Project Name             | State          | Implementing Agency | Boiler        | Turbine               | Technology          | LOA Date | Unit No                         | Cap. (MW)                       | Org Trial Run                                  | Anticipated Trial Run (as per CEA)             | Physical Progress (%)           | Original Cost (cr) | Latest Cost (cr) | Total Exp. (cr) | Financial progress (%) |
|-----------------------|--------------------------|----------------|---------------------|---------------|-----------------------|---------------------|----------|---------------------------------|---------------------------------|------------------------------------------------|------------------------------------------------|---------------------------------|--------------------|------------------|-----------------|------------------------|
| <b>CENTRAL SECTOR</b> |                          |                |                     |               |                       |                     |          |                                 |                                 |                                                |                                                |                                 |                    |                  |                 |                        |
| 1                     | Barh STPP St-I           | Bihar          | NTPC                | Doosan        | Power Machine, Russia | Supercritical       | Mar-05   | U-3                             | 660                             | Oct-11                                         | Nov-24                                         | 90%                             | 8693               | 22228            | 22228           | 100%                   |
| 2                     | Buxar TPP                | Bihar          | SJVN                | L&T           | L&T                   | Supercritical       | Jun-19   | U-1<br>U-2                      | 660<br>660                      | May-23<br>Sep-23                               | Sep-24<br>Dec-24                               | 90%<br>82%                      | 10439              | 10439            | 9962            | 95%                    |
| 3                     | Lara STPP St-II          | Chhattisgarh   | NTPC                | BHEL          | BHEL                  | Ultra Supercritical | Aug-23   | U-1<br>U-2                      | 800<br>800                      | Dec-27<br>Jun-28                               | Dec-27<br>Jun-28                               | 0%<br>0%                        | 15530              | 15530            | 726             | 5%                     |
| 4                     | North Karanpura STPP     | Jharkhand      | NTPC                | BHEL          | BHEL                  | Supercritical       | Feb-14   | U-3                             | 660                             | Jun-19                                         | Dec-24                                         | 87%                             | 14367              | 16243            | 15293           | 94%                    |
| 5                     | Patratu STPP             | Jharkhand      | PVUNL               | BHEL          | BHEL                  | Ultra Supercritical | Mar-18   | U-1<br>U-2<br>U-3               | 800<br>800<br>800               | Jan-22<br>Jul-22<br>Jan-23                     | Dec-24<br>May-25<br>Nov-25                     | 69%<br>65%<br>49%               | 17112              | 18668            | 13136           | 70%                    |
| 6                     | Singrauli STPP, St-III   | Madhya Pradesh | NTPC                | BHEL          | BHEL                  | Ultra Supercritical | Mar-24   | U-1<br>U-2                      | 800<br>800                      | May-29<br>Feb-30                               | May-29<br>Feb-30                               | 0%<br>0%                        | 17195              | 17195            | 0               | 0%                     |
| 7                     | Talcher TPP St-III       | Odisha         | NTPC                | BHEL          | BHEL                  | Ultra Supercritical | Sep-22   | U-1<br>U-2                      | 660<br>660                      | Nov-26<br>May-27                               | Mar-27<br>Jun-27                               | 22%<br>16%                      | 11844              | 11844            | 1356            | 11%                    |
| 8                     | NLC Talabira TPP         | Odisha         | NLC                 | BHEL          | BHEL                  | Ultra Supercritical | Jan-24   | U-1<br>U-2<br>U-3               | 800<br>800<br>800               | May-28<br>Nov-28<br>Apr-29                     | May-28<br>Nov-28<br>Apr-29                     | 0%<br>0%<br>0%                  | 19422              | 27213            | 813             | 3%                     |
| 9                     | Ghatampur TPP            | Uttar Pradesh  | NUPPL               | L&T MHPS      | GE Power system       | Supercritical       | Aug-16   | U-1<br>U-2<br>U-3               | 660<br>660<br>660               | May-20<br>Nov-20<br>May-21                     | Jun-24<br>Nov-24<br>Mar-25                     | 92%<br>83%<br>76%               | 17238              | 19406            | 17142           | 88%                    |
| 10                    | Khurja SCTPP             | Uttar Pradesh  | THDC                | L&T MHI       | BHEL                  | Ultra Supercritical | Aug-19   | U-1<br>U-2                      | 660<br>660                      | Jul-23<br>Jan-24                               | Sep-24<br>Dec-24                               | 87%<br>71%                      | 11089              | 11089            | 9962            | 90%                    |
| Total Central Sector  |                          |                |                     |               |                       |                     |          |                                 | 15260                           |                                                |                                                |                                 | 142930             | 169856           | 90620           |                        |
| <b>STATE SECTOR</b>   |                          |                |                     |               |                       |                     |          |                                 |                                 |                                                |                                                |                                 |                    |                  |                 |                        |
| 1                     | Jawaharpur STPP          | Uttar Pradesh  | UPRVUNL             | Doosan        | Doosan                | Ultra Supercritical | Dec-16   | U-2                             | 660                             | Apr-21                                         | Jun-24                                         | 92%                             | 10566              | 12320            | 12283           | 100%                   |
| 2                     | Obra-C STPP              | Uttar Pradesh  | UPRVUNL             | Doosan India  | Doosan India (GE)     | Ultra Supercritical | Dec-16   | U-2                             | 660                             | Apr-21                                         | Jul-24                                         | 87%                             | 8778               | 11706            | 10636           | 91%                    |
| 3                     | Panki TPS Extn.          | Uttar Pradesh  | UPRVUNL             | BHEL          | BHEL                  | Supercritical       | Mar-18   | U-1                             | 660                             | Sep-21                                         | Sep-24                                         | 82%                             | 5817               | 6729             | 5484            | 81%                    |
| 4                     | Ennore SCTPP             | Tamil Nadu     | TANGEDCO            | BHEL          | BHEL                  | Supercritical       | Sep-14   | U-1<br>U-2                      | 660<br>660                      | Jan-18<br>Mar-18                               | Apr-26<br>Jul-26                               | 71%<br>69%                      | 9800               | 9800             | 9607            | 98%                    |
| 5                     | North Chennai TPP St-III | Tamil Nadu     | TANGEDCO            | BHEL          | BHEL                  | Supercritical       | Jan-16   | U-1                             | 800                             | Oct-19                                         | May-24                                         | 96%                             | 6376               | 10158            | 8791            | 87%                    |
| 6                     | Udangudi STPP St-I       | Tamil Nadu     | TANGEDCO            | BHEL          | BHEL                  | Supercritical       | Dec-17   | U-1<br>U-2                      | 660<br>660                      | Jun-21<br>Jun-21                               | Oct-24<br>Feb-25                               | 83%<br>81%                      | 13077              | 13077            | 9951            | 76%                    |
| 7                     | Bhusawal TPS             | Maharashtra    | MAHAGENCO           | BHEL          | BHEL                  | Supercritical       | Jan-18   | U-6                             | 660                             | May-22                                         | Jul-24                                         | 95%                             | 4548               | 6350             | 4482            | 71%                    |
| 8                     | Sagardighi TPP St-III    | West Bengal    | WBPDL               | BHEL          | BHEL                  | Supercritical       | Dec-18   | U-5                             | 660                             | Jan-24                                         | Jan-25                                         | 78%                             | 3863               | 4567             | 2053            | 45%                    |
| 9                     | Yadadri TPS              | Telangana      | TSGENCO             | BHEL          | BHEL                  | Supercritical       | Oct-17   | U-1<br>U-2<br>U-3<br>U-4<br>U-5 | 800<br>800<br>800<br>800<br>800 | Oct-21<br>Oct-21<br>Jun-22<br>Jun-22<br>Oct-22 | Sep-24<br>Sep-24<br>Dec-24<br>Feb-25<br>Apr-25 | 91%<br>91%<br>87%<br>87%<br>81% | 25099              | 34543            | 25635           | 74%                    |
| 10                    | DCRTPP Extn.             | Haryana        | HPGCL               | BHEL          | BHEL                  | Ultra Supercritical | Feb-24   | U-3                             | 800                             | Sep-29                                         | Sep-29                                         | 0%                              | 6900               | 6900             | 1               | 0%                     |
| Total State Sector    |                          |                |                     |               |                       |                     |          |                                 | 11540                           |                                                |                                                |                                 | 94823              | 116150           | 88923           |                        |
| <b>PRIVATE SECTOR</b> |                          |                |                     |               |                       |                     |          |                                 |                                 |                                                |                                                |                                 |                    |                  |                 |                        |
| 1                     | Mahan STPP               | Madhya Pradesh | Mahan Energen Ltd   | BHEL (Supply) | BHEL (Supply)         | Ultra Supercritical | Aug-23   | U-1<br>U-2                      | 800<br>800                      | Nov-26<br>May-27                               | Dec-26<br>May-27                               | 0%<br>0%                        | 12439              | 12439            | 777             | 6%                     |
| Total Private Sector  |                          |                |                     |               |                       |                     |          |                                 | 1600                            |                                                |                                                |                                 | 12439              | 12439            | 777             |                        |
| <b>Grand Total</b>    |                          |                |                     |               |                       |                     |          |                                 | 28400                           |                                                |                                                |                                 | 250192             | 298445           | 180320          |                        |

### 1.3 Under construction TPPs where work is on hold / not likely to be commissioned

(As on 31.03.2024)

| S. No                                                             | State          | Project Name / Impl. Agency/ EPC or BTG                                                                                   | LOA Date/ ordered date | Unit No | Cap. (MW)  | Org. Comm. Sched. | Present Status/Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Original Cost | Latest Cost (cr) | Exp. (cr) | Exp Till Date |
|-------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------|------------------------|---------|------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------|-----------|---------------|
| <b>CENTRAL SECTOR</b>                                             |                |                                                                                                                           |                        |         |            |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 1                                                                 | Rajasthan      | Barsingar TPP ext/NLC/Reliance Infra/Chinese                                                                              | Nov-16                 | U-1     | 250        | May-20            | Project was held up due to withdrawal of PPA by DISCOM (Rajasthan), due to land issue in linked mines and consequently higher tariff. On 04-08-2022, a meeting was held (Additional Secretary-Coal, GoI along with NLCIL Directors met Chief Secretary-GoR and Principal Secretary-Energy) and it was jointly decided not to pursue with the Barsingar TPS Extension project (1X250 MW) along with Hadla Mine.                                                                                                                                                                                                                                                                                                 | 2112.59       | 2112.59          | 158.25    | Jan- 21       |
| 2                                                                 | Rajasthan      | Bitnook TPP /NLC/Reliance Infra/ Chinese                                                                                  | Nov-16                 | U-1     | 250        | May-20            | Project was held up due to withdrawal of PPA by DISCOM(Rajasthan) due to increased project cost and time over run. On 04-08-2022 a meeting was held (Additional Secretary-Coal, GoI along with NLCIL Directors met Chief Secretary-GoR and Principal Secretary-Energy) to revive the Bitnook TPS. Based on the decision, a consultant was appointed to prepare feasibility. Further, as per the discussions held with Rajasthan government officials, it has been agreed that NLC and GoR will jointly work to revive the Bitnook Thermal Power Project along with Bitnook Mines. The consultant has prepared the feasibility report for revival of the project and the same is under "scrutiny and approval". | 2196.3        | 2196.3           | 173.82    | Jan- 21       |
| <b>TOTAL CENTRAL SECTOR [No. of Projects: 2, No. of Units: 2]</b> |                |                                                                                                                           |                        |         | <b>500</b> |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| <b>PRIVATE SECTOR</b>                                             |                |                                                                                                                           |                        |         |            |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 1                                                                 | Andhra Pradesh | Bhavanapadu TPP Ph-I / East Coast Energy Ltd. / BTG DEC china                                                             | Sep-09                 | U-1     | 660        | Oct-13            | Liquidation Order date 22/04/2019. Liquidator has partially sold the assets(P&M) of the company on a standalone basis through e-auction. Further, the liquidator has also sold the Land including buildings at the Plant Site on 9th Feb 2023.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6571.94       | 9343.15          | 3785.6    | Jan- 16       |
|                                                                   |                |                                                                                                                           | Sep-09                 | U-2     | 660        | Mar-14            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 2                                                                 | Andhra Pradesh | Thamminapatnam TPP, St-II Meenakshi Energy Pvt.Ltd. SG-Cether vessels TG- Chinese                                         | Dec-09                 | U-3     | 350        | May-12            | Vedanta Ltd. Has bought this plant under NCLT route. The project is likely to be commissioned during 2024-25. (U#1: Sep-2024, U#2: Oct-2024)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5005          | 5414.4           | 5414.4    | Feb- 19       |
|                                                                   |                |                                                                                                                           | Dec-09                 | U-4     | 350        | Aug-12            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 3                                                                 | Bihar          | Siriya TPP (Jas Infra. TPP) / JICPL BTG-DEC China                                                                         | Mar-11                 | U-1     | 660        | Aug-14            | Liquidation Order date 17.07.2020; The Enforcement directorate has attached the assets of the corporate debtor and as a result of which the auction of the assets are kept on hold.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11120         | 11120            | NA        | NA            |
|                                                                   |                |                                                                                                                           | Mar-11                 | U-2     | 660        | Dec-14            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
|                                                                   |                |                                                                                                                           | Mar-11                 | U-3     | 660        | Apr-15            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
|                                                                   |                |                                                                                                                           | Mar-11                 | U-4     | 660        | Aug-15            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 4                                                                 | Chhattisgarh   | Akaltara TPP (Naiyara) / KSK Mahandi Power Company Ltd. Boiler- SEPCO CHINA (Shanghai china) / TG- SEPCO (Dongfeng china) | Apr-09                 | U-4     | 600        | Apr-13            | CIRP commenced on 3rd October 2019 & currently under NCLT. PPL and REC have submitted EOI on 21-7-2023 and shortlisted as PRAs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16190         | 27080            | 18730     | Dec- 16       |
|                                                                   |                |                                                                                                                           | Apr-09                 | U-5     | 600        | Aug-13            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
|                                                                   |                |                                                                                                                           | Apr-09                 | U-6     | 600        | Dec-13            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 5                                                                 | Chhattisgarh   | Binjkote TPP/ SKS Power Generation (Chhattisgarh) Ltd. Boiler-Cethar Vessels Turbine-Harbin China                         | Mar-11                 | U-3     | 300        | Mar-14            | Reworked bids (seven) received from the Resolution Applicants. Voting is completed. Plan submitted by Sarda Energy & Minerals filed with NCLT for approval has been sent back by NCLT for reconsideration by CoC. The plant is likely to be revived by 2030-31.                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5058          | 7940             | 3828      | Jun- 15       |
|                                                                   |                |                                                                                                                           | Mar-11                 | U-4     | 300        | Jun-14            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 6                                                                 | Chhattisgarh   | Lanco Amarkantak TPP- II LAP Pvt. Ltd. BTG-DEC china                                                                      | Nov-09                 | U-3     | 660        | Jan-12            | Adani Power Limited resolution plan submitted for NCLT approval on 10.03.2024 (e-filing). NCLT approval awaited.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6886          | 10815.24         | 9537.79   | Dec- 16       |
|                                                                   |                |                                                                                                                           | Nov-09                 | U-4     | 660        | Mar-12            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 7                                                                 | Chhattisgarh   | Singhtarai TPP / Athena Chhattisgarh Power Ltd. BTG-DEC china                                                             | Dec-09                 | U-1     | 600        | Nov-14            | Vedanta Ltd. has bought the power plant under liquidation. Plant is likely to be revived by FY 2030-31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6200          | 8443.79          | 6408.47   | May- 17       |
|                                                                   |                |                                                                                                                           | Dec-09                 | U-2     | 600        | Feb-15            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 8                                                                 | Chhattisgarh   | Salora TPP / Vandana Vidyut/ Boiler- Cether Vessels /TG Harbin China                                                      | Sep-09                 | U-2     | 135        | Sep-11            | The liquidator successfully sold the assets of corporate debtor as per provision of IBC, 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1458.44       | 2386.89          | 2386.89   | Mar- 15       |
| 9                                                                 | Chhattisgarh   | Deveri (Visa) TPP / Visa Power Ltd. BTG-BHEL                                                                              | Jun-10                 | U-1     | 600        | Aug-13            | The liquidator has started the process of liquidating the company by selling the assets of the Corporate Debtor on piecemeal basis. BHEL claims certain unpaid lien on the assets available at the site of the Corporate Debtor and in this regard matter is still pending before the Supreme Court of India.                                                                                                                                                                                                                                                                                                                                                                                                  | 2618.7        | 3930             | 2077.23   | Nov- 15       |
| 10                                                                | Jharkhand      | Matrishri Usha TPP, Ph-I / Corporate Power Ltd. EPC-BHEL                                                                  | Dec-09                 | U-1     | 270        | Apr-12            | The liquidator is making endeavor to sell the company as per provision of IBC, 2016 and the regulation laid there in.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2900          | 3120             | 3120      | Nov- 12       |
|                                                                   |                |                                                                                                                           | Dec-09                 | U-2     | 270        | May-12            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 11                                                                | Jharkhand      | Matrishri Usha TPP, Ph-II / Corporate Power Ltd. EPC-BHEL                                                                 | Mar-11                 | U-3     | 270        | Oct-12            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3182          | 3182             | 2207      | Sep- 12       |
|                                                                   |                |                                                                                                                           | Mar-11                 | U-4     | 270        | Jan-13            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 12                                                                | Jharkhand      | Tori TPP, Ph-I / Essar PowerLtd. BTG- Harbin China                                                                        | Aug-08                 | U-1     | 600        | Jul-12            | the Liquidator has initiated the e-auction process for realizing the assets of the Corporate Debtor and till date has sold around 15,000 MT of Fabricated Steel Structure from the power plant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5700          | 5700             | 4757.92   | Jun- 17       |
|                                                                   |                |                                                                                                                           | Aug-08                 | U-2     | 600        | Sep-12            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |
| 13                                                                | Jharkhand      | Tori TPP Ph-II / Essar Power Ltd./ BTG- Harbin China                                                                      | Feb-10                 | U-3     | 600        | Dec-15            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2500          | 2500             | 246.65    | Mar- 15       |
|                                                                   |                |                                                                                                                           | Oct-10                 | U-1     | 270        | Jul-14            | Company has decided to drop Phase II due to following reasons:<br>a) no new Bids for Long Term PPAs have been coming up in the Market                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |                  |           |               |
|                                                                   |                |                                                                                                                           | Oct-10                 | U-2     | 270        | Sep-14            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                  |           |               |

| S. No                                                      | State          | Project Name / Impl. Agency/ EPC or BTG                                                                 | LOA Date/ ordered date | Unit No | Cap. (MW) | Org. Comm. Sched. | Present Status/Remarks                                                                                                                                                                                                                                                    | Original Cost | Latest Cost (cr) | Exp. (cr) | Exp Till Date |
|------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------|------------------------|---------|-----------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------|-----------|---------------|
| 14                                                         | Maharashtra    | Amravati TPP Ph-II / Ratan India Power Pvt. Ltd. BTG-BHEL                                               | Oct-10                 | U-3     | 270       | Nov-14            | since the last 5 years.<br>b) the revised emission norms under the Environment (Protection) Amendment Rules, 2015 revising, inter alia, emission norms for thermal power plants., drastic changes in the design and equipment of Phase II was required to be carried out. | 6646          | 6646             | 763.8     | Mar- 15       |
|                                                            |                |                                                                                                         | Oct-10                 | U-4     | 270       | Jan-15            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
|                                                            |                |                                                                                                         | Oct-10                 | U-5     | 270       | Mar-15            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 15                                                         | Maharashtra    | Nasik TPP Ph-II / Ratan India Nasik Power Pvt. Ltd. BTG-BHEL                                            | Nov-09                 | U-1     | 270       | Apr-13            |                                                                                                                                                                                                                                                                           | 6789          | 6789             | 711.81    | Mar- 15       |
|                                                            |                |                                                                                                         | Nov-09                 | U-2     | 270       | Jun-13            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
|                                                            |                |                                                                                                         | Nov-09                 | U-3     | 270       | Aug-13            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
|                                                            |                |                                                                                                         | Nov-09                 | U-4     | 270       | Oct-13            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
|                                                            |                |                                                                                                         | Nov-09                 | U-5     | 270       | Dec-13            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 16                                                         | Maharashtra    | Lanco Vidarbha TPP / LVP Pvt. Ltd. EPC- LANCO/ Boiler- Dongfong China / Turbine- Harbin china           | Nov-09                 | U-1     | 660       | Jul-14            | Majority of Plant material has been auctioned and removed from site. 706 Acres of Land and approx. 4000 MT of material is yet to be auctioned as they were under Litigation.                                                                                              | 6936          | 10433            | 5338      | Apr- 17       |
|                                                            |                |                                                                                                         | Nov-09                 | U-2     | 660       | Nov-14            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 17                                                         | Maharashtra    | Bijora Ghanmukh TPP / Jinbhuvish Power Generation Pvt. Ltd.                                             | Sep-11                 | U-1     | 300       | Dec-16            | The coal linkage matter for this project is sub judice and once it is resolved, developer will be looking for funding options and further process.                                                                                                                        | 3189          | 3450             | 422.27    | Mar- 15       |
|                                                            |                |                                                                                                         | Sep-11                 | U-2     | 300       | Mar-17            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 18                                                         | Madhya Pradesh | Gorgi TPP / D.B. Power (MP) Ltd. BTG- BHEL                                                              | Mar-11                 | U-1     | 660       | Jun-13            | The company has requested a COD extension with GoMP, and a revival will be planned accordingly on the final permission.                                                                                                                                                   | 3941          | 3941             | 475.79    | Sep- 15       |
| 19                                                         | Odisha         | Utkal TPP (Odisha) / Ind Barath/BTG-Cetha Vessels                                                       | May-09                 | U-2     | 350       | Dec-11            | JSW Energy has bought the plant under NCLT route. U#2 is likely to be commissioned in June-2024 (2024-25).                                                                                                                                                                | 3150          | 4254             | 4254      | Apr- 17       |
| 20                                                         | Odisha         | KVK Nilanchal TPP/ KVK Nilanchal / BTG-Harbin China                                                     | Nov-09                 | U-1     | 350       | Dec-11            | Project sold to successful bidder M/s Padmaprabhu Commodity Trading Pvt Ltd in the E-auction held on 26th August 2022                                                                                                                                                     | 4990          | 6000             | 1708.36   | Mar- 15       |
|                                                            |                |                                                                                                         | Nov-09                 | U-2     | 350       | Feb-12            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
|                                                            |                |                                                                                                         | Nov-09                 | U-3     | 350       | Feb-12            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 21                                                         | Odisha         | Lanco Babandh TPP / LBP Ltd./ BTG- DEC Chinese                                                          | Nov-09                 | U-1     | 660       | Apr-13            | the Liquidator has partially sold the assets of the company on a standalone basis through e-auction dated 27.08.2021                                                                                                                                                      | 6930          | 10430            | 7615      | Mar- 17       |
|                                                            |                |                                                                                                         | Nov-09                 | U-2     | 660       | Aug-13            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 22                                                         | Odisha         | Malibrahmani TPP / Monnet Power Co.Ltd. / BTG-BHEL                                                      | Jun-10                 | U-1     | 525       | Dec-12            | Jindal Steel & Power has acquired the asset under liquidation; Plant is likely to be revived by FY 2024-25                                                                                                                                                                | 5093          | 6330             | 5329.75   | Dec- 14       |
|                                                            |                |                                                                                                         | Jun-10                 | U-2     | 525       | Feb-13            |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| 23                                                         | Tamil Nadu     | Tuticorin TPP (Ind- Barath) / IBPIL / BTG- Shangdong China                                              | May-10                 | U-1     | 660       | May-12            | Successful bidder has been identified. However, the Liquidation process has been stayed by the Hon'ble NCLAT.                                                                                                                                                             | 3595          | 3595             | 2000      | May- 15       |
| 24                                                         | West Bengal    | Hiranmaye Energy Ltd. (India)Power corporation (Haldia) TPP / Haldia Energy Ltd / EPC- MEIL / BTG-BHEL. | Sep-10                 | U-3     | 150       | May-16            | Project is currently under hold                                                                                                                                                                                                                                           | 2656          | 3307             | 3263.05   | Oct- 17       |
| TOTAL PRIVATE SECTOR [No. of Projects:24, No. of Units:51] |                |                                                                                                         |                        |         | 23055     |                   |                                                                                                                                                                                                                                                                           |               |                  |           |               |
| GRAND TOTAL [No. of Projects: 26, No. of Units: 53]        |                |                                                                                                         |                        |         | 23555     |                   |                                                                                                                                                                                                                                                                           |               |                  |           |               |

**BARH STPP St-I, Unit# 1, 2 & 3 (3x660 MW) / NTPC (CENTRAL SECTOR)**

NTPC Barh Super Thermal Power Station, Barh, Distt – Patna, Bihar – 803215

E-Gen Portal Registration No. (U#1 - 1200002610; U#2 - 1200002611; U#3 - 1200002612 )

| Project Developer / Implementing Agency - NTPC |                                                                                                                                                                                                                                                                                                   |                                                                                | Main Plant Vendor : SG-Ms/TPE/DPSI, TG: Power Machines, Russia, |                |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------|
| Unit No.                                       | LOA                                                                                                                                                                                                                                                                                               | Original Trial Run Date                                                        | Anticipated / Actual                                            | Trial Run Date |
| Unit#1                                         | Mar-2005                                                                                                                                                                                                                                                                                          | Feb-2010                                                                       | 30-Oct-2021 (A)                                                 |                |
| Unit#2                                         |                                                                                                                                                                                                                                                                                                   | Dec-2010                                                                       | 30-Jun-2023 (A)                                                 |                |
| Unit#3                                         |                                                                                                                                                                                                                                                                                                   | Oct-2011                                                                       | Nov-2024                                                        |                |
| CLEARANCES AND STATIC DATA                     |                                                                                                                                                                                                                                                                                                   |                                                                                | FINANCIAL DATA (Fig. in Rs. Crore)                              |                |
| FUEL TYPE                                      | Coal, Indigenous, Non-pit head                                                                                                                                                                                                                                                                    |                                                                                | ORIGINAL ESTIMATED COST OF THE PROJECT                          | 8693.00        |
| COAL COMBUSTION TECHNOLOGY                     | Supercritical                                                                                                                                                                                                                                                                                     |                                                                                | LATEST ESTIMATED COST                                           | 22228.28       |
| APPROVAL DATE / NTP                            | Feb-2005                                                                                                                                                                                                                                                                                          |                                                                                | DATE OF FINANCIAL CLOSURE                                       | 21.02.2005     |
| EPC/BTG/BoP Contractor Details (Package Wise)  | TG: Power Machines, Russia on 14.03.2005. Boiler: Awarded to TPE on 14.03.2005, contract terminated on 14.01.2015; Balance work awarded to DPSI on 30.01.2016. Pressure Parts ordered partially (replacement of DI 59 coils) to GE Power on 15.01.2018.                                           |                                                                                | YEAR WISE EXPENDITURE                                           |                |
| PPA                                            | Bihar (incl. Home state share): 1025 MW, Jharkhand: 202 MW, Orissa: 418 MW, Sikkim: 38 MW and unallocated: 297MW.                                                                                                                                                                                 |                                                                                | 2010-11                                                         | 921.81         |
|                                                |                                                                                                                                                                                                                                                                                                   |                                                                                | 2011-12                                                         | 1286.25        |
|                                                |                                                                                                                                                                                                                                                                                                   |                                                                                | 2012-13                                                         | 1384.43        |
| COAL LINKAGE/FSA                               | Letter of Assurance dtd. 18.11.2010 from CCL, securing 10 MMTPA coal for 03 Units. FSA of Unit-1 (3.333 MTPA) already signed with CCL(all operative mines, G8-G10) as per MoC PD dtd. 17.07.2013. FSA of Unit-2 & 3 to be signed after commissioning in terms of para 1A(i)of SHAKTI-2017 policy. |                                                                                | 2013-14                                                         | 1581.22        |
|                                                |                                                                                                                                                                                                                                                                                                   |                                                                                | 2014-15                                                         | 568.49         |
|                                                |                                                                                                                                                                                                                                                                                                   |                                                                                | 2015-16                                                         | 1143.46        |
| START UP POWER AGREEMENT                       | Done with PGCIL on 27.01.2020 for 400 kV D/C LILO of Kahalgaon-Patna, Barh-Patna & Barh-Gorakhpur lines                                                                                                                                                                                           |                                                                                | 2016-17                                                         | 1410.21        |
| POWER EVACUATION SYSTEM                        | Tx Line Developer                                                                                                                                                                                                                                                                                 | PGCIL                                                                          | 2017-18                                                         | 1389.43        |
|                                                | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                  | LILoing of Kahalgaon – Patna 400 kV D/C (Quad) line at Barh (NTPC) switchyard. | 2018-19                                                         | 1453.89        |
|                                                | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                             | D/C                                                                            | 2019-20                                                         | 1502.47        |
| LAND POSSESSION                                | Required – 3212 Acres, Under Possession – 3212 Acres                                                                                                                                                                                                                                              |                                                                                | 2020-21                                                         | 1123.15        |
| WATER ALLOCATION                               | 100 Cusec from River Ganges                                                                                                                                                                                                                                                                       |                                                                                | 2021-22                                                         | 1185.00        |
| MOEF CLEARANCE                                 | 11.09.2001                                                                                                                                                                                                                                                                                        |                                                                                | 2022-23                                                         | 2284.00        |
| CIVIL AVIATION CLEARANCE                       | 09.08.2004                                                                                                                                                                                                                                                                                        |                                                                                | EXPENDITURE OF MAR’2024                                         | 101.58         |
| CPCB CLEARANCE                                 | Not Applicable                                                                                                                                                                                                                                                                                    |                                                                                | TOTAL EXPENDITURE (upto 31.03.2024)                             | 22228.28       |
| SPCB CLEARANCE                                 | Consent to Operate (Emission & Discharge) Granted by SPCB on 04.07.2017, For Unit#1, and is Valid upto 30.09.2021                                                                                                                                                                                 |                                                                                |                                                                 |                |
| FOREST CLEARANCE                               | Not Applicable                                                                                                                                                                                                                                                                                    |                                                                                |                                                                 |                |

## BARH STPP St-I, Unit# 1, 2 &amp; 3 (3x660 MW)

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL ) |                                              |                             |                                         |                             |                                         |                             |                                         | STATUS OF MAIN PLANT PACKAGE (BTG) / SG - DPSI, TG - Power Machine, Russia |                                     |                                  |               |                              |                                       |              |              |              |       |
|-----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|----------------------------------------------------------------------------|-------------------------------------|----------------------------------|---------------|------------------------------|---------------------------------------|--------------|--------------|--------------|-------|
| Sl.                                           | MILESTONE                                    | UNIT-01                     |                                         | UNIT-02                     |                                         | UNIT-03                     |                                         | Sl.                                                                        | Packages                            | AREA                             | UNIT-01       | UNIT-02                      | UNIT-03                               |              |              |              |       |
|                                               |                                              | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion |                                                                            |                                     |                                  | % Completion  | % Completion                 | % Completion                          |              |              |              |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 1                                                                          | BOILER                              | CIVIL                            | 100%          | 100%                         | 94%                                   |              |              |              |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         |                                                                            | STRUCTURE                           | 84%                              |               |                              |                                       |              |              |              |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         |                                                                            | PRESSURE PARTS                      | 99%                              |               |                              |                                       |              |              |              |       |
| 1                                             | COMPLETION OF BOILER FOUNDATION              | Complete                    |                                         | Complete                    |                                         | Complete                    |                                         | 2                                                                          | TG                                  | CIVIL                            | 100%          | 100%                         | 96%                                   |              |              |              |       |
| 2                                             | START OF BOILER ERECTION                     | May-06                      | Mar-11                                  | Mar-07                      | Jul-11                                  | Jan-08                      | Jan-12                                  |                                                                            | STRUCTURE                           | 97%                              |               |                              |                                       |              |              |              |       |
| 3                                             | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          |                                         | NA                          |                                         | NA                          |                                         |                                                                            | TG ERECTION                         | 84%                              |               |                              |                                       |              |              |              |       |
| 4                                             | BOILER CEILING GIRDER LIFTING COMPLETION     | Complete                    |                                         | Complete                    |                                         | Complete                    |                                         | 3                                                                          | ESP                                 | UNDER PROGRESS                   | 100%          | 100%                         | 95%                                   |              |              |              |       |
| 5                                             | CONDENSER ERECTION START                     | Jun-07                      | Nov-08                                  | Apr-08                      | Jan-09                                  | Feb-09                      | Nov-13                                  | 4                                                                          | FGD                                 | CIVIL WORK                       | 28%           | 13%                          | 15%                                   |              |              |              |       |
| 6                                             | TG ERECTION START                            | Aug-07                      | Aug-11                                  | Jun-08                      | Sep-11                                  | Apr-09                      | Mar-12                                  |                                                                            |                                     | MATERIAL SUPPLY                  | 39%           | 30%                          | 30%                                   |              |              |              |       |
| 7                                             | HP PIPING ERECTION START                     |                             |                                         | May-09                      | Oct-19                                  | Mar-09                      | Sep-23                                  |                                                                            |                                     | ERECTION WORK                    | 1%            | Yet to start                 | Yet to start                          |              |              |              |       |
| 8                                             | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | Dec-07                      | Feb-13                                  | Oct-08                      | Jan-21                                  | Aug-09                      | Feb-24                                  | STATUS OF BOPs                                                             |                                     |                                  |               |                              |                                       |              |              |              |       |
| 9                                             | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION |                             | Feb-13                                  | Oct-08                      | Jan-21                                  | Aug-09                      | Apr-24                                  | Sl.                                                                        | Packages/ Linked Project Milestones | Vendor/Contracting Agency (DPSI) | Date of Award | Scheduled Date of Completion | Anticipated/Actual Date of Completion | UNIT-01      | UNIT-02      | UNIT-03      |       |
| 10                                            | TG BOX UP                                    | Aug-08                      | Dec-13                                  | Jun-09                      | Jan-15                                  | Apr-10                      | July-24                                 |                                                                            |                                     |                                  |               |                              |                                       | % Completion | % Completion | % Completion |       |
| 11                                            | HP PIPING ERECTION COMPLETION                |                             |                                         | Aug-09                      | Jun-22                                  | Jun-09                      | Jan-24                                  | 1                                                                          | Chimney                             | NBCC                             | 20.12.2005    | 19.07.2009                   | Completed                             | 100%         | 100%         | 100 %        |       |
| 12                                            | START OF OIL FLUSHING                        |                             |                                         | Jul-09                      | Dec-21                                  | May-09                      | Jul-24                                  | 2                                                                          | Coal Handling Plant                 | L&T (Conveyor package)           | 22.09.2005    | 21.08.2009                   | U2-May'23(A); U3- May'24              | 100%         | 100%         | 69%          |       |
| 13                                            | BOILER LIGHT UP                              | Aug-08                      | Aug-19                                  | Jun-09                      | May-22                                  | Apr-10                      | Jun-24                                  |                                                                            |                                     |                                  |               | L&T (Wagon Tippler)          | 21.07.2009                            | Completed    | 100%         | 100 %        | 100 % |
| 14                                            | CHEMICAL CLEANING COMPLETION                 |                             |                                         | Jul-09                      | May-22                                  | May-10                      | Apr-24                                  |                                                                            |                                     |                                  |               | L&T(Stacker Reclaimer)       | 21.09.2009                            | Completed    | 100%         | 100 %        | 100 % |
| 15                                            | STEAM BLOWING START                          |                             |                                         | Sep-09                      | Jul-22                                  | Jul-10                      | Jul-24                                  | 3                                                                          | Ash Handling Plant                  | Melco                            | 15.04.2016    | 14.01.2019                   | U2-May'23(A); U3-June'24              | 100%         | 100%         | 67%          |       |
| 16                                            | STEAM BLOWING COMPLETION                     | Jan-09                      | Jan-20                                  | Nov-09                      | Oct-22                                  | Sep-10                      | Jul-24                                  | 4                                                                          | Fuel Oil System                     | Techno                           | 07.05.2006    | 05.07.2009                   | U2-Completed U3-completed             | 100%         | 100 %        | 100%         |       |
| 17                                            | ROLLING & SYNC.                              | Mar-09                      | Sep-20                                  | Jan-10                      | Mar-23                                  | Nov-10                      | Sept-24                                 | 5                                                                          | Cooling Towers                      | Paharpur                         | 28.12.2005    | 27.08.2009                   | U2-Jun'23(A); U3- June'24             | 100%         | 100%         | 90%          |       |
| 18                                            | FULL LOAD                                    | Jul-09                      | Apr-21                                  | Apr-10                      | Jun-23                                  | Mar-11                      | Oct-24                                  | 6                                                                          | CW Pump house                       | KBL                              | 17.07.2006    | 16.01.2014                   | U3- June'24                           | 100%         | 100 %        | 96%          |       |
| 19                                            | TRIAL RUN                                    | Feb-10                      | Oct-21                                  | Dec-10                      | Jun-23                                  | Oct-11                      | Nov-24                                  | 7                                                                          | WPT Plant                           | SPML                             | 28.05.2007    | 27.11.2008                   | U3- Completed                         | 100%         | 100 %        | 100%         |       |
| 20                                            | COD                                          | Mar-10                      | Nov-21                                  | Jan-11                      | Aug-23                                  | Nov-11                      | Dec-24                                  | 8                                                                          | DM Plant                            | Driplex                          | 24.03.2006    | 23.09.2008                   | Completed                             | 100%         | 100 %        | 100 %        |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 9                                                                          | Compressed Air System               | Power Machines                   | 24.03.2005    | 29.10.2014                   | U3- Completed                         | 100%         | 100%         | 100%         |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 10                                                                         | Fire Protection System              | Minimax                          | 24.03.2006    | 23.07.2008                   | U2-Nov'23(A); U3- June'24             | 100%         | 100%         | 82%          |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 11                                                                         | Switch Yard                         | BHEL                             | 23.03.2006    | 06.11.2009                   | Completed                             | 100%         | 100 %        | 100 %        |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 12                                                                         | Station Transformers                | ABB                              | 10.10.2005    | 11.09.2008                   | U3- March 23(A)                       | 100%         | 100%         | 70%          |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 13                                                                         | Unit Transformers                   | TRIL/BHEL/Kanohar                | 22.05.2006    | 21.01.2009                   | U3- May'24                            | 100%         | 100%         | 42%          |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 14                                                                         | Railway Siding                      | RITES                            | 28.06.2006    | 27.12.2007                   | Line a/v                              | 100%         | 100 %        | 100 %        |       |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 15                                                                         | Power Evacuation Lines              | PGCIL                            |               |                              | Line a/v                              | 100%         | 100%         | 100%         |       |

## CRITICAL ISSUES

- Supply of Stator from M/s Power Machines, Russia. There may be delay in manufacturing of Generator stator due to geo-political situation and sanctions imposed on Russian Federation. It is likely to supplied by August-2024.

## REASONS OF DELAY

- Inordinate delay by Main Plant (SG & Auxiliaries Package) vendor M/s TPE. Work started after 6 Years of award. Contract of M/s TPE was terminated in Jan'15 due to consistent failure of commitments and poor performance. Contract for balance works re-awarded after 1 year in Jan'2016.
- During Hydro Test of Boiler U#1, DI-59 Coils in PSH-IV, CSH & LPRH-II failed which were supplied by M/s TPE. Accordingly, change of material to SS304H was approved and contract was awarded to M/s GE on 15.01.2018 for supply, Dismantling & Installation of Coils. Delayed project by approx. 2 years.
- Due to unusual delay in project commissioning for Main plant vendors, revival of Balance Offsite Packages is taking considerable time.
- Due to US sanction on Power Machines, Russia, balance TG/SG supplies and works got delayed. Due to ongoing war between Ukraine & Russia availability of experts from Ukraine is affected.

**NORTH KARANPURA TPP, Unit# 1, 2 & 3 (3x660 MW) / NTPC (CENTRAL SECTOR)**

NTPC, North Karanpura, Tandwa, Sub division – Simaria, Distt–Chatra – Jharkhand-825321

E-Gen Portal Registration No. (U#1 - 1200002378; U#2 - 1200002379; U#3 - 1200002380 )

| Project Developer / Implementing Agency - NTPC |                                                                                                                                                                                   |                                                                        | Main Plant Vendor - BHEL (EPC contract) |                                    |            |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------|------------------------------------|------------|
| Unit No.                                       | LOA                                                                                                                                                                               | Original Trial Run Date                                                | Anticipated / <span>Actual</span>       | Trial Run Date                     |            |
| Unit#1                                         | Feb-2014                                                                                                                                                                          | Jun-2018                                                               | 18-Jan-2023(A)                          |                                    |            |
| Unit#2                                         |                                                                                                                                                                                   | Dec-2018                                                               | 28-Feb-2024(A)                          |                                    |            |
| Unit#3                                         |                                                                                                                                                                                   | Jun-2019                                                               | Dec-2024                                |                                    |            |
| CLEARANCES AND STATIC DATA                     |                                                                                                                                                                                   |                                                                        |                                         | FINANCIAL DATA (Fig. in Rs. Crore) |            |
| FUEL TYPE                                      | Coal, Pithead                                                                                                                                                                     |                                                                        | ORIGINAL ESTIMATED COST OF THE PROJECT  |                                    | 14367.00   |
| COAL COMBUSTION TECHNOLOGY                     | Supercritical                                                                                                                                                                     |                                                                        | LATEST ESTIMATED COST                   |                                    | 16243.00   |
| APPROVAL DATE / NTP                            | Feb-2014                                                                                                                                                                          |                                                                        | DATE OF FINANCIAL CLOSURE               |                                    | 28.01.2014 |
| EPC/BTG/BoP Contractor Details (Package Wise)  | BTG (EPC) – BHEL                                                                                                                                                                  |                                                                        | YEAR WISE EXPENDITURE                   |                                    |            |
|                                                |                                                                                                                                                                                   |                                                                        | 2010-11                                 | 8.17                               |            |
| PPA                                            | Jharkhand: 500 MW; Odisha: 396 MW; Bihar: 688 MW; WB: 99 MW; Unallocated: 297 MW.                                                                                                 |                                                                        | 2011-12                                 | 4.88                               |            |
| COAL LINKAGE/FSA                               | Letter of Assurance dtd. 24.03.2015 from CCL, securing 7.039 MTPA coal (G7-G11) for 03 Units. FSA to be signed after commissioning in terms of para 1A (i) of SHAKTI-2017 policy. |                                                                        | 2012-13                                 | 5.75                               |            |
|                                                |                                                                                                                                                                                   |                                                                        | 2013-14                                 | 1362.18                            |            |
|                                                |                                                                                                                                                                                   |                                                                        | 2014-15                                 | 527.92                             |            |
|                                                |                                                                                                                                                                                   |                                                                        | 2015-16                                 | 615.73                             |            |
| START UP POWER AGREEMENT                       | Through ATS – 400 KV NK Chandwa line. Line is under construction. Agreement yet to be done.                                                                                       |                                                                        | 2016-17                                 | 2199.92                            |            |
| POWER EVACUATION SYSTEM                        | Tx Line Developer                                                                                                                                                                 | NKTL                                                                   | 2017-18                                 | 2044.46                            |            |
|                                                | Tx Line Name<br>Tx Voltage Level                                                                                                                                                  | i) NKSTPP-Chandwa 400 KV, D/c line<br>ii) NKSTPP-Gaya, 400 KV D/c line | 2018-19                                 | 1747.91                            |            |
|                                                | Configuration of Tx Line (S/C or D/C)                                                                                                                                             | D/C                                                                    | 2019-20                                 | 1762.62                            |            |
| LAND POSSESSION                                | 2263/ 2293 Acres. 30 Acres pending for acquisition.                                                                                                                               |                                                                        | 2020-21                                 | 1243.28                            |            |
| WATER ALLOCATION                               | 20 Cusec from Garhi River – Raw water drawl agreement signed with DVC on 18.09.2020.                                                                                              |                                                                        | 2021-22                                 | 1051.00                            |            |
| MOEF CLEARANCE                                 | 29.11.2004                                                                                                                                                                        |                                                                        | 2022-23                                 | 1590.38                            |            |
| CIVIL AVIATION CLEARANCE                       | 13.02.2009                                                                                                                                                                        |                                                                        | EXPENDITURE of MAR’ 2024                |                                    | 171.62     |
| CPCB CLEARANCE                                 | Not Applicable                                                                                                                                                                    |                                                                        | TOTAL EXPENDITURE (upto 31.03.2024)     |                                    | 15292.62   |
| SPCB CLEARANCE                                 | Available. 31.12.2001 for Bihar. 11.12.2014 for Jharkhand                                                                                                                         |                                                                        |                                         |                                    |            |
| FOREST CLEARANCE                               | 03.11.2015                                                                                                                                                                        |                                                                        |                                         |                                    |            |

## NORTH KARANPURA TPP, Unit# 1, 2 &amp; 3 (3x660 MW) / NTPC (CENTRAL SECTOR)

## UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL )

| Sl. | MILESTONE                                    | UNIT-01                     |                                         | UNIT-02                     |                                         | UNIT-03                     |                                         |
|-----|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|
|     |                                              | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion |
| 1   | COMPLETION OF BOILER FOUNDATION              | Complete                    |                                         | Complete                    |                                         | Complete                    |                                         |
| 2   | START OF BOILER ERECTION                     | Aug-15                      | Apr-16                                  | Feb-16                      | Jul-16                                  | Aug-16                      | Jun-17                                  |
| 3   | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          |                                         | NA                          |                                         | NA                          |                                         |
| 4   | BOILER CEILING GIRDER LIFTING COMPLETION     | Complete                    |                                         | Complete                    |                                         | Complete                    |                                         |
| 5   | CONDENSER ERECTION START                     | May-16                      | Nov-18                                  | Nov-16                      | Jan-20                                  | May-17                      | Jun-23                                  |
| 6   | TG ERECTION START                            | Jul-16                      | Nov-17                                  | Jan-17                      | Jan-18                                  | Jul-17                      | Mar-22                                  |
| 7   | HP PIPING ERECTION START                     | Jul-17                      | Nov-20                                  | Jan-18                      | Jul-23                                  | Jul-18                      | Dec-23                                  |
| 8   | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | Jan-17                      | Dec-18                                  | Jul-17                      | Oct-19                                  | Jan-18                      | Jun-24                                  |
| 9   | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | Mar-17                      | Jan-19                                  | Jul-17                      | Oct-19                                  | Jan-18                      | Jul-24                                  |
| 10  | TG BOX UP                                    | Jun-17                      | Aug-19                                  | Dec-17                      | Jan-22                                  | Jun-18                      | Jun-24                                  |
| 11  | HP PIPING ERECTION COMPLETION                | Sep-17                      | Jan-21                                  | Mar-18                      | Sep-23                                  | Sep-18                      | May-24                                  |
| 12  | START OF OIL FLUSHING                        | Jul-17                      | Jul-20                                  | Jan-18                      | Feb-23                                  | Jul-18                      | Jun-24                                  |
| 13  | BOILER LIGHT UP                              | Aug-17                      | Dec-20                                  | Feb-18                      | Jun-23                                  | Aug-18                      | Sept-24                                 |
| 14  | CHEMICAL CLEANING COMPLETION                 | Aug-17                      | Jan-21                                  | Feb-18                      | Jun-23                                  | Aug-18                      | Sept-24                                 |
| 15  | STEAM BLOWING START                          | Sep-17                      | Jan-21                                  | Mar-18                      | Jul-23                                  | Sep-18                      | Oct-24                                  |
| 16  | STEAM BLOWING COMPLETION                     | Oct-17                      | Feb-21                                  | Apr-18                      | Aug-23                                  | Oct-18                      | Oct-24                                  |
| 17  | ROLLING & SYNC.                              | Dec-17                      | 21.10.2022                              | Jun-18                      | 09.11.23                                | Dec-18                      | Nov-24                                  |
| 18  | FULL LOAD                                    | Feb-18                      | 20.12.2022                              | Aug-18                      | 19.01.24                                | Feb-19                      | Dec-24                                  |
| 19  | TRIAL RUN                                    | Jun-18                      | 18.01.2023                              | Dec-18                      | 28.02.2024                              | Jun-19                      | Dec-24                                  |
| 20  | COD                                          | -                           | 01.03.2023                              | -                           | 20.03.24                                | -                           | Jan-25                                  |

## STATUS OF MAIN PLANT PACKAGE (BTG) : BHEL

| Sl. | Packages | AREA            | UNIT-01      | UNIT-02      | UNIT-03      |
|-----|----------|-----------------|--------------|--------------|--------------|
|     |          |                 | % Completion | % Completion | % Completion |
| 1   | BOILER   | CIVIL           | 100%         | 100%         | 90%          |
|     |          | STRUCTURE       | 100%         | 100%         | 79%          |
|     |          | PRESSURE PARTS  | 100%         | 100%         | 66%          |
| 2   | TG       | CIVIL           | 100%         | 100%         | 99%          |
|     |          | STRUCTURE       | 100%         | 100%         | 100%         |
|     |          | TG ERECTION     | NA           | NA           | NA           |
| 3   | ESP      | UNDER PROGRESS  | 100%         | 100%         | 88%          |
| 4   | FGD      | CIVIL WORK      | 90%          | 71%          | 43.3%        |
|     |          | MATERIAL SUPPLY | 71.5%        | 62%          | 63%          |
|     |          | ERECTION WORK   | 46.5%        | 31%          | 7%           |

## STATUS OF BOPs

| Sl. | Packages/ Linked Project Milestones | Vendor/Contracting Agency                           | Date of Award | Scheduled Date of Completion           | Anticipated/Actual Date of Completion           | UNIT-01        | UNIT-02        | UNIT-03       |
|-----|-------------------------------------|-----------------------------------------------------|---------------|----------------------------------------|-------------------------------------------------|----------------|----------------|---------------|
|     |                                     |                                                     |               |                                        |                                                 | % Completion   | % Completion   | % Completion  |
| 1   | Chimney                             | M/s BHEL                                            | Feb-14        | U#1-Dec-18<br>U#2-Jun-19<br>U#3-Dec-20 | U#2-Oct-23 (A)<br>U#3-Apr-23 (A)                | 100%           | 100%           | 100%          |
| 2   | Coal Handling Plant                 | M/s BHEL (Conveyor package)                         | Feb-14        | Dec-18                                 | U#2-Feb-24<br>U#3-May-24                        | 100%           | 100%           | 56%           |
|     |                                     | M/s BHEL (Wagon Tripler)                            | Feb-14        | NA                                     | NA                                              | NA             | NA             | NA            |
|     |                                     | M/s BHEL (Stacker Reclaimer)                        | Feb-14        | Dec-18                                 | U#1-Nov-22 (A)<br>U#2&3-May-24                  | 100%           | 100%           | 60%           |
| 3   | Ash Handling Plant                  | M/s BHEL                                            | Feb-14        | Dec-18                                 | U#1-Jan-23(A)<br>U#2-Mar-24<br>U#3-May-24       | 100%           | 100%           | 73%           |
| 4   | Fuel Oil System                     | M/s BHEL                                            | Feb-14        | Dec-18                                 | Completed                                       | 100%           | 100%           | 100%          |
| 5   | Cooling Towers                      | M/s BHEL                                            | Feb-14        | Dec-18                                 | U#2 - Oct-23(A)<br>U#3 - May-24                 | 100%           | C-100%; M-100% | C-100%; M-26% |
| 6   | CW Pump house                       | M/s BHEL                                            | Feb-14        | NA                                     | NA                                              | NA             | NA             | NA            |
| 7   | WPT Plant                           | M/s BHEL                                            | Feb-14        | Dec-18                                 | Completed                                       | 100 %          | 100 %          | 100 %         |
| 8   | DM Plant                            | M/s BHEL                                            | Feb-14        | Dec-18                                 | Completed                                       | 100%           | 100%           | 100%          |
| 9   | Compressed Air System               | M/s BHEL                                            | Feb-14        |                                        | Completed                                       | 100%           | 100%           | 100%          |
| 10  | Fire Protection System              | M/s BHEL                                            | Feb-14        |                                        | U#2-Mar-24<br>U#3-May-24                        | 100%           | 76%            | 42%           |
| 11  | Switch Yard                         | BHEL-TBG/Arun Construction Technico India Pvt. Ltd. | Feb-14        | Dec-18                                 | U#2-Sep-23(A)<br>U#3-Mar-24(A)                  | 100%           | 100%           | 100%          |
| 12  | Station Transformers                | M/s BHEL                                            | Feb-14        | Mar-18                                 | U#2-Dec-23(A)<br>U#3-May-24                     | 100%           | 100%           | 70%           |
| 13  | Unit Transformers                   | M/s BHEL                                            | Feb-14        | Jul-18                                 | U#2-Feb-24<br>U#3-May-24                        | 100%           | 100%           | 42%           |
| 14  | Railway Siding                      | M/s BHEL                                            | Feb-14        | NA                                     | NA                                              | NA             | NA             | NA            |
| 15  | Power Evacuation Lines              | M/s BHEL                                            | May-16        | Sep-19                                 | NK-Chandwa line : Oct-22 (A)<br>NK-Gaya-June-24 | 100% (Chandwa) | 100% (Chandwa) | 54% (Gaya)    |

## CRITICAL ISSUES

- Handing over of balance 20 acres Private land corridor to NTPC by CCL for external CHP.
- Slow Progress & delay in Supply of missing materials by EPC (BHEL) agency.
- Delay in readiness of 400 kV NK-Gaya transmission line.

## REASONS OF DELAY

- ♦ Main plant layout was changed to avoid GM land which Govt. was not in position to handover due to encroachments.
- ♦ Delay in Award of Critical Packages by BHEL. Air Cooled Condenser (ACC) Mechanical Package awarded in Mar'17 with a delay of 31months; ACC civil package was awarded in May'17 with a delay of 27 months.
- ♦ Delay due to slow work progress by EPC agency (M/s BHEL). Slow progress of Air Cooled Condenser works by M/s BHEL may affect the current commissioning target of project.
- ♦ Agitation by villagers for demand of additional compensation against already acquired land (about 2200 Acres). Project Work was completely stopped by the agitators for about 40 days during Local Agitation again started on 23.02.2022

**PATRATU TPS, Unit# 1, 2 & 3 (3X800 MW) / PVUNL (CENTRAL SECTOR)**

Patratu Vidyut Utpadan Nigam Limited, Patratu, PO: PTPS, Patratu, Distt. Ramgarh, Jharkhand , PIN – 829119

E-Gen Portal Registration No. ( U#1 - 1200002399; U#2 - 1200002400; U#3 - 1200002401 )

| Project Developer / Implementing Agency - PVUNL |                                                                                                                                                                                    |                                                                                                                                                                       | Main Plant Vendor - M/s BHEL (EPC contract) |                |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------|
| Unit No.                                        | LOA                                                                                                                                                                                | Original Trial Run Date                                                                                                                                               | Anticipated / Actual                        | Trial Run Date |
| Unit#1                                          | Mar-2018                                                                                                                                                                           | Jan-22                                                                                                                                                                | Dec-2024                                    |                |
| Unit#2                                          |                                                                                                                                                                                    | Jul-22                                                                                                                                                                | Sept-2025                                   |                |
| Unit#3                                          |                                                                                                                                                                                    | Jan-23                                                                                                                                                                | Nov-2025                                    |                |
| CLEARANCES AND STATIC DATA                      |                                                                                                                                                                                    |                                                                                                                                                                       | FINANCIAL DATA (Fig. in Rs. Crore)          |                |
| FUEL TYPE                                       | Coal, Pithead                                                                                                                                                                      |                                                                                                                                                                       | ORIGINAL ESTIMATED COST OF THE PROJECT      | 17112.00       |
| COAL COMBUSTION TECHNOLOGY                      | Ultra Supercritical                                                                                                                                                                |                                                                                                                                                                       | LATEST ESTIMATED COST                       | 18668.00       |
| APPROVAL DATE / NTP                             | Nov-2017                                                                                                                                                                           |                                                                                                                                                                       | DATE OF FINANCIAL CLOSURE                   |                |
| EPC/BTG/BoP Contractor Details (Package Wise)   | EPC package awarded to BHEL on 08.03.2018.                                                                                                                                         |                                                                                                                                                                       | YEAR WISE EXPENDITURE                       |                |
|                                                 |                                                                                                                                                                                    |                                                                                                                                                                       | 2015-16                                     | -----          |
| PPA                                             | 85% allocated to Jharkhand, PPA signed on 30.03.2016. 15% of power will remain as unallocated quota at the disposal of GoI                                                         |                                                                                                                                                                       | 2016-17                                     | -----          |
| COAL LINKAGE/FSA                                | 12 MTPA for Ph-I from Banhardih Coal Mine at a distance of about 110 km. Banhardi Coal Mine transferred to PVUNL vide deed of adherence signed on 02.06.2017.                      |                                                                                                                                                                       | 2017-18                                     | 992.11         |
|                                                 | Bridge allocation granted by SLC(LT) upto 24-06-2024; Allocation from CCL; Coal quantity quantified is 9.17 MTPA.                                                                  |                                                                                                                                                                       | 2018-19                                     | 601.86         |
| START UP POWER AGREEMENT                        | Through 7.5 kms Transmission line : Patratu-Patratu (Main Plant to Katia Substation) D/C Line                                                                                      |                                                                                                                                                                       | 2019-20                                     | 695.09         |
| POWER EVACUATION SYSTEM                         | Tx Line Developer                                                                                                                                                                  | JUSNL                                                                                                                                                                 | 2020-21                                     | 1228.66        |
|                                                 | Tx Line Name<br>Tx Voltage Level                                                                                                                                                   | i) Patratu (PVUNL) –Patratu, 400 kV D/C line (7.5 km).<br>ii) Patratu STPP-Koderma, 400 KV D/c Line (160 Km).<br>iii) Patratu STPP-Chandil, 400 KV D/c Line (150 Km). | 2021-22                                     | 1846.48        |
|                                                 | Configuration of Tx Line (S/C or D/C)                                                                                                                                              | D/C                                                                                                                                                                   | 2022-23                                     | 2849.76        |
| LAND POSSESSION                                 | Correction of 268.92 acres of land in the records of forest department in favour of PVUNL and also change of nature of land as non-forest                                          |                                                                                                                                                                       | EXPENDITURE OF MAR'24                       | 431.16         |
| WATER ALLOCATION                                | Project is envisaged with Air Cooled Condenser Technology. In principle commitment for 27 cusecs water available from Nalkari Dam Reservoir vide agreement dt 25.01.2016 with GoJ. |                                                                                                                                                                       | TOTAL EXPENDITURE (upto 31.03.24)           | 13136.45       |
| MOEF CLEARANCE                                  | EAC recommended for grant of EC for the project on EAC meeting held on 25.09.17. EC letter received on 07.11.17. Validity till 06.11.24.                                           |                                                                                                                                                                       |                                             |                |
| CIVIL AVIATION CLEARANCE                        | Received on 03.06.2016.                                                                                                                                                            |                                                                                                                                                                       |                                             |                |
| CPCB CLEARANCE                                  | Not Applicable                                                                                                                                                                     |                                                                                                                                                                       |                                             |                |
| SPCB CLEARANCE                                  | SPCB Clearance: CTE received on 19.10.2018. Validity till 06.11.24.                                                                                                                |                                                                                                                                                                       |                                             |                |
| FOREST CLEARANCE                                | No forest land in the main plant area.                                                                                                                                             |                                                                                                                                                                       |                                             |                |



**TALCHER THERMAL POWER PROJECT, Unit# 1 & 2 (2X660 MW, St-III) / NTPC (CENTRAL SECTOR)**

TALCHER THERMAL POWER PROJECT, P.O.: TALCHER THERMAL, DIST- ANGUL, ODISHA- 759101

E-Gen Portal Registration No. (U#1 - 1200003198; U#2 - 1200003199)

| Project Developer / Implementing Agency - NTPC |                                                                                                                                                                                                                                                                                                   |                                   | Main Plant Vendor( BTG) -BHEL (EPC contract)                                                                                                                                                                                                                 |                |  |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--|
| Unit No.                                       | LOA                                                                                                                                                                                                                                                                                               | Original Trial Run Date           | Anticipated / Actual                                                                                                                                                                                                                                         | Trial Run Date |  |
| Unit#1                                         | Sep-2022                                                                                                                                                                                                                                                                                          | Nov-2026                          | Mar-2027                                                                                                                                                                                                                                                     |                |  |
| Unit#2                                         |                                                                                                                                                                                                                                                                                                   | May-2027                          | Jun-2027                                                                                                                                                                                                                                                     |                |  |
| CLEARANCES AND STATIC DATA                     |                                                                                                                                                                                                                                                                                                   |                                   | FINANCIAL DATA (Fig. in Rs. Crore)                                                                                                                                                                                                                           |                |  |
| FUEL TYPE                                      | Coal                                                                                                                                                                                                                                                                                              |                                   | ORIGINAL ESTIMATED COST OF THE PROJECT                                                                                                                                                                                                                       | 11843.75       |  |
| COAL COMBUSTION TECHNOLOGY                     | Ultra-supercritical                                                                                                                                                                                                                                                                               |                                   | LATEST ESTIMATED COST                                                                                                                                                                                                                                        | 11843.75       |  |
| APPROVAL DATE / NTP                            | Investment Approval: 26.08.2022                                                                                                                                                                                                                                                                   |                                   | DATE OF FINANCIAL CLOSURE                                                                                                                                                                                                                                    |                |  |
| EPC/BTG/BoP Contractor Details (Package Wise)  | EPC Package for TTPP St-III(2X660 MW) awarded to M/s BHEL on 27.09.2022                                                                                                                                                                                                                           |                                   | YEAR WISE EXPENDITURE                                                                                                                                                                                                                                        |                |  |
| PPA                                            | PPA signed; Odisha SEB: 50% (660 MW) on 02.08.2022; Tamil Nadu SEB: 35% (460 MW) on 26.09.2022; Unallocated- 15%                                                                                                                                                                                  |                                   | 2021-22                                                                                                                                                                                                                                                      | 45.00          |  |
| COAL LINKAGE/FSA                               | Available : as per the MoM of the Standing Linkage Committee (LT) dated 10.04.2018; FSA Agreement with MCL under process; Source: Bhuwaneswari/Jagannath mines of MCL Pithead, Dist – 30km; Grade: G-12; Quantity: 5.854 MMTPA                                                                    |                                   | 2022-23                                                                                                                                                                                                                                                      | 453.14         |  |
| START UP POWER AGREEMENT                       | Startup power to be drawn from 400 KV grid. Application for connectivity to STU has been submitted on 01/12/2022. Application for CTU connectivity to be submitted.                                                                                                                               |                                   | EXPENDITURE OF MAR’2024                                                                                                                                                                                                                                      | 255.32         |  |
| POWER EVACUATION SYSTEM                        | Tx Line Developer                                                                                                                                                                                                                                                                                 | Yet to be awarded                 | TOTAL EXPENDITURE (upto 31.03.2024)                                                                                                                                                                                                                          | 1356.09        |  |
|                                                | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                  | (400 kV Gas Insulated Switchyard) | ADDITIONAL REMARKS<br><br>Ash Disposal:<br><br>6.43 Mcum of Quarry IV of Jaganath Mine Void of MCL allocated for TTPP Stage-III which will cater for 03 Years of Ash Disposal. For allocation of balance 17 Cum capacity, matter has been taken up with MCL. |                |  |
|                                                | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                             | -                                 |                                                                                                                                                                                                                                                              |                |  |
| LAND POSSESSION                                | Total Land: 194.82 Acre(Main Plant-191 Acre, Railway Siding-1.48 Acre; Make up water -2.34 Acre to be acquired) ROU/ROW of Land- 77.63 for Make up water Corridor. Approval under process.                                                                                                        |                                   |                                                                                                                                                                                                                                                              |                |  |
| WATER ALLOCATION                               | Available, Source: Up Stream of Samal Barrage from Brahmani River Qty: 39 Cusec                                                                                                                                                                                                                   |                                   |                                                                                                                                                                                                                                                              |                |  |
| MOEF CLEARANCE                                 | Received on 12.09.2018 and it is valid upto 12.09.2025                                                                                                                                                                                                                                            |                                   |                                                                                                                                                                                                                                                              |                |  |
| CIVIL AVIATION CLEARANCE                       | Renewed on 22.05.2022 and valid upto 22.05.2030                                                                                                                                                                                                                                                   |                                   |                                                                                                                                                                                                                                                              |                |  |
| CPCB CLEARANCE                                 | Received on 12.09.2018 and it is valid upto 12.09.2025                                                                                                                                                                                                                                            |                                   |                                                                                                                                                                                                                                                              |                |  |
| SPCB CLEARANCE                                 | CTE Application submitted on 06.11.2022 (Application No -4474906)                                                                                                                                                                                                                                 |                                   |                                                                                                                                                                                                                                                              |                |  |
| FOREST CLEARANCE                               | Make up water Pump House: 1st stage received, Application for 2nd stage under process; Make up Corridor: There was delay in submission of online application due to non-availability of PARIVESH PORTAL. Online application for Stage-I submitted on 13.11.2022 and under process at PCCF Odisha. |                                   |                                                                                                                                                                                                                                                              |                |  |

**TALCHER THERMAL POWER PROJECT, St-III, Unit# 1 & 2 (2X660 MW) / NTPC (CENTRAL SECTOR)**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           |
|----------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           |
|                                              |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 25.09.2023    | Jan-24                    | 25.01.2024    | Sept-24                   |
| 2                                            | START OF BOILER ERECTION                     | 26.09.2023    | Jan-24                    | 26.01.2024    | Sept-24                   |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 25.07.2024    | Jan-25                    | 25.11.2024    | Mar-25                    |
| 5                                            | CONDENSER ERECTION START                     | 31.07.2024    | Jan-25                    | 30.11.2024    | Jul-25                    |
| 6                                            | TG ERECTION START                            | 07.08.2024    | Jan-25                    | 07.12.2024    | Jul-25                    |
| 7                                            | HP PIPING ERECTION START                     | 04.08.2024    | Jan-25                    | 04.12.2024    | Jul-25                    |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 26.07.2025    | Mar-26                    | 26.11.2025    | Aug-26                    |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 29.11.2025    | May-26                    | 29.03.2026    | Oct-26                    |
| 10                                           | TG BOX UP                                    | 25.09.2025    | Mar-26                    | 25.01.2026    | Aug-26                    |
| 11                                           | HP PIPING ERECTION COMPLETION                | 25.01.2026    | Jun-26                    | 25.05.2026    | Dec-26                    |
| 12                                           | START OF OIL FLUSHING                        | 27.09.2025    | Mar-26                    | 27.01.2026    | Aug-26                    |
| 13                                           | BOILER LIGHT UP                              | 13.01.2026    | Jun-26                    | 13.05.2026    | Dec-26                    |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 26.01.2026    | Aug-26                    | 26.05.2026    | Mar-26                    |
| 15                                           | STEAM BLOWING START                          | 27.02.2026    | Aug-26                    | 27.06.2026    | Jan-27                    |
| 16                                           | STEAM BLOWING COMPLETION                     | 26.03.2026    | Sept-26                   | 26.07.2026    | Feb-27                    |
| 17                                           | ROLLING & SYNC.                              | 26.05.2026    | Oct-26                    | 26.09.2026    | Mar-27                    |
| 18                                           | FULL LOAD                                    | 25.06.2025    | Nov-26                    | 25.10.2026    | April-27                  |
| 19                                           | TRIAL RUN                                    | 24.11.2026    | Mar-27                    | 24.05.2027    | Jun-27                    |
| 20                                           | COD                                          | 24.12.2026    | Dec-26                    | 24.06.2027    | Jul-27                    |

| STATUS OF MAIN PLANT PACKAGE (BTG) : BHEL (EPC contract) |                                     |                                                                                                                                                                                     |               |                              |                                        |              |              |
|----------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------|----------------------------------------|--------------|--------------|
| Sl.                                                      | Packages                            | AREA                                                                                                                                                                                | UNIT-01       | UNIT-02                      |                                        |              |              |
|                                                          |                                     |                                                                                                                                                                                     | % Completion  | % Completion                 |                                        |              |              |
| 1                                                        | BOILER                              | CIVIL                                                                                                                                                                               | 95%           | 60%                          |                                        |              |              |
|                                                          |                                     | STRUCTURE                                                                                                                                                                           | 7%            | 0%                           |                                        |              |              |
|                                                          |                                     | PRESSURE PARTS                                                                                                                                                                      | 0%            | 0%                           |                                        |              |              |
| 2                                                        | TG                                  | CIVIL                                                                                                                                                                               | 55%           | 24%                          |                                        |              |              |
|                                                          |                                     | STRUCTURE                                                                                                                                                                           | 0%            | 0%                           |                                        |              |              |
|                                                          |                                     | TG ERECTION                                                                                                                                                                         | 0%            | 0%                           |                                        |              |              |
| 3                                                        | ESP                                 | UNDER PROGRESS                                                                                                                                                                      | 35.50%        | 14.40%                       |                                        |              |              |
| 4                                                        | FGD                                 | CIVIL WORK                                                                                                                                                                          | 5%            | 0%                           |                                        |              |              |
|                                                          |                                     | MATERIAL SUPPLY                                                                                                                                                                     | 0%            | 0%                           |                                        |              |              |
|                                                          |                                     | ERECTION WORK                                                                                                                                                                       | 0%            | 0%                           |                                        |              |              |
| STATUS OF BOPs                                           |                                     |                                                                                                                                                                                     |               |                              |                                        |              |              |
| Sl.                                                      | Packages/ Linked Project Milestones | Vendor/Contracting Agency                                                                                                                                                           | Date of Award | Scheduled Date of Completion | Anticipated /Actual Date of Completion | UNIT-01      | UNIT-02      |
|                                                          |                                     |                                                                                                                                                                                     |               |                              |                                        | % Completion | % Completion |
| 1                                                        | Chimney                             | BHEL                                                                                                                                                                                | Sep-22        | Nov-25                       | Nov-25 (U1)<br>Mar-26 (U2)             | 53%          |              |
| 2                                                        | Coal HandlingPlant                  | Conveyor Package - BHEL                                                                                                                                                             | Sep-22        | Jan-26                       | Jan-26 (U1)<br>May-26 (U2)             | 8%           |              |
|                                                          |                                     | Track Hopper- BHEL                                                                                                                                                                  | Sep-22        | NA                           | Jan-26 (U1)<br>May-26 (U2)             | 8%           |              |
|                                                          |                                     | Stacker Reclaimer - BHEL                                                                                                                                                            | Sep-22        | Jan-26                       | Jan-26 (U1)<br>May-26 (U2)             | 6%           |              |
| 3                                                        | Ash Handling                        | BHEL                                                                                                                                                                                | Sep-22        | Apr-26                       | Apr-26 (U1)<br>Aug-26 (U2)             | 7%           |              |
| 4                                                        | Fuel Oil System                     | BHEL                                                                                                                                                                                | Sep-22        | Nov-25                       | Nov-25 (U1)<br>Mar-26 (U2)             | 10.40%       | 10.40%       |
| 5                                                        | Cooling Towers                      | BHEL                                                                                                                                                                                | Sep-22        | Dec-25                       | Dec-25 (U1)<br>Apr-26 (U2)             | 22%          | 22%          |
| 6                                                        | CW Pump House and Piping            | BHEL                                                                                                                                                                                | Sep-22        | Nov-25                       | Nov-25 (U1)<br>Mar-26 (U2)             | 15%          | 15%          |
| 7                                                        | WPT Plant                           | BHEL                                                                                                                                                                                | Sep-22        | Sep-25                       | Sep-25 (U1)<br>Jan-26 (U2)             | 4%           | 4%           |
| 8                                                        | DM Plant                            | BHEL                                                                                                                                                                                | Sep-22        | Jul-25                       | Jul-25 (U1)<br>Nov-25 (U2)             | 12.80%       | 12.80%       |
| 9                                                        | Compressed Air System               | BHEL                                                                                                                                                                                | Sep-22        | Dec-25                       | Dec-25 (U1)<br>Apr-26 (U2)             | 0%           | 0%           |
| 10                                                       | Fire Protection System              | BHEL                                                                                                                                                                                | Sep-22        | Aug-26                       | Aug-26 (U1)<br>Dec-26 (U2)             | 12.40%       | 12.40%       |
| 11                                                       | Switch Yard                         | BHEL                                                                                                                                                                                | Sep-22        | Mar-26                       | Mar-26 (U1)<br>Jul-26 (U2)             | 26.80%       |              |
| 12                                                       | Station Txer                        | BHEL                                                                                                                                                                                | Sep-22        | Apr-25                       | Apr-25 (U1)<br>Aug-25 (U2)             | 0%           | 0 %          |
| 13                                                       | Generator Txer                      | BHEL                                                                                                                                                                                | Sep-22        | Apr-26                       | Apr-26 (U1)<br>Aug-26 (U2)             | 0%           | 0%           |
| 14                                                       | Unit Txer                           | BHEL                                                                                                                                                                                | Sep-22        | Apr-26                       | Apr-26 (U1)<br>Aug-26 (U2)             | 0%           | 0%           |
| 15                                                       | Railway Siding                      | MITES                                                                                                                                                                               | Dec-22        | Jun-25                       | Jun-25 (U1)<br>Jun-25 (U2)             | 0%           | 0%           |
| 16                                                       | Power evacuation                    | a. ISTS connectivity: Talcher Stage-III to ISTS Pandiabali [Power Grid] pooling station (App. 120kms); b. STU connectivity: Talcher stage-III to Meramundali-B [OPTCL] (App.12kms). |               |                              |                                        |              |              |

**CRITICAL ISSUES**

- Closure of Anand Bazaar – Jaganathpur Road passing through Main Plant area is awaited. This is critical in view of Safety and Security in construction area. Alternate road (Jaganathpur bypass road) has already been constructed by NTPC.
- Relocation of Bi-weekly Haat (Anand Bazar): There is a bi-weekly market located near the entrance gate of TTPS through which trucks/ trailers carrying construction/ project materials pass. Relocation of the haat is required from NTPC land as the area becomes very crowded and is a bottleneck for safe movement of materials and Safety of public.

**REASONS OF DELAY**

-NA-

**LARA SUPER THERMAL POWER PROJECT, St-II, Unit# 1 & 2 (2X800 MW ) / NTPC (CENTRAL SECTOR)**

Lara Super Thermal Power Project, Village - Chhapora, PO/PS- Pussore. Distt.-Raigarh(C.G.)-496440

E-Gen Portal Registration No. ( U#1 - 1200003870 ; U#2 - 1200003871 )

| Project Developer / Implementing Agency - NTPC |                                                                                                                                                                                             |                                                                                                                                                          | Main Plant Vendor (BTG) -BHEL(EPC contract) |                |  |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------|--|
| Unit No.                                       | LOA                                                                                                                                                                                         | Original Trial Run Date                                                                                                                                  | Anticipated / Actual                        | Trial Run Date |  |
| Unit#1                                         | Aug-2023                                                                                                                                                                                    | Dec-2027                                                                                                                                                 | Dec-2027                                    |                |  |
| Unit#2                                         |                                                                                                                                                                                             | Jun-2028                                                                                                                                                 | Jun-2028                                    |                |  |
| CLEARANCES AND STATIC DATA                     |                                                                                                                                                                                             |                                                                                                                                                          | FINANCIAL DATA (Fig. in Rs. Crore)          |                |  |
| FUEL TYPE                                      | Coal Based                                                                                                                                                                                  |                                                                                                                                                          | ORIGINAL ESTIMATED COST OF THE PROJECT      | 15530.00       |  |
| COAL COMBUSTION TECHNOLOGY                     | Ultra-Supercritical                                                                                                                                                                         |                                                                                                                                                          | LATEST ESTIMATED COST                       | 15530.00       |  |
| APPROVAL DATE / NTP                            | 29.08.23                                                                                                                                                                                    |                                                                                                                                                          | DATE OF FINANCIAL CLOSURE                   |                |  |
| EPC/BTG/BoP Contractor Details (Package Wise)  | BHEL-EPC                                                                                                                                                                                    |                                                                                                                                                          | YEAR WISE EXPENDITURE                       |                |  |
|                                                |                                                                                                                                                                                             |                                                                                                                                                          | Upto 2022-23                                | 252            |  |
| PPA                                            | PPA signed. Consent from Beneficiaries available Chhattisgarh: 50%, Power allocation to following states as per MoP allocation: Gujarat, Madhya Pradesh, Maharashtra, Goa, Daman & Diu, DNH |                                                                                                                                                          | EXPENDITURE OF MAR’2024                     | -4.18          |  |
| COAL LINKAGE/FSA                               | 7 MMTPA coal from Talaipalli Coal block allocated to NTPC                                                                                                                                   |                                                                                                                                                          | TOTAL EXPENDITURE (upto 31.03.2024)         | 726.30         |  |
| START UP POWER AGREEMENT                       | To be finalised by CTU                                                                                                                                                                      |                                                                                                                                                          |                                             |                |  |
| POWER EVACUATION SYSTEM                        | Tx Line Developer                                                                                                                                                                           | To be finalised by CTU                                                                                                                                   |                                             |                |  |
|                                                | Tx Line Name<br>Tx Voltage Level                                                                                                                                                            | • ISTS connectivity: Talcher Stage-III to ISTS Pandiabili [Power Grid] pooling station<br>• STU connectivity: Talcher stage-III to Meramundali-B [OPTCL] |                                             |                |  |
|                                                | Configuration of Tx Line (S/C or D/C)                                                                                                                                                       | To be finalised by CTU                                                                                                                                   |                                             |                |  |
| LAND POSSESSION                                | Available; Land available for Stage-II: ~ 520 acres                                                                                                                                         |                                                                                                                                                          |                                             |                |  |
| WATER ALLOCATION                               | Available; 76 cusec for Stage-II; Source is Mahanadi River, from Saradih Barrage (38 kms from Plant).                                                                                       |                                                                                                                                                          |                                             |                |  |
| MOEF CLEARANCE                                 | Available (issued on 17.07.23)                                                                                                                                                              |                                                                                                                                                          |                                             |                |  |
| CIVIL AVIATION CLEARANCE                       | Available Valid up to 17.05.2030                                                                                                                                                            |                                                                                                                                                          |                                             |                |  |
| CPCB CLEARANCE                                 | Not applicable                                                                                                                                                                              |                                                                                                                                                          |                                             |                |  |
| SPCB CLEARANCE                                 | In Process                                                                                                                                                                                  |                                                                                                                                                          |                                             |                |  |
| FOREST CLEARANCE                               | Not applicable                                                                                                                                                                              |                                                                                                                                                          |                                             |                |  |

**LARA SUPER THERMAL POWER PROJECT, Unit# 1 & 2 (2X800 MW, St-II) / NTPC (CENTRAL SECTOR)**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |               |                                 |               |                                 |
|----------------------------------------------|----------------------------------------------|---------------|---------------------------------|---------------|---------------------------------|
| Sl.                                          | MILESTONE<br>(Tentative Dates)               | UNIT-01       |                                 | UNIT-02       |                                 |
|                                              |                                              | Original Date | Actual /<br>Anticipated<br>Date | Original Date | Actual /<br>Anticipated<br>Date |
| 1                                            | COMPLETION OF BOILER FOUNDATION              |               |                                 |               |                                 |
| 2                                            | START OF BOILER ERECTION                     | Oct-2024      | Oct-2024                        | April-2025    | April-2025                      |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   |               |                                 |               |                                 |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | Aug-2025      | Aug-2025                        | Feb-2026      | Feb-2026                        |
| 5                                            | CONDENSER ERECTION START                     | Oct-2025      | Oct-2025                        | Apr-2026      | April-2026                      |
| 6                                            | TG ERECTION START                            | Nov-2025      | Nov-2025                        | May-2026      | May-2026                        |
| 7                                            | HP PIPING ERECTION START                     | Sept-2025     | Sept-2025                       | Mar-2026      | Mar-2026                        |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     |               |                                 |               |                                 |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | Feb-2027      | Feb-2027                        | Aug-2027      | Aug-2027                        |
| 10                                           | TG BOX UP                                    | Jan-2027      | Jan-2027                        | Oct-2027      | Oct-2027                        |
| 11                                           | HP PIPING ERECTION COMPLETION                | April-2027    | April-2027                      | Oct-2027      | Oct-2027                        |
| 12                                           | START OF OIL FLUSHING                        | Dec-2026      | Dec-2026                        | June-2026     | June-2026                       |
| 13                                           | BOILER LIGHT UP                              | June-2027     | June-2027                       | Dec-2027      | Dec-2027                        |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | June-2027     | June-2027                       | Dec-2027      | Dec-2027                        |
| 15                                           | STEAM BLOWING START                          | June-2027     | June-2027                       | Dec-2027      | Dec-2027                        |
| 16                                           | STEAM BLOWING COMPLETION                     | July-2027     | July-2027                       | Feb-2028      | Feb-2028                        |
| 17                                           | ROLLING & SYNC.                              | Oct-2027      | Oct-2027                        | April-2028    | April-2028                      |
| 18                                           | FULL LOAD                                    | Nov-2027      | Nov-2027                        | May-2028      | May-2028                        |
| 19                                           | TRIAL RUN                                    | Dec-2027      | Dec-2027                        | Jun-2028      | Jun-2028                        |
| 20                                           | COD                                          | Jan-2028      | Jan-2028                        | Jul-2028      | Jul-2028                        |

| STATUS OF MAIN PLANT PACKAGE (BTG) : BHEL |          |                 |                 |                 |                 |                 |  |
|-------------------------------------------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| Sl.                                       | Packages | AREA            | UNIT-01         |                 | UNIT-02         |                 |  |
|                                           |          |                 | %<br>Completion | %<br>Completion | %<br>Completion | %<br>Completion |  |
| 1                                         | BOILER   | CIVIL           |                 | 0%              | 0%              |                 |  |
|                                           |          | STRUCTURE       |                 | 0%              | 0%              |                 |  |
|                                           |          | PRESSURE PARTS  |                 | 0%              | 0%              |                 |  |
| 2                                         | TG       | CIVIL           |                 | 0%              | 0%              |                 |  |
|                                           |          | STRUCTURE       |                 | 0%              | 0%              |                 |  |
|                                           |          | TG ERECTION     |                 | 0%              | 0%              |                 |  |
| 3                                         | ESP      | UNDER PROGRESS  |                 | 0%              | 0%              |                 |  |
| 4                                         | FGD      | CIVIL WORK      |                 | 0%              | 0%              |                 |  |
|                                           |          | MATERIAL SUPPLY |                 | 0%              | 0%              |                 |  |
|                                           |          | ERECTION WORK   |                 | 0%              | 0%              |                 |  |

| STATUS OF BOPs |                                           |                                        |                                               |                                    |                                                 |                 |                 |
|----------------|-------------------------------------------|----------------------------------------|-----------------------------------------------|------------------------------------|-------------------------------------------------|-----------------|-----------------|
| Sl.            | Packages/<br>Linked Project<br>Milestones | Vendor/Contracting<br>Agency           | Date of<br>Award                              | Scheduled<br>Date of<br>Completion | Anticipated<br>/Actual<br>Date of<br>Completion | UNIT-01         | UNIT-02         |
|                |                                           |                                        |                                               |                                    |                                                 | %<br>Completion | %<br>Completion |
| 1              | Chimney                                   | BHEL                                   | Aug'23                                        | U#1-Oct26<br>U#2-Feb27             | U#1-Oct26<br>U#2-Feb27                          | 0%              | 0%              |
| 2              | Coal HandlingPlant                        | Conveyor Package -                     | Aug'23                                        | U#1-Dec26<br>U#2-Apr27             | U#1-Dec26<br>U#2-Apr27                          | 0%              | 0%              |
|                |                                           | Wagon Tippler – NA                     | NA                                            | NA                                 | NA                                              | NA              | NA              |
|                |                                           | Stacker Reclaimer -                    | Aug'23                                        | U#1-Dec26<br>U#2-Apr27             | U#1-Dec26<br>U#2-Apr27                          | 0%              | 0%              |
| 3              | Ash Handling                              | BHEL                                   | Aug'23                                        | U#1-Feb27<br>U#2-Jun27             | U#1-Feb27<br>U#2-Jun27                          | 0%              | 0%              |
| 4              | Fuel Oil System                           | BHEL                                   | Aug'23                                        | U#1-Oct26<br>U#2-Feb27             | U#1-Oct26<br>U#2-Feb27                          | 0%              | 0%              |
| 5              | Cooling Towers                            | BHEL                                   | Aug'23                                        | U#1-Sep26<br>U#2-Jan27             | U#1-Sep26<br>U#2-Jan27                          | 0%              | 0%              |
| 6              | CW Pump                                   | BHEL                                   | Aug'23                                        | U#1-Sep26<br>U#2-Jan27             | U#1-Sep26<br>U#2-Jan27                          | 0%              | 0%              |
| 7              | WPT Plant                                 | BHEL                                   | Aug'23                                        | U#1-Aug26<br>U#2-Dec26             | U#1-Aug26<br>U#2-Dec26                          | 0%              | 0%              |
| 8              | DM Plant                                  | BHEL                                   | Aug'23                                        | U#1-Jun26<br>U#2-Oct26             | U#1-Jun26<br>U#2-Oct26                          | 0%              | 0%              |
| 9              | Compressed Air System                     | BHEL                                   | Aug'23                                        | U#1-Sep26<br>U#2-Jan27             | U#1-Sep26<br>U#2-Jan27                          | 0%              | 0%              |
| 10             | Fire Protection System                    | BHEL                                   | Aug'23                                        | U#1-Jul27<br>U#2-Nov27             | U#1-Jul27<br>U#2-Nov27                          | 0%              | 0%              |
| 11             | Switch Yard                               | BHEL                                   | Aug'23                                        | U#1-Feb27<br>U#2-Jun27             | U#1-Feb27<br>U#2-Jun27                          | 0%              | 0%              |
| 12             | Station Txer                              | BHEL                                   | Aug'23                                        | U#1-Feb26<br>U#2-Jun26             | U#1-Feb26<br>U#2-Jun26                          | 0%              | 0%              |
| 13             | Unit Txer                                 | BHEL                                   | Aug'23                                        | U#1-Apr27<br>U#2-Aug27             | U#1-Apr27<br>U#2-Aug27                          | 0%              | 0%              |
| 14             | Railway Siding                            | BITES                                  | Application filed to Railways for FR approval |                                    |                                                 | 0%              | 0%              |
| 15             | Power evacuation                          | Application for connectivity submitted |                                               |                                    |                                                 |                 |                 |

**CRITICAL ISSUES**

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**REASONS OF DELAY**

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**Singrauli STPP, St-III, Unit#8 & 9 (2X800 MW) / NTPC (CENTRAL SECTOR)**

Shaktinagar, Sonebhadra, Uttar Pradesh

E-Gen Portal Registration No. ( U#8 –1200003908, U#9 –1200003909)

| Project Developer / Implementing Agency -NTPC |            | Main Plant Vendor - M/s BHEL (EPC contract) |                      |                |
|-----------------------------------------------|------------|---------------------------------------------|----------------------|----------------|
| Unit No.                                      | LOA        | Original Trial Run Date                     | Anticipated / Actual | Trial Run Date |
| Unit#8                                        | 05-03-2024 | May-29                                      |                      | May-29         |
| Unit#9                                        |            | Feb-30                                      |                      | Feb-30         |

| CLEARANCES AND STATIC DATA |                                                                                                              | FINANCIAL DATA (Fig. in Rs. Crore)     |            |
|----------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------|------------|
| FUEL TYPE                  | Coal, Pithead                                                                                                | ORIGINAL ESTIMATED COST OF THE PROJECT | 17195.31   |
| COAL COMBUSTION TECHNOLOGY | Ultra-Supercritical                                                                                          | LATEST ESTIMATED COST                  | 17195.31   |
| APPROVAL DATE / NTP        | 03.03.2024 (Investment Approval)                                                                             | DATE OF FINANCIAL CLOSURE              | 03.03.2024 |
| PPA                        | PPA signed with UPPCL, PSPCL, RUVNL, UPCL, Consent available from J&K                                        | YEAR WISE EXPENDITURE                  |            |
| COAL LINKAGE/FSA           | 21.04.2020,NCL,G-10 and 5.61 MTPA                                                                            | EXPENDITURE OF Mar'24                  | -          |
| START UP POWER AGREEMENT   | 400 kV D/c Interconnection Between VSTPP-V to Singrauli-III with twin Moose conductor.                       | TOTAL EXPENDITURE (up to 31.03.24)     | 0          |
| POWER EVACUATION SYSTEM    | Power evacuation proposed at 400 kV with provision of 6 nos. outgoing line bays.<br>To be finalised by CTUIL |                                        |            |
| LAND POSSESSION            | Land is available and in possession.                                                                         |                                        |            |
| WATER ALLOCATION           | 48 cusec from Rihand reservoir                                                                               |                                        |            |
| MOEF CLEARANCE             | Available vide MoEF&CC Letter dated 13.07.2020                                                               |                                        |            |
| CIVIL AVIATION CLEARANCE   | Available vide AAI Letter dated 27.11.2018                                                                   |                                        |            |
| CPCB CLEARANCE             | Available                                                                                                    |                                        |            |
| SPCB CLEARANCE             | Available                                                                                                    |                                        |            |
| FOREST CLEARANCE           | Available                                                                                                    |                                        |            |

## Singrauli STPP, St-III, Unit#8 &amp; 9 (2X800 MW) / NTPC (CENTRAL SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED/ ACTUAL ) |                                              |                             |                                         |                             |                                         | STATUS OF MAIN PLANT PACKAGE (BTG-BHEL) |                                     |                                   |               |                          |                           |         |         |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|---------------|--------------------------|---------------------------|---------|---------|
| Sl .                                         | Milestone                                    | UNIT-08                     |                                         | UNIT-09                     |                                         | SI                                      | PACKAGE                             | AREA                              |               | UNIT-01                  | UNIT-02                   |         |         |
|                                              |                                              | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion |                                         |                                     |                                   |               |                          |                           |         |         |
| 1                                            | Completion Of Boiler Foundation              |                             |                                         |                             |                                         | 1                                       | BOILER                              | CIVIL                             |               |                          |                           |         |         |
| 2                                            | Start Of Boiler Erection                     |                             |                                         |                             |                                         |                                         |                                     | STRUCTURE                         |               |                          |                           |         |         |
| 3                                            | Boiler Ceiling Girder Lifting Completion     |                             |                                         |                             |                                         |                                         |                                     | PRESSURE PARTS                    |               |                          |                           |         |         |
| 4                                            | Condenser Erection Start                     |                             |                                         |                             |                                         | 2                                       | TG                                  | CIVIL                             |               |                          |                           |         |         |
| 5                                            | TG Erection Start                            |                             |                                         |                             |                                         |                                         |                                     | STRUCTURE                         |               |                          |                           |         |         |
| 6                                            | HP Piping Erection Start                     |                             |                                         |                             |                                         | 3                                       | ESP                                 | TG ERECTION                       |               |                          |                           |         |         |
| 7                                            | Boiler Hydro Test (Drainable) Completion     |                             |                                         |                             |                                         | 4                                       | FGD                                 | UNDER PROGRESS                    |               |                          |                           |         |         |
| 8                                            | Boiler Hydro Test (Non-Drainable) Completion |                             |                                         |                             |                                         |                                         |                                     | CIVIL WORK                        |               |                          |                           |         |         |
| 9                                            | TG BOX UP                                    |                             |                                         |                             |                                         |                                         |                                     | MATERIAL SUPPLY                   |               |                          |                           |         |         |
| 10                                           | HP Piping Erection Completion                |                             |                                         |                             |                                         |                                         |                                     | ERECTION WORK                     |               |                          |                           |         |         |
| 11                                           | Start Of Oil Flushing                        |                             |                                         |                             |                                         | STATUS OF BOPs                          |                                     |                                   |               |                          |                           |         |         |
| 12                                           | Boiler Light Up                              |                             |                                         |                             |                                         | Sl .                                    | Packages/ Linked Project Milestones | Vendor/ Contracting Agency (DPSI) | Date of Award | Schedule d Date of Comp. | Ant/ Actual Date of Comp. | UNIT 08 | UNIT 09 |
| 13                                           | Chemical Cleaning Completion                 |                             |                                         |                             |                                         | 1                                       | Chimney                             |                                   |               |                          |                           |         |         |
| 14                                           | Steam Blowing Start                          |                             |                                         |                             |                                         | 2                                       | Coal Handling Plant                 |                                   |               |                          |                           |         |         |
| 15                                           | Steam Blowing Completion                     |                             |                                         |                             |                                         |                                         |                                     |                                   |               |                          |                           |         |         |
| 16                                           | Rolling & Sync.                              |                             |                                         |                             |                                         | 3                                       | Ash Handling Plant                  |                                   |               |                          |                           |         |         |
| 17                                           | Full Load                                    |                             |                                         |                             |                                         | 4                                       | Fuel Oil System                     |                                   |               |                          |                           |         |         |
| 18                                           | Trial Run                                    |                             |                                         |                             |                                         | 5                                       | Cooling Towers                      |                                   |               |                          |                           |         |         |
| 19                                           | COD                                          |                             |                                         |                             |                                         | 6                                       | CW Pump house                       |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 7                                       | WPT Plant                           |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 8                                       | DM Plant                            |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 9                                       | Compressed Air System               |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 10                                      | Fire Protection System              |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 11                                      | Switch Yard                         |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 12                                      | Station Transformers                |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 13                                      | Unit Transformers                   |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 14                                      | Railway Siding                      |                                   |               |                          |                           |         |         |
|                                              |                                              |                             |                                         |                             |                                         | 15                                      | Power Evacuation Lines              |                                   |               |                          |                           |         |         |

## CRITICAL AREAS

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## REASONS OF DELAY

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**GHATAMPUR THERMAL POWER PROJECT, Unit# 1, 2 & 3 (3x660 MW) / NUPPL (CENTRAL SECTOR)**

Near Village Lahurimau-Kasimpur, Ghatampur Tehsil, P.O.: Samuhi-209206, Kanpur Nagar District, Uttar Pradesh  
E-Gen Portal Registration No. (U#1 - 1200002439; U#2 - 1200002440; U#3 - 1200002441)

| Project Developer / Implementing Agency - NUPPL |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | Main Plant Vendor: SG- M/s L&T/MHI, TG- M/s GE |                      |                |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------|----------------|
| Unit No.                                        | LOA                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                         | Original Trial Run Date                        | Anticipated / Actual | Trial Run Date |
| Unit#1                                          | Aug-2016                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                         | May-2020                                       |                      | Jun-2024       |
| Unit#2                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | Nov-2020                                       |                      | Nov-2024       |
| Unit#3                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | May-2021                                       |                      | Mar-2025       |
| CLEARANCES AND STATIC DATA                      |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | FINANCIAL DATA (Fig. in Rs. Crore)             |                      |                |
| FUEL TYPE                                       | Coal, Indigenous                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                         | ORIGINAL ESTIMATED COST OF THE PROJECT         |                      | 17237.80       |
| COAL COMBUSTION TECHNOLOGY                      | Supercritical                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                         | LATEST ESTIMATED COST                          |                      | 19406.12       |
| APPROVAL DATE / NTP                             | GoI Sanction - 27.07.2016                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                         | DATE OF FINANCIAL CLOSURE                      |                      | 22.06.2021     |
| EPC/BTG/BoP Contractor Details (Package Wise)   | Contractor Details: 1. SG Package (GA1)- L&T-MHI Power Boilers Pvt. Ltd/ LoA Date-02-08-2016<br>2. TG Package (GA2)- GE Power Systems India Pvt. Ltd /LoA Date-02-08-2016<br>3. BoP Package (GA3)- BGR Energy Systems Ltd / LoA Date-21-11-2016                                                                                                                                                                                            |                                                                                                                         | YEAR WISE EXPENDITURE                          |                      |                |
| PPA                                             | 75% PPA Signed with Uttar Pradesh Power Corporation Ltd.(UPPCL). Balance 25% PPA signed with Assam PDCL.                                                                                                                                                                                                                                                                                                                                   |                                                                                                                         | 2016-17                                        |                      | 927.76         |
| COAL LINKAGE/FSA                                | Allocation Date- 03.10.2016. Allocated Mine (Source) - Pachwara South Coal Block Grade - G10 Quantity- Net Geological Reserve 373.52 MT. Extractable reserve - 262.84MT; Pachwara South Coal Block will be fully functional by the end of Financial Year 2026-27 and will be able to meet the coal requirement of NUPPL. Hence, NUPPL is seeking coal under bridge linkage by the time Pachwara South Coal Block will be fully functional. |                                                                                                                         | 2017-18                                        |                      | 1228.45        |
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | 2018-19                                        |                      | 3517.83        |
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | 2019-20                                        |                      | 3525.17        |
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | 2020-21                                        |                      | 2260.09        |
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         | 2021-22                                        |                      | 1901.77        |
| START UP POWER AGREEMENT                        | There are four incoming lines for 132 KV Start-up power. Four lines are from: 1. Sarh-1 to NUPPL, 2. Ghatampur to NUPPL, 3. Sarh-2 to NUPPL, 4. Hamirpur to NUPPL; Out of four two are connected and we are availing power through two lines (Ghatampur to NUPPL & Sarh-2 to NUPPL).                                                                                                                                                       |                                                                                                                         | 2022-23                                        |                      | 1511.60        |
| POWER EVACUATION SYSTEM                         | Tx Line Developer                                                                                                                                                                                                                                                                                                                                                                                                                          | M/S GTL                                                                                                                 | EXPENDITURE OF MAR'2024                        |                      | 248.94         |
|                                                 | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                                                                                                                                                           | i)765 KV, S/C, Ghatampur-Agra line;<br>ii) 765 KV, S/C, Ghatampur- Hapur Line;<br>iii) 400 KV D/C,Ghatampur-Kanpur line | TOTAL EXPENDITURE (upto 31.03.2024)            |                      | 17142.34       |
|                                                 | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                                                                                                                                                      | Both                                                                                                                    |                                                |                      |                |
| LAND POSSESSION                                 | Total Pocket land-52.33 Ha. (As per initial approval); Total Pocket land registered/ Acquired- 47.4790 Ha. (As per current reconciliation);                                                                                                                                                                                                                                                                                                |                                                                                                                         |                                                |                      |                |
| WATER ALLOCATION                                | 80 cusec from UP Irrigation department (44.6 km from GTPP)                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                         |                                                |                      |                |
| MOEF CLEARANCE                                  | Clearance obtained date from concerned authority:- 17.06.2015 validity of it (If any):- 7 Years                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         |                                                |                      |                |
| CIVIL AVIATION CLEARANCE                        | Clearance obtained date from concerned authority:- 13.12.2013 Validity : - 5 Years, NUPPL had sent compliance to AAI regarding the                                                                                                                                                                                                                                                                                                         |                                                                                                                         |                                                |                      |                |
| CPCB CLEARANCE                                  | NOT APPLICABLE                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                         |                                                |                      |                |
| SPCB CLEARANCE                                  | Clearance obtained date from concerned authority:- 17.11.2017; validity of it.- 5 Years                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                         |                                                |                      |                |
| FOREST CLEARANCE                                | NOT APPLICABLE                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                         |                                                |                      |                |

## GHATAMPUR THERMAL POWER PROJECT, Unit# 1, 2 &amp; 3 (3x660 MW) / NUPPL (CENTRAL SECTOR)

| UNIT WISE MILESTONES ANTICIPATED / ACTUAL ) |                                              |                             |                                          |                             |                                          |                             |                                          |
|---------------------------------------------|----------------------------------------------|-----------------------------|------------------------------------------|-----------------------------|------------------------------------------|-----------------------------|------------------------------------------|
| Sl.                                         | Milestones                                   | UNIT-01                     |                                          | UNIT-02                     |                                          | UNIT-03                     |                                          |
|                                             |                                              | Original Date of Completion | Anticipate d / Actual Date of Completion | Original Date of Completion | Anticipate d / Actual Date of Completion | Original Date of Completion | Anticipate d / Actual Date of Completion |
| 1                                           | COMPLETION OF BOILER FOUNDATION              | 01.01.2017                  | 17.03.2017                               | 01.07.2017                  | 21.10.2020                               | 28.12.2017                  | 29.01.2021                               |
| 2                                           | START OF BOILER ERECTION                     | 01.09.2017                  | 27.02.2018                               | 01.03.2018                  | 30.06.2018                               | 28.08.2018                  | 04.12.2018                               |
| 3                                           | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          |                                          | NA                          |                                          | NA                          |                                          |
| 4                                           | BOILER CEILING GIRDER LIFTING COMPLETION     | 01.05.2018                  | 25.11.2018                               | 01.11.2018                  | 04.04.2019                               | 01.05.2019                  | 12.09.2019                               |
| 5                                           | CONDENSER ERECTION START                     | 19.07.2018                  | 09.03.2019                               | 19.01.2019                  | 03.01.2020                               | 19.07.2019                  | 02.03.2021                               |
| 6                                           | TG ERECTION START                            | 03.07.2018                  | 08.02.2019                               | 03.01.2019                  | 29.02.2020                               | 03.07.2019                  | 30.04.2021                               |
| 7                                           | HP PIPING ERECTION START                     | 12.01.2019                  | 30.10.2019                               | 12.07.2019                  | 21.02.2019                               | 12.01.2019                  | 30.06.2021                               |
| 8                                           | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | NA                          |                                          | NA                          |                                          | NA                          |                                          |
| 9                                           | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 01.05.2019                  | 06.01.2020                               | 01.11.2019                  | 24.02.2021                               | 01.05.2020                  | 29.08.2021                               |
| 10                                          | TG BOX UP                                    | 02.07.2019                  | 23.10.2019                               | 02.01.2020                  | 15.05.2021                               | 02.07.2020                  | 15.12.2022                               |
| 11                                          | HP PIPING ERECTION COMPLETION                | 10.06.2019                  | 31.08.2021                               | 10.06.2020                  | 28.02.2023                               | 12.06.2020                  | 30.06.2023                               |
| 12                                          | START OF OILFLUSHING                         | 30.11.2019                  | 27.10.2020                               | 31.05.2020                  | 07.11.2022                               | 30.11.2020                  | May-24                                   |
| 13                                          | BOILER LIGHT UP                              | 30.11.2019                  | 28.02.2022                               | 30.05.2020                  | Jun-24                                   | 30.11.2020                  | Nov-24                                   |
| 14                                          | CHEMICAL CLEANING COMPLETION                 | 30.10.2019                  | 24.07.2021                               | 30.04.2020                  | May-24                                   | 30.10.2020                  | Sep-24                                   |
| 15                                          | STEAM BLOWING START                          | 15.12.2020                  | 23.06.2022                               | 30.05.2020                  | Jun-24                                   | 30.11.2020                  | Oct-24                                   |
| 16                                          | STEAM BLOWING COMPLETION                     | 30.01.2020                  | 13.08.2022                               | 15.06.2020                  | Jul-24                                   | 15.12.2020                  | Dec-24                                   |
| 17                                          | ROLLING & SYNC.                              | 01.03.2020                  | 04.11.2023                               | 31.08.2020                  | Sep-24                                   | 01.03.2021                  | Jan-25                                   |
| 18                                          | FULL LOAD                                    | 01.04.2020                  | May-24                                   | 31.10.2020                  | Oct-24                                   | 01.04.2021                  | Feb-25                                   |
| 19                                          | TRIAL RUN                                    | 29.05.20                    | Jun-24                                   | 27.11.20                    | Nov-24                                   | 29.05.21                    | Mar-25                                   |
| 20                                          | COD                                          | 01.06.20                    | Jul-24                                   | 30.11.20                    | Dec-24                                   | 01.06.21                    | Apr-25                                   |

| STATUS OF MAIN PLANT PACKAGE (BTG) : SG - L&T MHI, TG - GE |                                     |                                            |                                    |                      |                                  |                                                                                                          |                      |                        |              |  |
|------------------------------------------------------------|-------------------------------------|--------------------------------------------|------------------------------------|----------------------|----------------------------------|----------------------------------------------------------------------------------------------------------|----------------------|------------------------|--------------|--|
| Sl.                                                        | Packages                            |                                            | AREA                               |                      |                                  | UNIT-01                                                                                                  | UNIT-02              | UNIT-03                |              |  |
|                                                            |                                     |                                            |                                    |                      |                                  | % Completion                                                                                             | % Completion         | % Completion           |              |  |
| 1                                                          | BOILER                              |                                            | CIVIL                              |                      |                                  | 96%                                                                                                      | 93%                  | 94%                    |              |  |
|                                                            |                                     |                                            | STRUCTURE                          |                      |                                  | 99%                                                                                                      | 98%                  | 97%                    |              |  |
|                                                            |                                     |                                            | PRESSURE PARTS                     |                      |                                  | 100%                                                                                                     | 100%                 | 100%                   |              |  |
| 2                                                          | TG                                  |                                            | CIVIL                              |                      |                                  | 100%                                                                                                     | 100%                 | 99%                    |              |  |
|                                                            |                                     |                                            | STRUCTURE                          |                      |                                  | 100%                                                                                                     | 100%                 | 100%                   |              |  |
| 3                                                          | ESP                                 |                                            | UNDER PROGRESS                     |                      |                                  | 100%                                                                                                     | 100%                 | 99%                    |              |  |
| 4                                                          | FGD                                 |                                            | CIVIL WORK                         |                      |                                  | GA-3 Package material shifting from FGD area is under progress, 1900Mt of GA-3 material already shifted. |                      |                        |              |  |
|                                                            |                                     |                                            | MATERIAL SUPPLY                    |                      |                                  |                                                                                                          |                      |                        |              |  |
|                                                            |                                     |                                            | ERECTION WORK                      |                      |                                  |                                                                                                          |                      |                        |              |  |
| STATUS OF BOPs                                             |                                     |                                            |                                    |                      |                                  |                                                                                                          |                      |                        |              |  |
| Sl.                                                        | Packages/ Linked Project Milestones |                                            | Vendor/Contracting Agency(M/s BGR) | Date of Award        | Scheduled Date of Completion     | Anticipated/ Actual Date of Completion                                                                   | UNIT-01              | UNIT-02                | UNIT-03      |  |
|                                                            |                                     |                                            |                                    |                      |                                  |                                                                                                          | % Completion         | % Completion           | % Completion |  |
| 1                                                          | Chimney                             | BGR Energy System Ltd.                     | 21.11.2016                         | 20.11.2019           | U1-Apr 24; U2-Jun 24; U3-Sept 24 | 99.5%                                                                                                    | 82%                  | 41.5%                  |              |  |
| 2                                                          | Coal Handling Plant                 | Conveyor Pkg – BGR Energy System Ltd.      | 21.11.2016                         | 20.07.2019           | Apr24, Aug 24, Nov 24            | 77%                                                                                                      | 19%                  | 9%                     |              |  |
|                                                            |                                     | Wagon Tippler - BGR Energy System Ltd.     | 21.11.2016                         | U1-Jul19, U2&3-Jan20 | U1-Jun 24, U2&3-Aug 24           | 70%                                                                                                      | 0%                   |                        |              |  |
|                                                            |                                     | Stacker Reclaimer - BGR Energy System Ltd. | 21.11.2016                         | U1-Jun19, U2&3-Feb20 | SRI-Sep 24, SR2-Oct 24           | 27%                                                                                                      | 9%                   |                        |              |  |
| 3                                                          | Ash Handling Plant                  | BGR Energy System Ltd.                     | 21.11.2016                         | Jul19, Mar20, Feb20  | Apr24, Aug24, Sep24              | 67%                                                                                                      | 73%                  | 57%                    |              |  |
| 4                                                          | Fuel Oil System                     | L&T MHI Power Boilers Pvt Ltd              | 21.11.2016                         | 24.10.2019           | May-24                           | 99%                                                                                                      |                      |                        |              |  |
| 5                                                          | Cooling Towers                      | BGR Energy System Ltd.                     | 21.11.2016                         | 20.11.2020           | Apr24, Oct24, Feb25              | Civil:95%, Mech.70%                                                                                      | Civil:66%, Merch. 0% | Civil:42.15%, Mech. 0% |              |  |
| 6                                                          | CW Pump house                       | BGR Energy System Ltd.                     | 21.11.2016                         | 20.11.2020           | Apr24, May24, Jun24              | 99%                                                                                                      | 55%                  | 35%                    |              |  |
| 7                                                          | WPT Plant                           | BGR Energy System Ltd.                     | 21.11.2016                         | 20.04.2019           | Mar-24                           | 99%                                                                                                      |                      |                        |              |  |
| 8                                                          | DM Plant                            | BGR Energy System Ltd.                     | 21.11.2016                         | 20.04.2019           | Feb-22 (A)                       | 100%                                                                                                     |                      |                        |              |  |
| 9                                                          | Compressed Air System               | L&T MHI Power Boilers Pvt Ltd              | 02.08.2016                         | 20.07.2019           | Mar-23 (A)                       | 100%                                                                                                     |                      |                        |              |  |
| 10                                                         | Fire Protection System              | BGR Energy System Ltd.                     | 21.11.2016                         | 20.11.2020           | Apr24, Aug24, Oct24              | 69.5%                                                                                                    | 14.5%                | 4%                     |              |  |
| 11                                                         | Switch Yard                         | BGR Energy System Ltd.                     | 21.11.2016                         | 20.02.2020           | Jul'24                           | 400kV-59%, 765kV-96%, Outdoor Switchyard-83%                                                             |                      |                        |              |  |
| 12                                                         | Station Transformers                | GE-Power Systems India Pvt. Ltd.           | 02.08.2016                         | Apr19, Oct19, Apr20  | Feb21(A), Aug22(A), Apr-24       | 100.0%                                                                                                   | 100.0%               | 95.0%                  |              |  |
| 13                                                         | Unit Transformers                   | GE-Power Systems India Pvt. Ltd.           | 02.08.2016                         | Apr19, Oct19, Apr20  | Jul22(A), Dec22(A), Apr-24       | 100.0%                                                                                                   | 100%                 | 95.0%                  |              |  |
| 14                                                         | Railway Siding                      | RITES                                      | 29.03.2019                         | 28.03.2021           | Jun-24                           | Civil work – 99.2% Electrical – 95%                                                                      |                      |                        |              |  |
| 15                                                         | Power Evacuation Lines              | Ghatampur Transmission Ltd                 | 12.06.2018                         | 26.02.2020           | 17.05.2020(A)                    | 400kV GTPS-Kanpur -100%                                                                                  |                      |                        |              |  |
|                                                            |                                     |                                            |                                    | 26.09.2020           | 27.03.2021(A)                    | 765kV GTPS-Agra -100%                                                                                    |                      |                        |              |  |
|                                                            |                                     |                                            |                                    | 26.03.2021           | 25.12.2021(A)                    | 765kV GTPS-Hapur - 100%                                                                                  |                      |                        |              |  |

## CRITICAL ISSUES

- Slow work progress in BoP areas i.e. CHP, AHP.
- Delay in material supply in CHP (Wagon Tippler, S/R) and AHP( pneumatic valves and ceramic bends) .

## REASONS OF DELAY

Work of BoP areas had been put on hold in August 2021 site due to financial issues being faced by M/s BGR.

**NLC TALABIRA TPP, Unit# 1, 2 & 3 (3X800 MW) / NLC (CENTRAL SECTOR)**

Office of the CGM &amp; Project Head, Talabira Thermal Power Project, NLC India Ltd, Ainthapalli, Sambalpur – 768 001

E-Gen Portal Registration No. ( U#1 - 1200003602 ; U#2 - 1200003603 ; U#3 - 1200003604 )

| Project Developer / Implementing Agency -NLCIL |            | Main Plant Vendor - M/s BHEL (EPC contract) |                                     |
|------------------------------------------------|------------|---------------------------------------------|-------------------------------------|
| Unit No.                                       | LOA        | Original Trial Run Date                     | Anticipated / Actual Trial Run Date |
| Unit#1                                         | 12-01-2024 | May-2028 (Tentative)                        | May-2028 (Tentative)                |
| Unit#2                                         |            | Nov-2028 (Tentative)                        | Nov-2028 (Tentative)                |
| Unit#3                                         |            | Apr-2029 (Tentative)                        | Apr-2029 (Tentative)                |

| CLEARANCES AND STATIC DATA |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | FINANCIAL DATA (Fig. in Rs. Crore)           |           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------|
| FUEL TYPE                  | Coal, Pithead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ORIGINAL ESTIMATED COST OF THE PROJECT       | 19,422.44 |
| COAL COMBUSTION TECHNOLOGY | Ultra-Supercritical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | LATEST ESTIMATED COST                        | 27,212.96 |
| APPROVAL DATE / NTP        | NTP - Within 11 months from the date of submission of price bid (29.12.2023)                                                                                                                                                                                                                                                                                                                                                                                                                          | DATE OF FINANCIAL CLOSURE                    |           |
| PPA                        | "100% PPA available.<br>PPA signed with:<br>a) TANGEDCO for 1500 MW on 16.03.2022(62.50%)<br>b) Puducherry Electricity Dept for 100 MW on 09.05.2022 (4.17%)<br>c) KSEBL for 400 MW on 19.10.2022 (16.67%)<br>d) GRIDCO for 400 MW on 28.09.2023 (16.67%)"                                                                                                                                                                                                                                            | YEAR WISE EXPENDITURE                        |           |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2017-18                                      | 1.01      |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2018-19                                      | 28.3      |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2019-20                                      | 2.82      |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2020-21                                      | 2.05      |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2021-22                                      | 21.31     |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2022-23                                      | 519.40    |
| COAL LINKAGE/FSA           | Coal Linkage from Talabira II & III OCP 10.56 Million Tonnes of coal per annum. GCV of about 3700 kCal/kg. [Grade: G-12]                                                                                                                                                                                                                                                                                                                                                                              | 2023-24 (Upto Mar'24-tentative)              | -0.28     |
| START UP POWER AGREEMENT   | Start up power will be drawn from CTU network, planned at 36th month from the date of NTP. Start up power agreement will be made with ERLDC as per CERC guidelines and prior to 36th month.                                                                                                                                                                                                                                                                                                           | TOTAL EXPENDITURE (up to 31.03.24-tentative) | 813       |
| POWER EVACUATION SYSTEM    | Out of 2400 MW project, the 2000 MW will be connected at CTU substation, and 400 MW will be connected at STU substation. The power required for Interstate Transmission will be evacuated through 2 Nos. D/C 765 KV transmission lines (LILO) to Jharsuguda (Sundargarh) Substation & Angul Substation of PGCIL, which is at a distance of about 25 km. The power required for the state of Odisha will be evacuated through 1 no. D/C 400 kV transmission line to nearby OPTCL Substation (Lapanga). |                                              |           |
| LAND POSSESSION            | "Requirement- 1694.5 Ac.<br>Advance Possession: 692 Ac.<br>Land in Use: 0 Ac."                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              |           |
| WATER ALLOCATION           | The Govt. of Odisha has granted approval for 90 cusecs for the Phase-I 3X 800 MW and Phase-II 1x800 MW project from Hirakud Reservoir.                                                                                                                                                                                                                                                                                                                                                                |                                              |           |
| MOEF CLEARANCE             | "EC Obtained on 02.02.2021<br>(Validity 7 years from 02.02.2021)"                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |           |
| CIVIL AVIATION CLEARANCE   | Obtained on 18.07.2018 from AAI                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                              |           |
| CPCB CLEARANCE             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              |           |
| SPCB CLEARANCE             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              |           |
| FOREST CLEARANCE           | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              |           |

## NLC TALABIRA TPP, Unit# 1, 2 &amp; 3 (3X800 MW) / NLC (CENTRAL SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL ) |                                              |                             |                                         |                             |                                         |                             |                                         | STATUS OF MAIN PLANT PACKAGE (BTG) - M/s BHEL |                                     |                                  |               |                         |                           |         |         |         |
|-----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|-----------------------------------------------|-------------------------------------|----------------------------------|---------------|-------------------------|---------------------------|---------|---------|---------|
| Sl.                                           | Milestone                                    | UNIT-01                     |                                         | UNIT-02                     |                                         | UNIT-03                     |                                         | SI                                            | PACKAGE                             | AREA                             | UNIT-01       | UNIT-02                 | UNIT-03                   |         |         |         |
|                                               |                                              | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion | Original Date of Completion | Actual / Anticipated Date of Completion |                                               |                                     |                                  |               |                         |                           |         |         |         |
| 1                                             | Completion Of Boiler Foundation              |                             |                                         |                             |                                         |                             |                                         | 1                                             | BOILER                              | CIVIL                            |               |                         |                           |         |         |         |
| 2                                             | Start Of Boiler Erection                     |                             |                                         |                             |                                         |                             |                                         |                                               |                                     | STRUCTURE                        |               |                         |                           |         |         |         |
| 3                                             | Boiler Ceiling Girder Lifting Completion     |                             |                                         |                             |                                         |                             |                                         |                                               |                                     | PRESSURE PARTS                   |               |                         |                           |         |         |         |
| 4                                             | Condenser Erection Start                     |                             |                                         |                             |                                         |                             |                                         | 2                                             | TG                                  | CIVIL                            |               |                         |                           |         |         |         |
| 5                                             | TG Erection Start                            |                             |                                         |                             |                                         |                             |                                         |                                               |                                     | STRUCTURE                        |               |                         |                           |         |         |         |
| 6                                             | HP Piping Erection Start                     |                             |                                         |                             |                                         |                             |                                         |                                               |                                     | TG ERECTION                      |               |                         |                           |         |         |         |
| 7                                             | Boiler Hydro Test (Drainable) Completion     |                             |                                         |                             |                                         |                             |                                         | 3                                             | ESP                                 | UNDER PROGRESS                   |               |                         |                           |         |         |         |
| 8                                             | Boiler Hydro Test (Non-Drainable) Completion |                             |                                         |                             |                                         |                             |                                         | 4                                             | FGD                                 | CIVIL WORK                       |               |                         |                           |         |         |         |
| 9                                             | TG BOX UP                                    |                             |                                         |                             |                                         |                             |                                         |                                               |                                     | MATERIAL SUPPLY                  |               |                         |                           |         |         |         |
| 10                                            | HP Piping Erection Completion                |                             |                                         |                             |                                         |                             |                                         |                                               |                                     | ERECTION WORK                    |               |                         |                           |         |         |         |
| 11                                            | Start Of Oil Flushing                        |                             |                                         |                             |                                         |                             |                                         | STATUS OF BOPs                                |                                     |                                  |               |                         |                           |         |         |         |
| 12                                            | Boiler Light Up                              |                             |                                         |                             |                                         |                             |                                         | Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency (DPSI) | Date of Award | Scheduled Date of Comp. | Ant/ Actual Date of Comp. | UNI T01 | UNI T02 | UNI T03 |
| 13                                            | Chemical Cleaning Completion                 |                             |                                         |                             |                                         |                             |                                         | 1                                             | Chimney                             |                                  |               |                         |                           |         |         |         |
| 14                                            | Steam Blowing Start                          |                             |                                         |                             |                                         |                             |                                         | 2                                             | Coal Handling Plant                 |                                  |               |                         |                           |         |         |         |
| 15                                            | Steam Blowing Completion                     |                             |                                         |                             |                                         |                             |                                         |                                               |                                     |                                  |               |                         |                           |         |         |         |
| 16                                            | Rolling & Sync.                              |                             |                                         |                             |                                         |                             |                                         | 3                                             | Ash Handling Plant                  |                                  |               |                         |                           |         |         |         |
| 17                                            | Full Load                                    |                             |                                         |                             |                                         |                             |                                         | 4                                             | Fuel Oil System                     |                                  |               |                         |                           |         |         |         |
| 18                                            | Trial Run                                    |                             |                                         |                             |                                         |                             |                                         | 5                                             | Cooling Towers                      |                                  |               |                         |                           |         |         |         |
| 19                                            | COD                                          |                             |                                         |                             |                                         |                             |                                         | 6                                             | CW Pump house                       |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 7                                             | WPT Plant                           |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 8                                             | DM Plant                            |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 9                                             | Compressed Air System               |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 10                                            | Fire Protection System              |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 11                                            | Switch Yard                         |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 12                                            | Station Transformers                |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 13                                            | Unit Transformers                   |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 14                                            | Railway Siding                      |                                  |               |                         |                           |         |         |         |
|                                               |                                              |                             |                                         |                             |                                         |                             |                                         | 15                                            | Power Evacuation Lines              |                                  |               |                         |                           |         |         |         |

## CRITICAL AREAS

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## REASONS OF DELAY

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**KHURJA STPP, Unit# 1 & 2 (2x660 MW) / THDC (CENTRAL SECTOR)**

Khurja, Distt.-Bulandshahar, Uttar Pradesh -203 131

E-Gen Portal Registration No. (U#1 - 1200002023; U#2 - 1200002024 )

| Project Developer / Implementing Agency - THDC |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | Main Plant Vendor: SG - L&T/MHI and TG - BHEL |                |             |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------|-------------|
| Unit No.                                       | LOA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Original Trial Run Date                                                                                                    | Anticipated / Actual                          | Trial Run Date |             |
| Unit#1                                         | Aug-2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Jul-2023                                                                                                                   | Sept-2024                                     |                |             |
| Unit#2                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Jan-2024                                                                                                                   | Dec-2024                                      |                |             |
| CLEARANCES AND STATIC DATA                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | FINANCIAL DATA (Fig. in Rs. Crore)            |                |             |
| FUEL TYPE                                      | Coal, Indigenous                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                            | ORIGINAL ESTIMATED COST OF THE PROJECT        |                | 11089.42    |
| COAL COMBUSTION TECHNOLOGY                     | Ultra Supercritical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                            | LATEST ESTIMATED COST                         |                | Not Revised |
| APPROVAL DATE / NTP                            | 07.03.2019.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                            | DATE OF FINANCIAL CLOSURE                     |                |             |
| EPC/BTG/BoP Contractor Details (Package Wise)  | Zero Date : 29.08.2019 (with respect to Award of Main Plant Package i.e. Steam Generator & Associated Packages)                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | YEAR WISE EXPENDITURE                         |                |             |
| PPA                                            | PPAs for entire off take-off power to be generated from Khurja STPP have been signed by THCDIL prior to 05.01.2011 with Uttar Pradesh, Utrrakhand, Rajasthan, Himachal Pradesh and Delhi. Out of 1320 MW, 60% power (792 MW) is to be supplied to UP & balance 40% power (528 MW) is to be supplied to other beneficiary states as per allocation to be done by Ministry of Power.                                                                                                                          |                                                                                                                            | 2016-17                                       | 338.92         |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | 2017-18                                       | 10.66          |             |
| COAL LINKAGE/FSA                               | For Coal linkage, Ministry of Coal, GoI vide allotment order dtd.17.01.2017 has allotted Amelia Coal Mine in District Singraulli, Madhya Pradesh to THDCIL to meet out fuel requirements of the project. Grade of Coal: G9 (Avg. GCV = 4746 Kcal/Kg). Net Geological Reserve in Amelia Coal Mine is 162.05 Million Ton (OC) out of this Extractable Coal Reserve is 139.48 Million Ton.                                                                                                                     |                                                                                                                            | 2018-19                                       | 148.87         |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | 2019-20                                       | 439.95         |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | 2020-21                                       | 789.69         |             |
| START UP POWER AGREEMENT                       | Connectivity has been granted by CTU vide its letter NoC/CTU/N/05/1200002404 dated.18.03.2020 for evacuation of 528 MW power from Khurja (2x660 MW) STPP to ISTS beneficiaries. Signing of Connectivity agreement is under process. In line with the granted connectivity, power evacuation system is under implementation through Power Grid Corporation Of India Limited and is likely to completed by June-2022.Thereafter THDCIL will request RLDC for availing start up power as per CERC Regulations. |                                                                                                                            | 2021-22                                       | 2158.93        |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                            | 2022-23                                       | 2825.84        |             |
| POWER EVACUATION SYSTEM                        | Tx Line Developer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PGCIL and UPPTCL                                                                                                           | EXPENDITURE OF Mar’2024                       |                | 305.86      |
|                                                | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | i) Khurja STPP- Aligarh 400 KV, D/C line (PGCIL)<br>ii) Aligarh-Shamli 400 KV line , D/C, LILOing at Khurja STPP (UPPTCL). | TOTAL EXPENDITURE (upto 31.03.2024)           |                | 9962.27     |
|                                                | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | D/C                                                                                                                        |                                               |                |             |
| LAND POSSESSION                                | Small Patches of land within the boundary of already acquired 1201 Acre land by UPSIDC and handed over to THDCIL .                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                            |                                               |                |             |
| WATER ALLOCATION                               | Formal water commitment letter for providing 43 Cusec water for Makeup Water System from Upper Ganga Canal at just 11 Km from Project site issued by Water Resource Department, GoUP on 12.06.2014.                                                                                                                                                                                                                                                                                                         |                                                                                                                            |                                               |                |             |
| MOEF CLEARANCE                                 | Environmental Clearance has been accorded to Khurja STPP by MOEF&CC on 30.03.2017 with validity upto 29.03.2024.                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                            |                                               |                |             |
| CIVIL AVIATION CLEARANCE                       | Clearance for construction of chimney for Khurja STPP has been obtained from Airport Authority of India (AAI) on 19.04.2018 with validity up to 17.07.2023.                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                            |                                               |                |             |
| CPCB CLEARANCE                                 | NOT APPLICABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                            |                                               |                |             |
| SPCB CLEARANCE                                 | “Consent to Establish” has been granted by SPCB Uttar Pradesh on 13.06.2018 with validity upto 01.06.2023.                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                            |                                               |                |             |
| FOREST CLEARANCE                               | NOT APPLICABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                            |                                               |                |             |

**KHURJA SUPER STPP, Unit# 1 & 2 (2x660 MW) / THDC (CENTRAL SECTOR)**

| UNIT WISE MILESTONES (ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           |
|---------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|
| Sl.                                         | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           |
|                                             |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1                                           | COMPLETION OF BOILER FOUNDATION              | 29.09.2020    | 20.01.2021                | 29.03.2021    | 15.11.2021                |
| 2                                           | START OF BOILER ERECTION                     | 29.10.2020    | 20.02.2021                | 29.04.2021    | 17.08.2021                |
| 3                                           | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           |
| 4                                           | BOILER CEILING GIRDER LIFTING COMPLETION     | 28.05.2021    | 12.02.2022                | 28.11.2021    | 09.09.2022                |
| 5                                           | CONDENSER ERECTION START                     | 02.09.2021    | 25.03.2022                | 19.01.2022    | 19.01.2023                |
| 6                                           | TG ERECTION START                            | 03.09.2021    | 25.05.2022                | 03.03.2022    | 25.02.2023                |
| 7                                           | HP PIPING ERECTION START                     | 28.06.2021    | 20.10.2022                | 28.12.2021    | 28.02.2023                |
| 8                                           | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 29.05.2022    | 15.03.2023                | 29.11.2022    | 02.11.2023                |
| 9                                           | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | NA            | NA                        | NA            | NA                        |
| 10                                          | TG BOX UP                                    | 04.08.2022    | 20.07.2023                | 04.02.2023    | 15.05.24                  |
| 11                                          | HP PIPING ERECTION COMPLETION                | 26.10.2022    | 15.01.24                  | 26.04.2023    | May-24                    |
| 12                                          | BOILER LIGHT UP                              | 29.10.2022    | Mar-24                    | 29.04.2023    | Aug-24                    |
| 13                                          | CHEMICAL CLEANING COMPLETION                 | 29.10.2022    | 18.02.24                  | 29.04.2023    | Jul-24                    |
| 14                                          | OIL FLUSHING COMPLETION                      | 03.11.2022    | 07.11.2023                | 03.05.2023    | July-24                   |
| 15                                          | STEAM BLOWING START                          | 29.11.2022    | April-24                  | 29.05.2023    | Aug-24                    |
| 16                                          | STEAM BLOWING COMPLETION                     | 29.12.2022    | June-24                   | 29.06.2023    | Sep-24                    |
| 17                                          | ROLLING & SYNC.                              | 02.04.2023    | July-24                   | 02.10.2023    | Oct-24                    |
| 18                                          | FULL LOAD                                    | 02.06.2023    | Aug-24                    | 02.12.2023    | Nov-24                    |
| 19                                          | TRIAL RUN                                    | 02.07.2023    | Sep-24                    | 02.01.2024    | Dec-24                    |
| 20                                          | COD                                          | 02.08.2023    | Oct-24                    | 02.02.2024    | Jan-25                    |

| STATUS OF MAIN PLANT PACKAGE (BTG) : SG:L&T MHI, TG: BHEL |                                     |                                                     |                           |                              |                                        |                                     |                                  |
|-----------------------------------------------------------|-------------------------------------|-----------------------------------------------------|---------------------------|------------------------------|----------------------------------------|-------------------------------------|----------------------------------|
| Sl.                                                       | Packages                            | AREA                                                | UNIT-01                   |                              | UNIT-02                                |                                     |                                  |
|                                                           |                                     |                                                     | %                         | %                            |                                        |                                     |                                  |
| 1                                                         | BOILER                              | CIVIL                                               | 100%                      | 100%                         |                                        |                                     |                                  |
|                                                           |                                     | STRUCTURE                                           | 89%                       | 59%                          |                                        |                                     |                                  |
|                                                           |                                     | PRESSURE PARTS                                      | 100%                      | 100%                         |                                        |                                     |                                  |
| 2                                                         | TG                                  | CIVIL                                               | 100%                      | 100%                         |                                        |                                     |                                  |
|                                                           |                                     | STRUCTURE                                           | 100%                      | 100%                         |                                        |                                     |                                  |
|                                                           |                                     | PRESSURE PARTS                                      | 100%                      | 1500%                        |                                        |                                     |                                  |
| 3                                                         | ESP                                 | UNDER PROGRESS                                      | 86%                       | 13%                          |                                        |                                     |                                  |
| 4                                                         | FGD                                 | CIVIL WORK                                          | 100 % RCC completed       | 85%                          |                                        |                                     |                                  |
|                                                           |                                     | MATERIAL SUPPLY                                     | 96.00%                    | 83%                          |                                        |                                     |                                  |
|                                                           |                                     | ERECTION WORK                                       | 60.00 %                   | 66%                          |                                        |                                     |                                  |
| STATUS OF BOPs                                            |                                     |                                                     |                           |                              |                                        |                                     |                                  |
| Sl.                                                       | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- BHEL)               | Date of Award             | Scheduled Date of Completion | Anticipated /Actual Date of Completion | UNIT-01                             | UNIT-02                          |
|                                                           |                                     |                                                     |                           |                              |                                        | % Completion                        | % Completion                     |
| 1                                                         | Chimney                             | L&T MHI Power Boilers Pvt. Ltd                      | 27.09.2020                | 14.04.2023                   | U#1-Mar'24<br>U#2-Jun'24               | Unit-1: RCC- 100%; Unit-2: RCC-100% |                                  |
| 2                                                         | Coal Handling Plant                 | Thyssenkrupp Industries India Pvt. Ltd.             | 04.08.2021                | 04.12.2023                   | Apr.'24                                | 69%                                 |                                  |
| 3                                                         | Ash Handling Plant                  | M/s L&T MHI Power Boilers Pvt. Ltd                  | 11.06.2020                | 20.02.2023                   | Apr'24                                 | 100% of Piling and 90% of RCC       |                                  |
| 4                                                         | Fuel Oil System                     | M/s L&T MHI Power Boilers Pvt. Ltd                  | 30.09.2021                | 08.10.2022                   | 15,Dec-23                              | 100% LDO tanks; 100% FOPH           |                                  |
| 5                                                         | Cooling Towers                      | M/s Paharpur Cooling Towers Ltd                     | 16.04.2021/<br>13.10.2021 | 14.06.2023/<br>14.12.2023    | Jun-24/<br>Jul-24                      | U-1: 99% of civil work completed    | U-2: 98% of civil work completed |
| 6                                                         | CW Pump house                       | Flowmore Ltd.                                       | 01.10.2021                | 28.12.2023                   | Junl-24                                | 96%                                 |                                  |
| 7                                                         | WPT Plant                           | Gaja Engineering Pvt. Ltd.                          | 30.11.2021                | 25.08.2023                   | 17-01-24                               | Civil : 100% Mech: 100%             |                                  |
| 8                                                         | DM Plant                            |                                                     | 30.11.2021                | 30.09.2023                   | 30.04-24                               | Civil : 100% Mech: 92%              |                                  |
| 9                                                         | DM Water Transfer Pump House        |                                                     |                           |                              |                                        |                                     |                                  |
| 10                                                        | Compressed Air System               | M/s L&T MHI Power Boilers Pvt. Ltd                  | 04-02-2022                | 08.10.22                     | 31-01-24                               | Civil Work: 100%                    |                                  |
| 11                                                        | Fire Protection System              | Gaja Engineering Pvt. Ltd                           |                           | 31.08.23                     | April-24                               | Civil – 100%; Mech-81%              |                                  |
| 12                                                        | Switch Yard                         | GET&D                                               | 16.09.2020                | 25.03.2023/<br>25.09.2023    | U#1 – Apr-24<br>U#2 – Jun-24           | 97.0%                               |                                  |
| 13                                                        | Ash Dyke Package                    | M/s JPW Infratech Pvt Ltd                           | 11.03.2022                | 10.09.2024                   | 10.09.2024                             | 53.55%                              |                                  |
| 14                                                        | Station Transformers                | BHEL                                                | 09.08.2020                | 04.02.2022/<br>30.07.2022    | 24.07.2023/<br>31.05.2024              | 53.0%                               |                                  |
| 15                                                        | Unit Transformers                   | BHEL                                                | 08.09.2020                | 15.07.2022                   | May-2024                               | Civil: 96%                          | Mfg: 95%                         |
| 20                                                        | Railway Siding                      | M/s Jhajhariya Nirman Ltd; M/s ISC-CMIPL (JV)       | 13.11.2020                | 13.09.2022                   | Apr-24                                 | 97 %                                |                                  |
| 21                                                        | Power Evacuation Lines              | M/s Unitech Power Transmission<br>M/s Hyosung India | 02.03.2021                | 01.06.2022                   | 24.12.2022(A)                          | 100% Tx line work completed         |                                  |

**CRITICAL ISSUES**

- Slow progress in BoP areas – CHP, AHP, Chimney, Air Compressor plant.
- Construction of LILOing work of 400 kV Aligarh – Shamli line by UPPTCL for evacuation of UP's share of power from Khurja STPP (854.4 MW)

**REASONS OF DELAY**

- ♦ 6 Months Post Award delay due to COVID-19 Pandemic.
- ♦ Slow work progress in some of the BoP areas i.e. CHP, AHP, DM Water Plant, WPT Plant. Air Compressor and Fire protection

**BUXAR THERMAL POWER PROJECT, Unit# 1 & 2 (2x660 MW) / SJVN (CENTRAL SECTOR)**

Village-Chausa, Tehsil-Chausa, Distt.-Buxar (Bihar), Pin- 802114

E-Gen Portal Registration No. (U#1 - 1200002481; U#2 - 1200002482)

| Project Developer / Implementing Agency -SJVN |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   | Main Plant Vendor - M/s L&T (EPC contract) |                |             |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------|-------------|
| Unit No.                                      | LOA                                                                                                                                                                                                                                                                                     | Original Trial Run Date                                                                                                                                           | Anticipated / Actual                       | Trial Run Date |             |
| Unit#1                                        | Jun-2019                                                                                                                                                                                                                                                                                | May-2023                                                                                                                                                          | Sept-2024                                  |                |             |
| Unit#2                                        |                                                                                                                                                                                                                                                                                         | Sep-2023                                                                                                                                                          | Dec-2024                                   |                |             |
| CLEARANCES AND STATIC DATA                    |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   | FINANCIAL DATA (Fig. in Rs. Crore)         |                |             |
| FUEL TYPE                                     | Coal, Indigenous                                                                                                                                                                                                                                                                        |                                                                                                                                                                   | ORIGINAL ESTIMATED COST OF THE PROJECT     |                | 10439.09    |
| COAL COMBUSTION TECHNOLOGY                    | Supercritical                                                                                                                                                                                                                                                                           |                                                                                                                                                                   | LATEST ESTIMATED COST                      |                | Not Revised |
| APPROVAL DATE / NTP                           | Investment Approval accorded by Govt. of India vide MoP                                                                                                                                                                                                                                 |                                                                                                                                                                   | DATE OF FINANCIAL CLOSURE                  |                | 26.11.2020  |
| BTG/BoP Contractor Details (Package Wise)     | Main Plant works has been awarded in single EPC package to M/s. L&T on 22.06.2019.                                                                                                                                                                                                      |                                                                                                                                                                   | YEAR WISE EXPENDITURE                      |                |             |
| PPA                                           | PPA signed with Govt. of Bihar on 05.01.2011 and further reconfirmed on 09.01.2018.                                                                                                                                                                                                     |                                                                                                                                                                   |                                            |                |             |
| COAL LINKAGE/FSA                              | Allocated Mine - CCL, Magadh-Amrapali; Distance from mine - 465 km (non pithead).<br>Letter of Assurance (LoA) for 4.976 MTPA of G9 to G14 grade coal issued by Central Coalfields Ltd. (CCL) on 10.12.2018. Coal may be supplied either from Amrapali coal block or Magadh coal block. |                                                                                                                                                                   | 2013-14                                    |                | 46.68       |
|                                               |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   | 2014-15                                    |                | 15.18       |
| START UP POWER AGREEMENT                      | Start up power will be arranged through South Bihar Power Distribution company Ltd. (SBPDCL).                                                                                                                                                                                           |                                                                                                                                                                   | 2015-16                                    |                | 378.08      |
|                                               |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   | 2016-17                                    |                | 23.96       |
| POWER EVACUATION SYSTEM                       | Tx Line Developer                                                                                                                                                                                                                                                                       | BSPTCL, Govt. of Bihar                                                                                                                                            | 2017-18                                    |                | 21.73       |
|                                               | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                        | i) Buxar TPS- Naubatpur 400 KV, D/C<br>ii) Buxar TPS- Dumraon (New) 220 KV, D/C<br>iii) Buxar TPS- Karmnasa (New) 220 KV, D/C<br>iv) Buxar TPS- Dehri 220 KV, D/C | 2018-19                                    |                | 68.21       |
|                                               | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                   | D/C                                                                                                                                                               | 2019-20                                    |                | 344.50      |
|                                               |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   | 2020-21                                    |                | 1100.05     |
| LAND POSSESSION                               | Total Land Required-1283 Acre;1058.335 Acre (for Main Plant), 147 acre (for Rail Corridor) and 78 acre (for Water Pipeline corridor & intake etc.) land under possession.                                                                                                               |                                                                                                                                                                   | 2021-22                                    |                | 2691.06     |
| WATER ALLOCATION                              | MoU for utilization of 55 cusec of water signed between STPL and Water Resource Deptt., Govt. of Bihar on 29.08.2016.                                                                                                                                                                   |                                                                                                                                                                   | 2022-23                                    |                | 2581.36     |
| MOEF CLEARANCE                                | Accorded by MOEF&CC on 28.02.2017.(Validity- 27.02.2024)                                                                                                                                                                                                                                |                                                                                                                                                                   | EXPENDITURE OF Mar'2024                    |                | 228.20      |
| CIVIL AVIATION CLEARANCE                      | Accorded by Airport Authority of India on 12.04.2017 (Fresh NOC issued on 18.11.2018). (Validity-17.11.2028)                                                                                                                                                                            |                                                                                                                                                                   | TOTAL EXPENDITURE (upto 31.03.2024)        |                | 9222.86     |
| CPCB CLEARANCE                                | NOT APPLICABLE                                                                                                                                                                                                                                                                          |                                                                                                                                                                   |                                            |                |             |
| SPCB CLEARANCE                                | “Consent to Establish” (NOC) granted by Bihar State Pollution Control Board on 03.09.2019.                                                                                                                                                                                              |                                                                                                                                                                   |                                            |                |             |
| FOREST CLEARANCE                              | NOT APPLICABLE                                                                                                                                                                                                                                                                          |                                                                                                                                                                   |                                            |                |             |

**BUXAR THERMAL POWER PROJECT, Unit# 1 & 2 (2x660 MW) / SJVN (CENTRAL SECTOR)**

| UNIT WISE MILESTONES (ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           |
|---------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|
| Sl.                                         | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           |
|                                             |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1                                           | COMPLETION OF BOILER FOUNDATION              | 21.JUL.20     | 01.MAY.21                 | 19.NOV.20     | 28.OCT.21                 |
| 2                                           | START OF BOILER ERECTION                     | 20.AUG.20     | 21.OCT.20                 | 20.DEC.20     | 23.NOV.21                 |
| 3                                           | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           |
| 4                                           | BOILER CEILING GIRDER LIFTING COMPLETION     | 19.APR.21     | 31.JAN.22                 | 20.AUG.21     | 30.NOV.22                 |
| 5                                           | CONDENSER ERECTION START                     | 03.AUG.21     | 31.MAY.22                 | 03.DEC.21     | Apr-24                    |
| 6                                           | TG ERECTION START                            | 21.SEP.21     | 21.SEP.22                 | 20.JAN.22     | May-24                    |
| 7                                           | HP PIPING ERECTION START                     | 16.OCT.21     | 02.MAY.22                 | 15.FEB.22     | Apr-24                    |
| 8                                           | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 20.APR.22     | 16.JUN.23                 | 21.AUG.22     | May-24                    |
| 9                                           | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | NA            |                           | NA            |                           |
| 10                                          | TG BOX UP                                    | 21.AUG.22     | 20-DEC-23                 | 20.DEC.22     | Sep-24                    |
| 11                                          | HP PIPING ERECTION COMPLETION                | 30.JUL.22     | May-24                    | 29.NOV.22     | Sep-24                    |
| 12                                          | START OF OIL FLUSHING                        | 28.AUG.22     | 4 Jan-24                  | 27.DEC.22     | Oct-24                    |
| 13                                          | BOILER LIGHT UP                              | 21.OCT.22     | May-24                    | 21.FEB.23     | Sep-24                    |
| 14                                          | CHEMICAL CLEANING COMPLETION                 | 15.OCT.22     | May-24                    | 15.FEB.23     | Sep-24                    |
| 15                                          | STEAM BLOWING START                          | 01.NOV.22     | Jun-24                    | 04.MAR.23     | Oct-24                    |
| 16                                          | STEAM BLOWING COMPLETION                     | 18.DEC.22     | June-24                   | 20.APR.23     | Oct-24                    |
| 17                                          | ROLLING & SYNC.                              | 20.FEB.23     | Jul-24                    | 21.JUN.23     | Nov-24                    |
| 18                                          | FULL LOAD                                    | 21.MAR.23     | Aug-24                    | 21.JUL.23     | Dec-24                    |
| 19                                          | TRIAL RUN                                    | 21.May.23     | Sep-24                    | 21.Sep.23     | Dec-24                    |
| 20                                          | COD                                          | 07.JUL.23     | Oct-24                    | 07.JAN.24     | Jan-25                    |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/s L&T |                                     |                                             |                             |                              |                                        |                  |              |
|----------------------------------------------|-------------------------------------|---------------------------------------------|-----------------------------|------------------------------|----------------------------------------|------------------|--------------|
| Sl.                                          | Packages                            | AREA                                        |                             |                              |                                        | UNIT-01          | UNIT-02      |
|                                              |                                     |                                             |                             |                              |                                        | % Completion     | % Completion |
| 1                                            | BOILER                              | CIVIL                                       |                             |                              |                                        | 100%             | 94.13%       |
|                                              |                                     | STRUCTURE                                   |                             |                              |                                        | 97.06%           | 88.15%       |
|                                              |                                     | PRESSURE PARTS                              |                             |                              |                                        | 100%             | 90.23%       |
| 2                                            | TG                                  | CIVIL                                       |                             |                              |                                        | 100%             | 87.68%       |
|                                              |                                     | STRUCTURE                                   |                             |                              |                                        | 100%             | 94.09%       |
|                                              |                                     | TG ERECTION                                 |                             |                              |                                        | 98.10%           | 72.15%       |
| 3                                            | ESP                                 | UNDER PROGRESS                              |                             |                              |                                        | 95.08%           | 75.17%       |
| 4                                            | FGD                                 | CIVIL WORK                                  |                             |                              |                                        | 79.61%           | 62.38%       |
|                                              |                                     | MATERIAL SUPPLY                             |                             |                              |                                        | 95.48%           | 96.59%       |
|                                              |                                     | ERECTION WORK                               |                             |                              |                                        | 29.19%           | 6.44%        |
| STATUS OF BOPs                               |                                     |                                             |                             |                              |                                        |                  |              |
| Sl.                                          | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- L&T)        | Date of Award               | Scheduled Date of Completion | Anticipated /Actual Date of Completion | UNIT-01          | UNIT-02      |
|                                              |                                     |                                             |                             |                              |                                        | % Completion     | % Completion |
| 1                                            | Chimney                             | L&T Limited (EPC)                           | 22.JUN.19                   | 28.JUN.23                    | May24                                  | 80.16%           |              |
| 2                                            | Coal Handling Plant                 | L&T (Conveyor pkg)                          | 22.JUN.19                   | 19.NOV.22                    | APR.24                                 | 71.12%           |              |
|                                              |                                     | L&T (Wagon tipler)                          | 22.JUN.19                   | 21.NOV.22                    | APR.24                                 | 73.15%           |              |
|                                              |                                     | L&T/ Thyssenkrup (Stacker reclaimer)        | 22.JUN.19                   | 23.OCT.22                    | APR.24                                 | 78.04%           |              |
| 3                                            | Ash Handling Plant                  | L&T /Macawber Beekay Pvt Ltd                | 22.JUN.19                   | 19.JUL.23                    | June.24                                | 74.54%           |              |
| 4                                            | Fuel Oil System                     | L&T/ Shalkoot Mechanique Pvt. Ltd           | 22.JUN.19                   | 31.AUG.22                    | April.24                               | 90.17%           |              |
| 5                                            | Cooling Towers                      | L&T/ Paharpur Cooling Towers Ltd            | I-22.JUN.19<br>II-22.JUN.19 | I-20.FEB.23<br>II-20.JUN.23  | Apr,24<br>July,24                      | 87.13%<br>58.11% |              |
| 6                                            | CW Pump house                       | L&T/ Xylem Water Solutions India Pvt Ltd    | I-22.JUN.19<br>II-22.JUN.19 | I-23.FEB.23<br>II-23.JUN.23  | Apr,24<br>APR,24                       | 88.21%<br>60.88% |              |
| 7                                            | WPT Plant                           | L&T/ Driplex Water Engineering Pvt Ltd      | I-22.JUN.19<br>II-22.JUN.19 | I-05.APR.23<br>II-05.AUG.23  | APR,24<br>APR,24                       | 94.66%<br>68.17% |              |
| 8                                            | DM Plant                            | L&T/ Driplex Water Engineering Pvt Ltd      | 22.JUN.19                   | 21.JUN.23                    | 31.AUG.23                              | 100%             |              |
| 9                                            | Compressed Air System               | L&T / L&T-MHPS Boilers Pvt. Ltd             | 22.JUN.19                   | 20.OCT.22                    | Apr,24                                 | 92.77%           |              |
| 10                                           | Fire Protection System              | L&T/ Flowmore Limited                       | 22.JUN.19                   | 10.JUL.23                    | Apr,24                                 | 73.07%           |              |
| 11                                           | Switch Yard                         | L&T/ ABB Power Products & Systems India Ltd | 22.JUN.19                   | 21.NOV.22                    | Apr,24                                 | 98.89%           |              |
| 12                                           | Station Transformers                | L&T/ ABB Power Products & Systems India Ltd | I-22.JUN.19<br>II-22.JUN.19 | I-22.APR.22<br>II-22.AUG.22  | Feb,24<br>Apr,24                       | 100%<br>82.92%   |              |
| 13                                           | Unit Transformers                   | L&T/ ABB Power Products & Systems India Ltd | I-22.JUN.19<br>II-22.JUN.19 | I-29.MAR.23<br>II-29.SEP.23  | Apr,24<br>Apr,24                       | 56.64%<br>54.23% |              |
| 14                                           | Railway Siding                      | MITES Ltd.                                  | 13.JUN.19                   | 31.OCT.22                    | Dec,24                                 | 36.34%           |              |
| 15                                           | Power Evacuation Lines              | BSPTCL, Govt. of Bihar                      | 23.NOV.21                   | 31.DEC.22                    | 05-03-24                               | 100%             |              |

**CRITICAL ISSUES**

- Slow work progress in BoP areas i.e. AHP, CHP & Railway siding.
- Delay in readiness of Switchyard and challenges in land acquisition affecting railway siding and water intake pipeline corridor pose obstacles to project advancement.
- Frequent local agitation.

**REASONS OF DELAY**

**BTG :**  
Covid-19 Pandemic and subsequent lockdowns; Non-availability of industrial Oxygen cylinders due to Covid-19; State government restriction for transportation of aggregates, sand mining etc.; Agitation by locals on 10.01.2023 and unrest activity on 11.01.2023.

**BoP:**  
Delayed acquisition of land for Water Corridor & Intake and Rail Corridor.; Covid-19 Pandemic and subsequent lockdowns. Non-availability of industrial Oxygen cylinders due to Covid-19; State government restriction for transportation of aggregates, sand mining etc.; Agitation by locals on 10.01.2023 and unrest activity on 11.01.2023.

**OBRA 'C' TPP, Unit# 1 & 2 (2x660 MW) / UPRVUNL (STATE SECTOR)**

Village-Obra, Tehsil-Obra, District-Sonebhadra, Uttar Pradesh, Pin-231219

E-Gen Portal Registration No. (U#1 - 1200001696; U#2 - 1200001697)

|                                                   |                                                                                                                                                                                                                                                                                     |                                                                                                                                            |                                                        |                |                                               |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------|-----------------------------------------------|
| Project Developer / Implementing Agency - UPRVUNL |                                                                                                                                                                                                                                                                                     |                                                                                                                                            | Main Plant Vendor - (BTG) : M/s. Doosan (EPC contract) |                |                                               |
| Unit No.                                          | LOA                                                                                                                                                                                                                                                                                 | Original Trial Run Date                                                                                                                    | Anticipated / Actual                                   | Trial Run Date |                                               |
| Unit#1                                            | Dec-2016                                                                                                                                                                                                                                                                            | Dec-2020                                                                                                                                   | 02-02-2024                                             |                |                                               |
| Unit#2                                            |                                                                                                                                                                                                                                                                                     | Apr-2021                                                                                                                                   | Jul-2024                                               |                |                                               |
| CLEARANCES AND STATIC DATA                        |                                                                                                                                                                                                                                                                                     |                                                                                                                                            | FINANCIAL DATA (Fig. in Rs. Crore)                     |                |                                               |
| FUEL TYPE                                         | Coal, Indigenous                                                                                                                                                                                                                                                                    |                                                                                                                                            | ORIGINAL ESTIMATED COST OF THE PROJECT                 |                | 8777.71                                       |
| COAL COMBUSTION TECHNOLOGY                        | Ultra-Supercritical                                                                                                                                                                                                                                                                 |                                                                                                                                            | LATEST ESTIMATED COST                                  |                | 11705.85                                      |
| APPROVAL DATE / NTP                               | Date of NTP or Approval Date: 22.12.2016                                                                                                                                                                                                                                            |                                                                                                                                            | DATE OF FINANCIAL CLOSURE                              |                | 13.11.2013; 30.05.2019 for additional amount. |
| BTG/BoP Contractor Details (Package Wise)         | 22.12.2016. EPC contract awarded to M/s Doosan Power Systems India Pvt. Ltd., Gurugram (Haryana)                                                                                                                                                                                    |                                                                                                                                            | YEAR WISE EXPENDITURE                                  |                |                                               |
| PPA                                               | PPA signed with UP Power Corporation Ltd for 100% share to state of UP                                                                                                                                                                                                              |                                                                                                                                            | 2015-16                                                |                | 7.24                                          |
| COAL LINKAGE/FSA                                  | Allocated Mine - Saharpur Jamarpani mines, Jharkhand; Distance from mine - 651 km (non pithead); Allocation Date: 13.08.2015. Grade of Coal -G10                                                                                                                                    |                                                                                                                                            | 2016-17                                                |                | 423.77                                        |
|                                                   |                                                                                                                                                                                                                                                                                     |                                                                                                                                            | 2017-18                                                |                | 277.83                                        |
| START UP POWER AGREEMENT                          | Start up power from UPPTCL                                                                                                                                                                                                                                                          |                                                                                                                                            | 2018-19                                                |                | 855.90                                        |
|                                                   |                                                                                                                                                                                                                                                                                     |                                                                                                                                            | 2019-20                                                |                | 2175.96                                       |
| POWER EVACUATION SYSTEM                           | Tx Line Developer                                                                                                                                                                                                                                                                   | UPPTCL                                                                                                                                     | 2020-21                                                |                | 1220.62                                       |
|                                                   | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                    | i) LILO of 765 kV Anpara'D'- Unnao S/C at Obra 'C' TPS;<br>ii) 400 kV D/C Jaunpur- Obra line (upto LILO point of Obra'B' – Obra 'C' Line). | 2021-22                                                |                | 1826.42                                       |
|                                                   | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                               |                                                                                                                                            | 2022-23                                                |                | 1460.40                                       |
| LAND POSSESSION                                   | Brown Field project, therefore Land already in Possession. For ash dyke construction, land acquisition of 113.42 Ha under progress. Initially ash disposal of Obra 'C' will be made in existing obra 'B' Ash Pond and in parallel land acquisition work for Obra'C' is in progress. |                                                                                                                                            | EXPENDITURE OF Mar'2024                                |                | 225.30                                        |
| WATER ALLOCATION                                  | Water requirement to be fulfilled from return channel of Obra-B plant. Additional requirement (if any) shall be met from the reservoir of Rihand Dam.                                                                                                                               |                                                                                                                                            | TOTAL EXPENDITURE (upto 31.03.2024)                    |                | 10635.96                                      |
| MOEF CLEARANCE                                    | Clearance obtained date 21.06.2016                                                                                                                                                                                                                                                  |                                                                                                                                            |                                                        |                |                                               |
| CIVIL AVIATION CLEARANCE                          | Clearance obtained date : 12.07.2016 Valid upto 21.07.2021                                                                                                                                                                                                                          |                                                                                                                                            |                                                        |                |                                               |
| CPCB CLEARANCE                                    | Not Applicable                                                                                                                                                                                                                                                                      |                                                                                                                                            |                                                        |                |                                               |
| SPCB CLEARANCE                                    | Not Applicable                                                                                                                                                                                                                                                                      |                                                                                                                                            |                                                        |                |                                               |
| FOREST CLEARANCE                                  | Wild life Clearance obtained date 07.06.2016                                                                                                                                                                                                                                        |                                                                                                                                            |                                                        |                |                                               |

## OBRA 'C' TPP, Unit# 1 &amp; 2 (2x660 MW) / UPRVUNL (STATE SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |                             |                                         |                             |                                         |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01                     |                                         | UNIT-02                     |                                         |
|                                              |                                              | Original Date of Completion | Anticipated / Actual Date of Completion | Original Date of Completion | Anticipated / Actual Date of Completion |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 11-Mar-18                   | 15-Feb-19                               | 16-Jun-18                   | 21-Feb-19                               |
| 2                                            | START OF BOILER ERECTION                     | 22-Apr-18                   | 28-May-18                               | 22-Aug-18                   | 21-Jan-19                               |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          |                                         | NA                          |                                         |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 21-Sep-18                   | 7-Mar-19                                | 21-Jan-19                   | 10-Nov-19                               |
| 5                                            | CONDENSER ERECTION START                     | 23-Nov-18                   | 17-Aug-20                               | 23-Mar-19                   | 2-Apr-22                                |
| 6                                            | TG ERECTION START                            | 22-Jan-19                   | 2-Nov-20                                | 23-May-19                   | May-23                                  |
| 7                                            | HP PIPING ERECTION START                     | 12-Jan-19                   | 1-Mar-20                                | 22-May-19                   | 7-Oct-23                                |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 22-Sep-19                   | 27-Sep-20                               | 23-Jan-20                   | 20-Apr-22                               |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 22-Sep-19                   | 27-Sep-20                               | 23-Jan-20                   | 20-Apr-22                               |
| 10                                           | TG BOX UP                                    | 22-Feb-20                   | 15-Dec-21                               | 20-Jun-20                   | Apr-24                                  |
| 11                                           | HP PIPING ERECTION COMPLETION                | 20-Mar-20                   | 14-Mar-22                               | 20-Jul-20                   | Apr-24                                  |
| 12                                           | START OF OILFLUSHING                         | 23-Feb-20                   | 10-Mar-22                               | 21-Jun-20                   | Apr-24                                  |
| 13                                           | BOILER LIGHT UP                              | 21-Apr-20                   | 26-Apr-22                               | 19-Aug-20                   | 30-30-24                                |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 25-Mar-20                   | 16-Mar-22                               | 25-Jul-20                   | Apr-24                                  |
| 15                                           | STEAM BLOWING START                          | 22-May-20                   | 07-Nov-22                               | 19-Sep-20                   | Apr-24                                  |
| 16                                           | STEAM BLOWING COMPLETION                     | 22-Jun-20                   | 09-Dec-22                               | 19-Oct-20                   | May-24                                  |
| 17                                           | ROLLING & SYNC.                              | 30-Jul-20                   | 25-Apr-23                               | 27-Nov-20                   | May-24                                  |
| 18                                           | FULL LOAD                                    | 1-Sep-20                    | 26-Dec-23                               | 31-Dec-20                   | May-24                                  |
| 19                                           | TRIAL RUN                                    | 21-Dec-20                   | 02-02-24                                | 21-Apr-21                   | Jul-24                                  |
| 20                                           | COD                                          | 21-Dec-20                   | 09-02-24                                | 21-Apr-21                   | Jul-24                                  |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/s Doosan (EPC contract) |                                     |                                              |                                        |                                        |                                                                                         |                      |                      |
|----------------------------------------------------------------|-------------------------------------|----------------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------|----------------------|----------------------|
| Sl.                                                            | Packages                            | AREA                                         | UNIT-01                                |                                        | UNIT-02                                                                                 |                      |                      |
|                                                                |                                     |                                              | % Completion                           | % Completion                           |                                                                                         |                      |                      |
| 1                                                              | BOILER                              | CIVIL                                        | 100%                                   | 90.62%                                 |                                                                                         |                      |                      |
|                                                                |                                     | STRUCTURE                                    |                                        |                                        |                                                                                         |                      |                      |
|                                                                |                                     | PRESSURE PARTS                               |                                        |                                        |                                                                                         |                      |                      |
| 2                                                              | TG                                  | CIVIL                                        | 100%                                   | 81.5%                                  |                                                                                         |                      |                      |
|                                                                |                                     | STRUCTURE                                    |                                        |                                        |                                                                                         |                      |                      |
|                                                                |                                     | PRESSURE PARTS                               |                                        |                                        |                                                                                         |                      |                      |
| 3                                                              | ESP                                 | PASS STATUS                                  | 98.90%                                 | 60.72%                                 |                                                                                         |                      |                      |
| 4                                                              | FGD                                 | CIVIL WORK                                   | 96.72%                                 | 75.32%                                 |                                                                                         |                      |                      |
|                                                                |                                     | MATERIAL SUPPLY                              | 94%                                    | 65.50%                                 |                                                                                         |                      |                      |
|                                                                |                                     | ERECTION WORK                                | 60.34%                                 | 24.09%                                 |                                                                                         |                      |                      |
| STATUS OF BOPs (DPSI-EPC)                                      |                                     |                                              |                                        |                                        |                                                                                         |                      |                      |
| Sl.                                                            | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- DPSI)        | Date of Award                          | Scheduled Date of Completion           | Anticipated/ Actual Date of Completion                                                  | UNIT-01 % Completion | UNIT-02 % Completion |
| 1                                                              | Chimney                             | M/s.Simplex                                  | 27.11.2018                             | 01.12.2019                             | 31.12.2023                                                                              | 100%                 |                      |
| 2                                                              | Coal Handling Plant                 | KCC (Conveyor package)                       |                                        | 19.05.2020                             | Apr-24                                                                                  | 99.00%               |                      |
|                                                                |                                     | Aneja (Wagon Tripler)                        | 23.11.2018                             | 23.02.2020                             | Apr-24                                                                                  | 99.00%               |                      |
|                                                                |                                     | Aneja (Stacker Reclaimer)                    | 02.05.2018                             | 05.04.2020                             | Oct-24                                                                                  | 97.38%               |                      |
| 3                                                              | Ash Handling Plant                  | AKC, PNC                                     | 09.04.2018                             | 29.06.2020                             | Sep-24                                                                                  | 80.73%               |                      |
| 4                                                              | Fuel Oil System                     | AKC, Sangha, Singrauli, Jiwala               | 30.11.2018                             | 04.05.2020                             | Dec-2023                                                                                | 100%                 |                      |
| 5                                                              | Cooling Towers                      | PCTL                                         | 01.08.2018(C T-01), 14.12.2018(C T-02) | 25.11.2019(C T-01), 26.03.2020(C T-02) | Dec-2023 Jun-24                                                                         | 100%                 | 75%                  |
| 6                                                              | CW Pump house                       | GDCL                                         | 06.06.2018                             | 05.07.2020                             | 02.04.2023                                                                              | 100%                 |                      |
| 7                                                              | WPT Plant                           | Rajpati Vishwakarma, Sahil Kumar, KNIL, IEIL | 20.11.2018                             | 13.09.2020                             | Apr-2023                                                                                | 100%                 |                      |
| 8                                                              | DM Plant                            | Rajpati Vishwakarma, Sahil Kumar, KNIL,IEIL  | 03.10.2018                             | 04.11.2019                             | Mar-2023                                                                                | 100%                 |                      |
| 9                                                              | Compressed Air System               | GDCL                                         | 23.11.2018                             | 04.05.2020                             | Mar-2023                                                                                | 100%                 |                      |
| 10                                                             | Fire Protection System              | Lloyd                                        | 08.04.2019                             | 17.10.2019                             | Jul-24                                                                                  | 58.81%               |                      |
| 11                                                             | Switch Yard                         | KNIL , GDCL, GET&D                           | 01.08.2018                             | 30.01.2020                             | Apr-2023                                                                                | 100%                 |                      |
| 12                                                             | Station Transformers                | GDCL, GET&D                                  | 10.11.2018                             | 27.09.2019                             | 28.06.2022                                                                              | 100.00%              |                      |
| 13                                                             | Unit Transformers                   | GDCL, GET&D                                  | 10.03.2019                             | 06.02.2020                             | Apr-24                                                                                  | 98.67%               |                      |
| 14                                                             | Railway Siding                      | DPSI                                         | Civil Works:- 24.08.2019               | Civil Works:- 23.02.2020               | Civil Works:- 13.05.2023<br>S&T Works- 31.12.2023<br><br>OHE works:- Apr-24 (Tentative) | 88%                  |                      |
| 15                                                             | Power Evacuation Lines              | GET&D                                        | 08.11.2017                             | 24.07.2020                             | 02.04.2023                                                                              | 100%                 |                      |

## CRITICAL ISSUES

- Delay in readiness of AHP, issue of material supply

## REASONS OF DELAY

- COVID-19 I & II wave.
- Steel Price Hike, Dispute between main contractor M/s DPSI and its sub-vendors,

**JAWAHARPUR STPS, Unit# 1 & 2 (2X660 MW) / UPRVUNL (STATE SECTOR )**

Jawaharpur STPS, Malawan, Distt.-Etah, U.P. – 207 001

E-Gen Portal Registration No. (U#1 - 1200002452; U#2 - 1200002496)

| Project Developer / Implementing Agency - UPRVUNL |                                                                                                                      |                                                                                                              | Main Plant Vendor - M/s Doosan (EPC contract) |                |          |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------|----------|
| Unit No.                                          | LOA                                                                                                                  | Original Trial Run Date                                                                                      | Anticipated / Actual                          | Trial Run Date |          |
| Unit#1                                            | Dec-2016                                                                                                             | Dec-2020                                                                                                     | 09-02-2024                                    |                |          |
| Unit#2                                            |                                                                                                                      | Apr-2021                                                                                                     | Jun-2024                                      |                |          |
| CLEARANCES AND STATIC DATA                        |                                                                                                                      |                                                                                                              | FINANCIAL DATA (Fig. in Rs. Crore)            |                |          |
| FUEL TYPE                                         | Coal, Indigenous                                                                                                     |                                                                                                              | ORIGINAL ESTIMATED COST OF THE PROJECT        |                | 8078.56  |
| COAL COMBUSTION TECHNOLOGY                        | Ultra Super Critical                                                                                                 |                                                                                                              | LATEST ESTIMATED COST                         |                | 12320.43 |
| APPROVAL DATE / NTP                               | Approval of DPR and Initial project cost by U. P. Government of DPRVide letter dated 04.09.2015                      |                                                                                                              | DATE OF FINANCIAL CLOSURE                     |                |          |
| EPC/BTG/BoP Contractor Details (Package Wise)     | 22.12.2016- date of Award to EPC Contractor M/s Doosan Power Systems India Power Limited - scope including BTG,BOP   |                                                                                                              | YEAR WISE EXPENDITURE                         |                |          |
| PPA                                               | Details of PPA signed or under process whichever is applicable with defining share % if any.                         |                                                                                                              | 2016-17                                       |                | 445.21   |
| COAL LINKAGE/FSA                                  | Allocated Mine - Saharpur Jamarpani mines, Jharkhand; Distance from mine - 1190 km (non pithead)                     |                                                                                                              | 2017-18                                       |                | 400.26   |
|                                                   | Bridge Linkage from CCL/ECL for 4.461 MTPA                                                                           |                                                                                                              | 2018-19                                       |                | 844.96   |
| START UP POWER AGREEMENT                          | For 220 KV signed with UPPTCL                                                                                        |                                                                                                              | 2019-20                                       |                | 2295.94  |
| POWER EVACUATION SYSTEM                           | Tx Line Developer                                                                                                    | PGCIL & UPPTCL                                                                                               | 2020-21                                       |                | 2034.08  |
|                                                   | Tx Line Name<br>Tx Voltage Level                                                                                     | i) LILO of 765kV Mainpuri - Gr. Noida S/C at Jawaharpur TPS;<br>ii) Jawaharpur TPS-Firozabad 400kV D/C line. | 2021-22                                       |                | 2224.36  |
|                                                   | Configuration of Tx Line (S/C or D/C)                                                                                |                                                                                                              | 2022-23                                       |                | 1782.72  |
| LAND POSSESSION                                   | 765 Acre land for Power House under Possession                                                                       |                                                                                                              | EXPENDITURE OF Mar’2024                       |                | 269.94   |
| WATER ALLOCATION                                  | Lower Ganga Canal - 38 cusec                                                                                         |                                                                                                              | TOTAL EXPENDITURE (upto 31.03.2024)           |                | 12282.96 |
| MOEF CLEARANCE                                    | MOEF clearance granted in 63rd Meeting of the reconstituted EAC (Thermal Power) was held on 29th & 30th August, 2016 |                                                                                                              |                                               |                |          |
| CIVIL AVIATION CLEARANCE                          | Chimney clearance from AAI vide letter dated 12.06.2015                                                              |                                                                                                              |                                               |                |          |
| CPCB CLEARANCE                                    | NA                                                                                                                   |                                                                                                              |                                               |                |          |
| SPCB CLEARANCE                                    | Ref No- 58264/UPPCB/Aligarh(UPPCBRO)/CTE/ETAH/ 2019 dated 24.10.2019 valid up to 09.10.2024                          |                                                                                                              |                                               |                |          |
| FOREST CLEARANCE                                  | Clearance obtained vide letter no. 1904/14-1 dated 15.03.2016                                                        |                                                                                                              |                                               |                |          |

## JAWAHARPUR STPS, Unit# 1 &amp; 2 (2X660 MW) / UPRVUNL (STATE SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |                             |                                         |                             |                                         |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01                     |                                         | UNIT-02                     |                                         |
|                                              |                                              | Original Date of Completion | Anticipated / Actual Date of Completion | Original Date of Completion | Anticipated / Actual Date of Completion |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 31.12.2017                  | 05.03.2019                              | 03.05.2018                  | 29.05.2019                              |
| 2                                            | START OF BOILER ERECTION                     | 22.04.2018                  | 20.08.2018                              | 22.08.2018                  | 20.11.2018                              |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          |                                         | NA                          |                                         |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 06.09.2018                  | 14.06.2019                              | 06.01.2019                  | 14.11.2019                              |
| 5                                            | CONDENSER ERECTION START                     | 22.01.2019                  | 16.09.2020                              | 22.05.2019                  | 12.06.2021                              |
| 6                                            | TG ERECTION START                            | 22.01.2019                  | 23.11.2020                              | 22.05.2019                  | 25.02.2022                              |
| 7                                            | HP PIPING ERECTION START                     | 18.02.2019                  | 01.11.2019                              | 22.06.2019                  | 15.02.2021                              |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 21.09.2019                  | 10.11.2020                              | 21.01.2020                  | 30.11.2021                              |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | -                           | -                                       | -                           | -                                       |
| 10                                           | TG BOX UP                                    | 22.02.2020                  | 25.07.2022                              | 20.06.2020                  | 28.07.2023                              |
| 11                                           | HP PIPING ERECTION COMPLETION                | 23.08.2019                  | 10.07.2022                              | 23.12.2019                  | 30.11.2022                              |
| 12                                           | START OF OILFLUSHING                         | 23.02.2020                  | 12.02.2022                              | 21.06.2020                  | 01.08.2023                              |
| 13                                           | BOILER LIGHT UP                              | 26.04.2020                  | 27.05.2022                              | 23.08.2020                  | 02.11.2023                              |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 15.03.2020                  | 03.05.2022                              | 13.07.2020                  | 02.11.2023                              |
| 15                                           | STEAM BLOWING START                          | 26.05.2020                  | 27.09.2022                              | 21.09.2020                  | Apr-24                                  |
| 16                                           | STEAM BLOWING COMPLETION                     | 21.06.2020                  | 02.12.2022                              | 21.10.2020                  | May-24                                  |
| 17                                           | ROLLING & SYNC.                              | 21.08.2020                  | 29.04.2023                              | 21.12.2020                  | May-24                                  |
| 18                                           | FULL LOAD                                    | 01.09.2020                  | 19.01.2024                              | 01.01.2021                  | May-24                                  |
| 19                                           | TRIAL RUN                                    | 20.12.2020                  | 09.02.2024                              | 20.04.2021                  | Jun-24                                  |
| 20                                           | COD                                          | 21.12.2020                  | 21.02.2024                              | 21.04.2021                  | Jul-24                                  |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/S DPSI |                                     |                                       |                        |                              |                                       |                      |                      |
|-----------------------------------------------|-------------------------------------|---------------------------------------|------------------------|------------------------------|---------------------------------------|----------------------|----------------------|
| Sl.                                           | Packages                            | AREA                                  | UNIT-01                |                              | UNIT-02                               |                      |                      |
|                                               |                                     |                                       | % Completion           | % Completion                 |                                       |                      |                      |
| 1                                             | BOILER                              | CIVIL                                 | 100 %                  | 100%                         |                                       |                      |                      |
|                                               |                                     | STRUCTURE                             | 98.96 %                | 93.83%                       |                                       |                      |                      |
|                                               |                                     | PRESSURE PARTS                        | 100%                   | 100 %                        |                                       |                      |                      |
| 2                                             | TG                                  | CIVIL                                 | 100 %                  | 99.10%                       |                                       |                      |                      |
|                                               |                                     | STRUCTURE                             | 99.71 %                | 98.64%                       |                                       |                      |                      |
| 3                                             | ESP                                 | STRUCTURE                             | 99.46%                 | 73.58%                       |                                       |                      |                      |
| 4                                             | FGD                                 | CIVIL WORK                            | 100%                   | 100 %                        |                                       |                      |                      |
|                                               |                                     | MATERIAL SUPPLY                       | 100%                   | 100%                         |                                       |                      |                      |
|                                               |                                     | ERECTION WORK                         | 96.99%                 | 55.33%                       |                                       |                      |                      |
| STATUS OF BOPs (DPSI-EPC)                     |                                     |                                       |                        |                              |                                       |                      |                      |
| Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- BHEL) | Date of Award          | Scheduled Date of Completion | Anticipated/Actual Date of Completion | UNIT-01 % Completion | UNIT-02 % Completion |
| 1                                             | Chimney                             | Simplex                               | 16.03.2017             | 05.11.2019                   | Jun-24                                | 86.32%               |                      |
| 2                                             | Coal Handling Plant                 | tkII/ NeoStructo(Conveyor package)    | 10.10.2017             | 23.04.2020                   | Apr-24                                | 95.98%               |                      |
|                                               |                                     | tkII/ NeoStructo (Wagon Tripler)      | 10.10.2017             | 24.12.2019                   | May-24                                | 99.12%               |                      |
|                                               |                                     | tkII/ NeoStructo (Stacker Reclaimer)  | 10.10.2017             | 15.09.2019                   | May-24                                | 99.34%               |                      |
| 3                                             | Ash Handling Plant                  | Main vendor/subcontractor             | 30.12.2016             | 26.09.2020                   | Sep-24                                | 87.43%               |                      |
| 4                                             | Fuel Oil System                     | Main vendor/                          | 21.02.2017             | 10.04.2020                   | 31.01.2024                            | 100% (Piping#2)      |                      |
| 5                                             | Cooling Towers                      | Paharpur                              | 05.03.2018, 10.09.2018 | 26.11.2019, 27.03.2020       | 25.05.2023, June-24                   | 100%                 | 89.94%               |
| 6                                             | CW Pump house                       | DPSI/ Jyoti                           | 10.01.2017             | 05.12.2019                   | Apr-24                                | 98.24%               |                      |
| 7                                             | WPT Plant                           | Civil : Tecknow                       | 14.10.2018             | 06.09.2019                   | 30.12.2023                            | 100%                 |                      |
| 8                                             | DM Plant                            | EPC : Ion Exchange                    | 21.08.2019             | 16.11.2019                   | 31.01.2024                            | 100%                 |                      |
| 9                                             | Compressed Air System               | Atlas / Jyoti                         | 13.03.2017             | 19.05.2020                   | May-24                                | 98.77%               |                      |
| 10                                            | Fire Protection System              | Lloyd                                 | 17.02.2017             | 05.04.2020                   | Jun-24                                | 68.10%               |                      |
| 11                                            | Switch Yard                         | GE T&D                                | 17.01.2017             | 26.03.2020                   | Aug-24                                | 97.58%               |                      |
| 12                                            | Station Transformers                | Zagson                                | 31.01.2019             | 03.09.2019                   | 31-01-24                              | 100%                 |                      |
| 13                                            | Unit Transformers                   | Zagson                                | 16.08.2019             | 23.09.2019                   | May-24                                | 90.64%               |                      |
| 14                                            | Railway Siding                      |                                       |                        |                              | -                                     | Civil work 65%       |                      |
| 15                                            | Power Evacuation Lines              | DPSI                                  |                        | 21.08.2020                   | 29.04.2023                            | 100 %                | 100 %                |

## CRITICAL ISSUES

- Delay in readiness of Ash Handling plant ( M/s Indure)

## REASONS OF DELAY

1<sup>st</sup> and 2<sup>nd</sup> wave of COVID-19 pandemic have caused delay in project.

**PANKI THERMAL POWER PROJECT, Unit# 1 (1X660MW) / UPRVUNL (STATE SECTOR )**

Panki TPP, Distt.-Kanpur, U. P., Pincode-208020

E-Gen Portal Registration No. (U#1 - 1200001768)

| Project Developer / Implementing Agency - UPRVUNL |                                                                                                                                                           |                                               | Main Plant Vendor - M/s BHEL(EPC-contract) |                                        |                |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------|----------------------------------------|----------------|
| Unit No.                                          | LOA                                                                                                                                                       | Original Trial Run Date                       |                                            | Anticipated / Actual                   | Trial Run Date |
| Unit#1                                            | Mar-2018                                                                                                                                                  | Sep-2021                                      |                                            | Sep-2024                               |                |
| CLEARANCES AND STATIC DATA                        |                                                                                                                                                           |                                               |                                            | FINANCIAL DATA (Fig. in Rs. Crore)     |                |
| FUEL TYPE                                         | Coal, Indigenous                                                                                                                                          |                                               |                                            | ORIGINAL ESTIMATED COST OF THE PROJECT | 5816.70        |
| COAL COMBUSTION TECHNOLOGY                        | Super Critical                                                                                                                                            |                                               |                                            | LATEST ESTIMATED COST                  | Not Revised    |
| APPROVAL DATE / NTP                               | 20.03.2018                                                                                                                                                |                                               |                                            | DATE OF FINANCIAL CLOSURE              | 22.06.2018     |
| EPC/BTG/BoP Contractor Details (Package Wise)     | BHEL, LOA: 31.03.2018                                                                                                                                     |                                               |                                            | YEAR WISE EXPENDITURE                  |                |
| PPA                                               | Signed on 17.01.2017                                                                                                                                      |                                               |                                            | 2018-19                                | 543.29         |
| COAL LINKAGE/FSA                                  | Allocated Mine - Saharpur Jamarpani mines, Jharkhand; Distance from mine - 896 km (non pithead). Expected grade of coal is G-10.<br><br>FSA on 30.01.2017 |                                               |                                            | 2019-20                                | 837.26         |
| START UP POWER AGREEMENT                          | 20.10.2020                                                                                                                                                |                                               |                                            | 2020-21                                | 1131.48        |
| POWER EVACUATION SYSTEM                           | Tx Line Developer                                                                                                                                         | UPPTCL                                        |                                            | 2021-22                                | 951.81         |
|                                                   | Tx Line Name<br>Tx Voltage Level                                                                                                                          | Panki TPS - Panki , 400 KV, D/C line (UPPTCL) |                                            | 2022-23                                | 1243.57        |
|                                                   | Configuration of Tx Line (S/C or D/C)                                                                                                                     |                                               |                                            | EXPENDITURE OF Mar-2024                | 85.39          |
| LAND POSSESSION                                   | It is extension project. Hence Land is available                                                                                                          |                                               |                                            | TOTAL EXPENDITURE (upto 31.03.2024)    | 5484.21        |
| WATER ALLOCATION                                  | Lower Ganga Canal and Tertiary Treatment Plant, Bingawan (Kanpur)                                                                                         |                                               |                                            |                                        |                |
| MOEF CLEARANCE                                    | Clearance obtained vide letter no. J-13012/35/2013-IA- I(T) dated :- 29.06.2017                                                                           |                                               |                                            |                                        |                |
| CIVIL AVIATION CLEARANCE                          | Clearance obtained vide letter no. AAI/NOC/2012/453/104-106 dated:- 18.01.2013                                                                            |                                               |                                            |                                        |                |
| CPCB CLEARANCE                                    | MOEF clearance obtained on 29.06.2017                                                                                                                     |                                               |                                            |                                        |                |
| SPCB CLEARANCE                                    | Clearance obtained vide letter no. 24271/UPPCB/Kanpur Nagar(UPPCBRO)/CTE/Kanpur Nagar/2018 dated : 25.06.2018                                             |                                               |                                            |                                        |                |
| FOREST CLEARANCE                                  | Clearance obtained vide letter no. 484/14-1 dated:- 11.08.2015                                                                                            |                                               |                                            |                                        |                |

**PANKI THERMAL POWER PROJECT, Unit# 1 (1X660 MW) / UPRVUNL (STATE SECTOR )**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |                             |                                         |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01                     |                                         |
|                                              |                                              | Original Date of Completion | Anticipated / Actual Date of Completion |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 29.04.2019                  | 13.01.2020                              |
| 2                                            | START OF BOILER ERECTION                     | 30.04.2019                  | 24.04.2019                              |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          | NA                                      |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 20.11.2019                  | 23.02.2020                              |
| 5                                            | CONDENSER ERECTION START                     | 30.04.2020                  | 28.08.2021                              |
| 6                                            | TG ERECTION START                            | 30.04.2020                  | 04.10.2021                              |
| 7                                            | HP PIPING ERECTION START                     | 03.11.2019                  | 30.11.2020                              |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 30.09.2020                  | 17.12.2021                              |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 22.02.2021                  | 30.09.2023                              |
| 10                                           | TG BOX UP                                    | 31.01.2021                  | 30-Mar-23                               |
| 11                                           | HP PIPING ERECTION COMPLETION                | 29.08.2020                  | 30.12.2021                              |
| 12                                           | START OF OILFLUSHING                         | 30.01.2021                  | 30.12.2023                              |
| 13                                           | BOILER LIGHT UP                              | 28.02.2021                  | 18.11.2023                              |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 10.03.2021                  | 15.12.2023                              |
| 15                                           | STEAM BLOWING START                          | 09.04.2021                  | 18.03.2024                              |
| 16                                           | STEAM BLOWING COMPLETION                     | 30.04.2021                  | 30.04.2024                              |
| 17                                           | ROLLING & SYNC.                              | 31.05.2021                  | 31.05.2024                              |
| 18                                           | FULL LOAD                                    | 30.06.2021                  | 15.09.2024                              |
| 19                                           | TRIAL RUN                                    | 30.09.2021                  | 30.09.2024                              |
| 20                                           | COD                                          | 30.09.2021                  | 01.10.2024                              |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/s BHEL |                                     |                                            |                        |                              |                                       |                         |
|-----------------------------------------------|-------------------------------------|--------------------------------------------|------------------------|------------------------------|---------------------------------------|-------------------------|
| Sl.                                           | Packages                            | AREA                                       |                        |                              |                                       | UNIT-01                 |
|                                               |                                     |                                            |                        |                              |                                       | % Completion            |
| 1                                             | BOILER                              | CIVIL                                      |                        |                              |                                       | 90.00%                  |
|                                               |                                     | STRUCTURE WORKS                            |                        |                              |                                       | 85.10%                  |
|                                               |                                     | PRESSURE PARTS                             |                        |                              |                                       | 97.00%                  |
| 2                                             | TG                                  | CIVIL                                      |                        |                              |                                       | 82.00%                  |
|                                               |                                     | STRUCTURE WORKS                            |                        |                              |                                       | 85.00%                  |
|                                               |                                     | TG AUX                                     |                        |                              |                                       | 85.00%                  |
| 3                                             | ESP                                 | PASS STATUS                                |                        |                              |                                       | 85.44%                  |
| 4                                             | FGD                                 | CIVIL WORK                                 |                        |                              |                                       | 50.00%                  |
|                                               |                                     | MATERIAL SUPPLY                            |                        |                              |                                       | 53.00%                  |
|                                               |                                     | ERECTION WORK                              |                        |                              |                                       | 12.00%                  |
| STATUS OF BOPs                                |                                     |                                            |                        |                              |                                       |                         |
| Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency                  | Date of Award          | Scheduled Date of Completion | Anticipated/Actual Date of Completion | UNIT-01<br>% Completion |
| 1                                             | Chimney                             | Bygging                                    | 27.11.2018             | 01.12.2019                   | May'24                                | 99.69%                  |
| 2                                             | Coal Handling Plant                 | Thyseen Krupp & RVPR (Conveyor Package)    |                        | 19.05.2020                   | Aug'24                                | 68%                     |
|                                               |                                     | Thyseen Krupp & Kanwar (Wagon Tripler)     | 23.11.2018             | 23.02.2020                   | May'24                                |                         |
|                                               |                                     | Thyseen Krupp & Kanwar (Stacker Reclaimer) | 02.05.2018             | 05.04.2020                   | May'24                                |                         |
| 3                                             | Ash Handling Plant                  | Indure/ Kanwar                             | 09.04.2018             | 29.06.2020                   | Jun'24                                | 56.66%                  |
| 4                                             | Fuel Oil System                     | GMW/ Simplex                               | 30.11.2018             | 04.05.2020                   | May'24                                | 75%                     |
| 5                                             | Cooling Towers                      | Paharpur                                   | 01.08.2018, 14.12.2018 | 25.11.2019, 26.03.2020       | May'24                                | 95%                     |
| 6                                             | CW Pump house                       | MHI/ Simplex                               | 06.06.2018             | 05.07.2020                   | Jun'24                                | 70%                     |
| 7                                             | WPT Plant                           | GDCL                                       | 20.11.2018             | 13.09.2020                   | May'24                                | 67%                     |
| 8                                             | DM Plant                            | BGR & Simplex                              | 03.10.2018             | 04.11.2019                   | May'24                                | 61%                     |
| 9                                             | Compressed Air System               | ATLAS COPCO                                | 23.11.2018             | 04.05.2020                   | May'24                                | 79%                     |
| 10                                            | Fire Protection System              | BHEL                                       | 08.04.2019             | 17.10.2019                   | Aug'24                                | 39%                     |
| 11                                            | Switch Yard                         | JSPPL                                      | 01.08.2018             | 30.01.2020                   | Apr'24                                | 99%                     |
| 12                                            | Station Transformers                | BHEL                                       | 10.11.2018             | 27.09.2019                   | May'24                                | 80%                     |
| 13                                            | Unit Transformers                   | BHEL                                       | 10.03.2019             | 06.02.2020                   | May'24                                | 80%                     |
| 14                                            | Railway Siding                      | BITES                                      |                        | 05-10-2020                   | May'24                                | 85%                     |
| 15                                            | Power Evacuation Lines              | UPPTCL                                     | 08.11.2017             | 24.07.2020                   | Apr'23                                | 100%                    |

**CRITICAL ISSUES**

- Delay in completion of CWPB, AHP, CHP & DM Plant
- Inadequate manpower at site (BHEL) and frequent labour strike.

**REASONS OF DELAY**

Due to COVID 19 outbreak and its consequences.

**ENNORE SEZ STPP, Unit# 1 & 2 (2X660 MW) / TANGEDCO (STATE SECTOR)**

Village-Voyalur, Minjur, Distt-Thiruvallur (Tamil Nadu)-601203

E-Gen Portal Registration No. (U#No - 1200001984, U#2 No - 1200001985)

| Project Developer / Implementing Agency - TANGEDCO |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | Main Plant Vendor - M/s BHEL (EPC contract) |                |  |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------|----------------|--|
| Unit No.                                           | LOA                                                                                                                                                                                                                                                                                                                                                                                                      | Original Trial Run Date                                       | Anticipated / Actual                        | Trial Run Date |  |
| Unit#1                                             | Sep-2014                                                                                                                                                                                                                                                                                                                                                                                                 | 27.01.18                                                      | Apr-2026                                    |                |  |
| Unit#2                                             |                                                                                                                                                                                                                                                                                                                                                                                                          | 27.03.18                                                      | Jul-2026                                    |                |  |
| CLEARANCES AND STATIC DATA                         |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | FINANCIAL DATA (Fig. in Rs. Crore)          |                |  |
| FUEL TYPE                                          | Coal, Indigenous & Imported                                                                                                                                                                                                                                                                                                                                                                              |                                                               | ORIGINAL ESTIMATED COST OF THE PROJECT      | 9800.00        |  |
| COAL COMBUSTION TECHNOLOGY                         | Supercritical                                                                                                                                                                                                                                                                                                                                                                                            |                                                               | LATEST ESTIMATED COST                       | 9800.00        |  |
| APPROVAL DATE / NTP                                | 27.09.2014                                                                                                                                                                                                                                                                                                                                                                                               |                                                               | DATE OF FINANCIAL CLOSURE                   |                |  |
| EPC/BTG/BoP Contractor Details (Package Wise)      | M/s BHEL (EPC), LoA: 27.09.2014                                                                                                                                                                                                                                                                                                                                                                          |                                                               | YEAR WISE EXPENDITURE                       |                |  |
| PPA                                                | State sector project. Hence entire 100% power from this project will be utilized by TAMILNADU                                                                                                                                                                                                                                                                                                            |                                                               |                                             |                |  |
| COAL LINKAGE/FSA                                   | Allocated Mine - Chandrabila Coal Block, Odisha; Distance from mine - 1300 km (non pithead); Total requirement is 5.95MTPA, comprising of indigenous 3.68 MTPA & imported 2.26 MTPA respectively<br>MoU has already been signed between MMTC & TANGEDCO on 25.06.2012 for the supply of Import coal for this project.<br>Bridge Linkage with SCCL available for indigenous coal.                         |                                                               | 2016-17                                     | 558.04         |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | 2017-18                                     | 2276.51        |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | 2018-19                                     | 4688.11        |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | 2019-20                                     | 1550.04        |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | 2020-21                                     | 750.13         |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | 2021-22                                     | 260.14         |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | 2022-23                                     | 410.67         |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | EXPENDITURE OF MAR’2024                     | 115.66         |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | TOTAL EXPENDITURE (upto 31.03.2024)         | 9606.81        |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               | START UP POWER AGREEMENT                    | By TANGEDCO    |  |
| POWER EVACUATION SYSTEM                            | Tx Line Developer                                                                                                                                                                                                                                                                                                                                                                                        | TANGEDCO                                                      |                                             |                |  |
|                                                    | Tx Line Name                                                                                                                                                                                                                                                                                                                                                                                             | Ennore SEZ SCTPP - North Chennai (765KV PS), 400 KV, D/C line |                                             |                |  |
|                                                    | Tx Voltage Level                                                                                                                                                                                                                                                                                                                                                                                         |                                                               |                                             |                |  |
|                                                    | Configuration of Tx. Line (S/C or D/C)                                                                                                                                                                                                                                                                                                                                                                   |                                                               |                                             |                |  |
|                                                    | Acquisition of Land does not arise since own Land of TANGEDCO (Out of 1100 acres available at Ash Dyke of NCTPS , only 500 Acres of ash dyke is utilized for the development of the subject project)                                                                                                                                                                                                     |                                                               |                                             |                |  |
|                                                    | Supply of 4 MGD water from CMWSSB obtained. However desalination plant is envisaged in the project.                                                                                                                                                                                                                                                                                                      |                                                               |                                             |                |  |
| WATER ALLOCATION                                   |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               |                                             |                |  |
| MOEF CLEARANCE                                     | MOEF Letter No. J 13012 / 36/2010-1A.II(T) dt.07.01.2014. Validity extended upto 31.12.2023 as per MoEF Lr. Dt.09.04.2021                                                                                                                                                                                                                                                                                |                                                               |                                             |                |  |
| CIVIL AVIATION CLEARANCE                           | Airport Authority has been addressed to issue NOC vide Letter No: Se/C/P&E/EE/EMC/AEE/C/F.ETPS-SEZTPP/D768 dt 17.4.2010. No Objection certificate issued by Airport Authority of India for the construction of chimney for the proposed Ennore SEZ TPP- 2X800 MW Project vide Lr.Ref:AAI/SR/NOC/dt 13.5.2010-validity 7years available. Validity extended upto 13.5.2022 vide their letter dt 19.5.2017. |                                                               |                                             |                |  |
| CPCB CLEARANCE                                     | Not applicable                                                                                                                                                                                                                                                                                                                                                                                           |                                                               |                                             |                |  |
| SPCB CLEARANCE                                     | Consent to establish under Air and water Acts issued by TNPCB vide order 2002229941522 Dt.26.11.2020 extended the validity upto 06.01.2021. Extension of validity upto 31.12.2023 is under process.                                                                                                                                                                                                      |                                                               |                                             |                |  |
| FOREST CLEARANCE                                   | Not applicable                                                                                                                                                                                                                                                                                                                                                                                           |                                                               |                                             |                |  |

**ENNORE SEZ STPP, Unit# 1 & 2 (2X660 MW) / TANGEDCO (STATE SECTOR)**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           |
|----------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           |
|                                              |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 13.08.15      | 14.09.17                  | 13.10.15      | 07.06.18                  |
| 2                                            | START OF BOILER ERECTION                     | 25.08.15      | 15.09.17                  | 28.10.15      | 08.06.18                  |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 28.01.16      | 30.11.18                  | 28.03.16      | 16.05.19                  |
| 5                                            | CONDENSER ERECTION START                     | 27.04.17      | Feb-24                    | 20.06.17      | 20.06.22                  |
| 6                                            | TG ERECTION START                            | 10.06.17      | May-24                    | 10.08.17      | 31.01.24                  |
| 7                                            | HP PIPING ERECTION START                     | 27.04.16      | 16.09.21                  | 27.06.16      | 16.11.21                  |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 28.12.16      | 15.02.20                  | 27.02.17      | 29.03.21                  |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 28.04.17      | 30.08.24                  | 28.06.17      | 30.11.24                  |
| 10                                           | TG BOX UP                                    | 27.09.17      | 30.09.24                  | 27.11.17      | 30.12.24                  |
| 11                                           | HP PIPING ERECTION COMPLETION                | 27.05.17      | 30.09.24                  | 27.07.16      | 30.12.24                  |
| 12                                           | START OF OILFLUSHING                         | 27.10.17      | 05.10.24                  | 27.12.17      | 10.01.25                  |
| 13                                           | BOILER LIGHT UP                              | 30.05.17      | 30.09.24                  | 29.09.17      | 30.12.24                  |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 10.06.17      | 10.10.24                  | 10.08.17      | 10.02.25                  |
| 15                                           | STEAM BLOWING START                          | 20.06.17      | 05.12.24                  | 20.08.17      | 01.04.25                  |
| 16                                           | STEAM BLOWING COMPLETION                     | 15.07.17      | 05.01.25                  | 15.09.17      | 30.08.25                  |
| 17                                           | ROLLING & SYNC.                              | 27.11.17      | 28.02.25                  | 27.01.18      | 30.09.25                  |
| 18                                           | FULL LOAD                                    | 27.10.17      | 30.03.25                  | 27.12.17      | 31.10.25                  |
| 19                                           | TRIAL RUN                                    | 27.11.17      | 30.04.26                  | 27.01.18      | 30.07.26                  |
| 20                                           | COD (TRIAL RUN)                              | 27.01.18      | 30.04.25                  | 27.03.18      | 30.11.25                  |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/S BHEL |                                     |                                                                                                                                                                                                                      |                                   |                              |                                        |                                                                                                                                                       |                         |
|-----------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Sl.                                           | Packages                            | AREA                                                                                                                                                                                                                 | UNIT-01                           |                              | UNIT-02                                |                                                                                                                                                       |                         |
|                                               |                                     |                                                                                                                                                                                                                      | % Completion                      | % Completion                 |                                        |                                                                                                                                                       |                         |
| 1                                             | BOILER                              | CIVIL                                                                                                                                                                                                                | 100.00%                           |                              | 90.00%                                 |                                                                                                                                                       |                         |
|                                               |                                     | STRUCTURE                                                                                                                                                                                                            | 97.49%                            |                              | 93.60%                                 |                                                                                                                                                       |                         |
|                                               |                                     | PRESSURE PARTS                                                                                                                                                                                                       | 97.49%                            |                              | 93.60%                                 |                                                                                                                                                       |                         |
| 2                                             | TG                                  | CIVIL                                                                                                                                                                                                                | 73.6%                             |                              | 91.25%                                 |                                                                                                                                                       |                         |
|                                               |                                     | STRUCTURE                                                                                                                                                                                                            | 73.6%                             |                              | 91.25%                                 |                                                                                                                                                       |                         |
|                                               |                                     | TG ERECTION                                                                                                                                                                                                          | Civil work is under progress      | Yet to start                 |                                        |                                                                                                                                                       |                         |
| 3                                             | ESP                                 | UNDER PROGRESS                                                                                                                                                                                                       | 79.12%                            |                              | 73.16%                                 |                                                                                                                                                       |                         |
| 4                                             | FGD                                 | CIVIL WORK                                                                                                                                                                                                           | Specification under finalization. |                              |                                        |                                                                                                                                                       |                         |
|                                               |                                     | MATERIAL SUPPLY                                                                                                                                                                                                      |                                   |                              |                                        |                                                                                                                                                       |                         |
|                                               |                                     | ERECTION WORK                                                                                                                                                                                                        |                                   |                              |                                        |                                                                                                                                                       |                         |
| STATUS OF BOPs (BHEL-EPC)                     |                                     |                                                                                                                                                                                                                      |                                   |                              |                                        |                                                                                                                                                       |                         |
| Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- BHEL)                                                                                                                                                                                | Date of Award                     | Scheduled Date of Completion | Anticipated/ Actual Date of Completion | UNIT-01<br>% Completion                                                                                                                               | UNIT-02<br>% Completion |
| 1                                             | Chimney                             | M/s Simplex                                                                                                                                                                                                          | 30.01.17                          | 28.03.17                     | Aug,24                                 | 60%                                                                                                                                                   | 60%                     |
| 2                                             | Coal Handling Plant                 | Contractor for erection M/s Promac                                                                                                                                                                                   | 09.02.17                          | 27.10.17                     | Feb,25                                 | 100 % (Civil), 32% (Mech)                                                                                                                             |                         |
|                                               |                                     | M/s.Bevcon (Conveyor package supply), M/s.FLSIDTH- Pipe                                                                                                                                                              | 18.03.17                          | 27.10.17                     | Feb,25                                 | 35.65%                                                                                                                                                |                         |
|                                               |                                     | M/s.Promac : Stacker Reclaimer supply, M/s.Elecon : Vibrating                                                                                                                                                        | 09.02.17                          | 27.10.17                     | Feb,25                                 | 80 %                                                                                                                                                  |                         |
| 3                                             | Ash Handling Plant                  | M/s.Indure (for supply and erection for mechanical packages) , M/s.Turbo Engineers for Slurry disposal pipes supply M/s.Weir for Slurry pumps supply, M/s.Atlas Copco& M/s.Ingersoll for Compressor supply M/s.Suraj | 14.09.17                          | 27.10.17                     | Sept,24                                | 53.78%                                                                                                                                                |                         |
| 4                                             | Fuel Oil System                     | M/s.New Fire Engineers Pvt Ltd.                                                                                                                                                                                      | 13.06.17                          | 30.03.17                     | Jul,24                                 | 60.29%                                                                                                                                                |                         |
| 5                                             | Cooling Towers                      | M/s.Simplex (Design – Paharpur)                                                                                                                                                                                      | 30.01.17                          | 29.04.17                     | Sept,24 (U-1)<br>Dec,24 (U-2)          | 80.95%                                                                                                                                                | 27.82%                  |
| 6                                             | CW Pump house                       | CW Pump House - M/s Cornerstone ( De- scoped from M/s.Simplex),CW Piping: BHEL / M/s.Vijay Gowtham- ( De-scoped from M/s.Simplex)                                                                                    | 27.12.19                          | 29.04.22                     | Aug,24                                 | 35.42%                                                                                                                                                | 45.24%                  |
| 7                                             | WPT Plant                           | M/s.Otoklin Global business services for supply and erection                                                                                                                                                         | 18.01.18                          | 30.03.17                     | Aug,24                                 | 56.72%                                                                                                                                                |                         |
| 8                                             | DM Plant                            | M/s Cornerstone (De-scoped from M/s.Simplex)                                                                                                                                                                         | 27.09.14                          | 30.03.17                     | Aug,24                                 | 56.35%                                                                                                                                                |                         |
| 9                                             | Compressed Air System               | M/s.ELGI Equipments Ltd.                                                                                                                                                                                             | 27.11.17                          | 30.03.17                     | Jul,24                                 | 99.13%                                                                                                                                                |                         |
| 10                                            | Fire Protection System              | BHEL- PE&SD                                                                                                                                                                                                          | July,18                           | 30.03.17                     | Aug,24                                 | 5%                                                                                                                                                    |                         |
| 11                                            | Switch Yard                         | BHEL-TBG ( Awarded to Sakthi Kanna Construction Ltd & M/s.Vijay Gowtham- De-scoped from M/s.Simplex)                                                                                                                 | 27.09.14                          | 30.03.17                     | May,24                                 | 91.66%                                                                                                                                                |                         |
| 12                                            | Station Transformers                | M/s Cornerstone                                                                                                                                                                                                      | 19.11.19                          | 30.03.17                     | Jul,24                                 | 73.18%                                                                                                                                                |                         |
| 13                                            | Unit Transformers                   | M/s Cornerstone                                                                                                                                                                                                      | 19.11.19                          | 30.08.17                     | Jul,24                                 |                                                                                                                                                       |                         |
| 14                                            | Railway Siding                      | NA                                                                                                                                                                                                                   | NA                                | NA                           | NA                                     | NA                                                                                                                                                    | NA                      |
| 15                                            | Power Evacuation Lines              | TANGEDCO Ennore SEZ SCTPP- North Chennai(765 KV PS), 400 KV, D/C line                                                                                                                                                |                                   |                              | Mar, 2023                              | Power will be evacuated through DC 400 KV TL, i.e. 2 nos 400 KV lines to 765 KV pooling station and 2 nos 400 KV lines to ETPS – work under progress. |                         |

**CRITICAL ISSUES**

- Delay in completion of coal & water pipe conveyor route passing over river and falling in the coastal zone area.
- In External coal handling plant area, erection of structure for a portion held up due to NGT order. Getting amendment in EC from MoEF & CC is in process.
- Slow progress in NDCT-II, CHP, AHP, EOT crane

**REASONS OF DELAY.**

- Zero date is 27.09.2014, Works commenced at Site on 09.10.2016. Project works temporarily suspended from 07.09.2015 to 18.10. 2016 due to litigation. Original completion schedule is March 2018. Work resumed at Site from 19.10.2016. Completion schedule re-fixed to 06.05.2019 (without levy of LD & penalty) due to time loss of 407 day due to court case. Time extension granted from 06.05.2019 to upto 31.08.2020 for U#1 and 31.10.2020 for Unit 2 without prejudice to levy of LD & Penalty clauses.
- Entire project civil works were awarded to M/s. Simplex. Wherever slow progress of work noticed, BHEL has de scoped the certain works from M/s. Simplex based on TANGEDCO's request, but still the progress is very poor from M/s. Simplex.
- Project activities became slow since 24th March 2020 due to lock down enforced by GOI in view of COVID-19 outbreak. Permission accorded by Distt Collector (Thiruvallur) for resumption of work at site with only 600 manpower on 25.04.2020.Work resumed by BHEL from 18.05.2020

**NORTH CHENNAI STPP St - III, Unit# 1 (1X800 MW) / TANGEDCO (STATE SECTOR )**

Athipattu village, Ponneri Tk, Distt.-Thiruvallur, Chennai (T.N.) - 600 120.

E-Gen Portal Registration No. (U#1 - 1200002174 )

| Project Developer / Implementing Agency - TANGEDCO |                                                                                                                                                                                                                                                                                                                                                                    |                                                    | Main Plant Vendor(BTG) - M/s BHEL                                                                                                                                                                                                                                                                                                              |                                                  |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Unit No.                                           | LOA                                                                                                                                                                                                                                                                                                                                                                |                                                    | Original Trial Run Date                                                                                                                                                                                                                                                                                                                        | Anticipated / <span>Actual</span> Trial Run Date |
| Unit#1                                             | Jan-2016                                                                                                                                                                                                                                                                                                                                                           |                                                    | Apr-2019                                                                                                                                                                                                                                                                                                                                       | Apr-2024                                         |
| CLEARANCES AND STATIC DATA                         |                                                                                                                                                                                                                                                                                                                                                                    |                                                    | FINANCIAL DATA (Fig. in Rs. Crore)                                                                                                                                                                                                                                                                                                             |                                                  |
| FUEL TYPE                                          | Coal, Indigenous & Imported(MMTC)                                                                                                                                                                                                                                                                                                                                  |                                                    | ORIGINAL ESTIMATED COST OF THE PROJECT                                                                                                                                                                                                                                                                                                         | 6376.00                                          |
| COAL COMBUSTION TECHNOLOGY                         | Super critical                                                                                                                                                                                                                                                                                                                                                     |                                                    | LATEST ESTIMATED COST                                                                                                                                                                                                                                                                                                                          | 10158.00                                         |
| APPROVAL DATE / NTP                                | BTG : SE/E/T & H (P)/ OT No. 02/2015-16 ; BOP : SE/E/T & H (P) OT No.04/2015-16                                                                                                                                                                                                                                                                                    |                                                    | DATE OF FINANCIAL CLOSURE                                                                                                                                                                                                                                                                                                                      | 28.1.2017                                        |
| EPC/BTG/BoP Contractor Details (Package Wise)      | BTG contractor-BHEL(LoA: 29.01.2016), BOP contractor-M/s BGR(LoA: 28.10.2016)                                                                                                                                                                                                                                                                                      |                                                    | YEAR WISE EXPENDITURE                                                                                                                                                                                                                                                                                                                          |                                                  |
| PPA                                                | NOT APPLICABLE. State sector project.                                                                                                                                                                                                                                                                                                                              |                                                    |                                                                                                                                                                                                                                                                                                                                                |                                                  |
| COAL LINKAGE/FSA                                   | Allocated Mine - SCCL; Distance from mine - 606 km (non pithead); Ministry of Coal recommended for longterm coal linkage for 1.971 MTPA Indigenous coal to SCCL. FSA Executed between TANGEDCO and SCCL for indigenous coal. MoU has been entered with M/s. MMTC for supply of Imported coal of 1.450 MTPA on 25.05.2015.                                          |                                                    | 2012-13                                                                                                                                                                                                                                                                                                                                        | 0.21                                             |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                    |                                                    | 2013-14                                                                                                                                                                                                                                                                                                                                        | 0.40                                             |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                    |                                                    | 2014-15                                                                                                                                                                                                                                                                                                                                        | 0.13                                             |
| START UP POWER AGREEMENT                           | Start up Power Arrangement is through 220 KV level by LILO of NCTPS-1 to Ennore Feeder. Station Transformer was charged on 05.09.2020.                                                                                                                                                                                                                             |                                                    | 2015-16                                                                                                                                                                                                                                                                                                                                        | 0.25                                             |
| POWER EVACUATION SYSTEM                            | Tx Line Developer                                                                                                                                                                                                                                                                                                                                                  | TANTRANSCO                                         | 2016-17                                                                                                                                                                                                                                                                                                                                        | 198.08                                           |
|                                                    | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                                                                                   | NCTPS St-III -North Chennai (PS), 765 KV, D/C line | 2017-18                                                                                                                                                                                                                                                                                                                                        | 929.75                                           |
|                                                    | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                                                                              |                                                    | 2018-19                                                                                                                                                                                                                                                                                                                                        | 2243.52                                          |
| LAND POSSESSION                                    | The proposed site is within the existing NCTPS complex and land is already under possession of TANGEDCO.                                                                                                                                                                                                                                                           |                                                    | 2019-20                                                                                                                                                                                                                                                                                                                                        | 2090.62                                          |
| WATER ALLOCATION                                   | The raw water requirement for this project will be met from existing cooling water fore-bay of NCTPS, Stage-II. The make-up water for cooling water, boiler make up and other sweet water requirements are to be met from desalination plant under construction for this project. Construction water from M/s. CMWSSB available to the contractor from 07.01.2017. |                                                    | 2020-21                                                                                                                                                                                                                                                                                                                                        | 928.95                                           |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                    |                                                    | 2021-22                                                                                                                                                                                                                                                                                                                                        | 760.29                                           |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                    |                                                    | 2022-23                                                                                                                                                                                                                                                                                                                                        | 694.13                                           |
| MOEF CLEARANCE                                     | Environmental clearance issued by MoEF on 20.01.2016 valid for a period of seven years.                                                                                                                                                                                                                                                                            |                                                    | EXPENDITURE OF MAR'2024                                                                                                                                                                                                                                                                                                                        | 212.01                                           |
| CIVIL AVIATION CLEARANCE                           | Chimney constructed for full height and the same was informed to Airports Authority of India.                                                                                                                                                                                                                                                                      |                                                    | TOTAL EXPENDITURE (upto 31.03.2024)                                                                                                                                                                                                                                                                                                            | 8,791.10                                         |
| CPCB CLEARANCE                                     | NOT APPLICABLE. State sector project.                                                                                                                                                                                                                                                                                                                              |                                                    | (In-principal approval for financial assistance of Rs.5006.992 crores with Debt : Equity ratio of 80 : 20 for setting up of 1 x 800 MW Supercritical Thermal Power Plant in Tiruvallur District of Tamil Nadu has been received from M/s. REC on 05.08.2016. Loan has been sanctioned on 22.11.2016. Loan Agreement was signed on 28.01.2017.) |                                                  |
| SPCB CLEARANCE                                     | Approval has been obtained on 13.04.2017.                                                                                                                                                                                                                                                                                                                          |                                                    |                                                                                                                                                                                                                                                                                                                                                |                                                  |
| FOREST CLEARANCE                                   | Not applicable, since the site is not coming under Forest area.                                                                                                                                                                                                                                                                                                    |                                                    |                                                                                                                                                                                                                                                                                                                                                |                                                  |

| NORTH CHENNAI STPP, St - III, Unit# 1 (1X800 MW) / TANGEDCO (STATE SECTOR ) |                                              |                                                                |                                         |                                         |                                        |                 |  |  |                                                                 |  |
|-----------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|-----------------|--|--|-----------------------------------------------------------------|--|
| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL)                                |                                              |                                                                |                                         | STATUS OF MAIN PLANT PACKAGE (BTG-BHEL) |                                        |                 |  |  |                                                                 |  |
| Sl.                                                                         | MILESTONE                                    | UNIT-01                                                        |                                         | Sl.                                     | Packages                               | AREA            |  |  | UNIT-01                                                         |  |
|                                                                             |                                              | Original Date of Completion                                    | Anticipated / Actual Date of Completion |                                         |                                        |                 |  |  | % Completion                                                    |  |
| 1                                                                           | COMPLETION OF BOILER FOUNDATION              | 31.10.2016                                                     | 14.06.18                                | 1                                       | BOILER                                 | CIVIL           |  |  | 100%                                                            |  |
| 2                                                                           | START OF BOILER ERECTION                     | 29.11.16                                                       | 30.08.17                                |                                         |                                        | STRUCTURE       |  |  | 100%                                                            |  |
| 3                                                                           | BOILER DRUM LIFTING (if sub-critical unit)   | NA                                                             | NA                                      |                                         |                                        | PRESSURE PARTS  |  |  | 100%                                                            |  |
| 4                                                                           | BOILER CEILING GIRDER LIFTING COMPLETION     | 11.05.17                                                       | 31.07.18                                | 2                                       | TG                                     | CIVIL           |  |  | 100%                                                            |  |
| 5                                                                           | CONDENSER ERECTION START                     | 29.08.17                                                       | 02.01.19                                |                                         |                                        | STRUCTURE       |  |  | 100%                                                            |  |
| 6                                                                           | TG ERECTION START                            | 28.10.17                                                       | 25.02.19                                |                                         |                                        | TG ERECTION     |  |  | 100%                                                            |  |
| 7                                                                           | HP PIPING ERECTION START                     | 24.10.17                                                       | 25.03.18                                | 3                                       | ESP                                    | UNDER PROGRESS  |  |  | 99.5%                                                           |  |
| 8                                                                           | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 28.02.18                                                       | 31.12.19                                | 4                                       | FGD                                    | CIVIL WORK      |  |  | M/s BHEL – FGD Civil Piping and Pipe cap works are in progress. |  |
| 9                                                                           | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 26.09.18                                                       | 07.12.22                                |                                         |                                        | MATERIAL SUPPLY |  |  |                                                                 |  |
| 10                                                                          | TG BOX UP                                    | 07.11.18                                                       | Aug-23                                  |                                         |                                        | ERECTION WORK   |  |  |                                                                 |  |
| STATUS OF BOPs - BGRESL/Chennai                                             |                                              |                                                                |                                         |                                         |                                        |                 |  |  |                                                                 |  |
| Sl.                                                                         | Packages/ Linked Project Milestones          | Vendor/Contracting Agency                                      | Date of Award                           | Scheduled Date of Completion            | Anticipated /Actual Date of Completion | UNIT-01         |  |  |                                                                 |  |
|                                                                             |                                              |                                                                |                                         |                                         |                                        | % Completion    |  |  |                                                                 |  |
| 1                                                                           | Chimney                                      | M/s. BGR ESL                                                   | 10.03.17                                | 25.06.19                                | 15.01.2024                             | 100%            |  |  |                                                                 |  |
| 2                                                                           | Coal Handling Plant                          |                                                                | 21.07.17                                | 25.07.19                                | 15.04.2024                             | 93.33%          |  |  |                                                                 |  |
| 3                                                                           | Ash Handling Plant                           |                                                                | 25.11.17                                | 28.07.19                                | 15.04.2024                             | 90%             |  |  |                                                                 |  |
| 4                                                                           | Fuel Oil System                              |                                                                | 27.07.17                                | 28.06.19                                | 15.03.2024                             | 100%            |  |  |                                                                 |  |
| 5                                                                           | Cooling Towers                               |                                                                | 16.05.17                                | 21.09.19                                | 10.04.2024                             | 93%             |  |  |                                                                 |  |
| 6                                                                           | CW Pump house                                |                                                                | 09.01.18                                | 28.05.19                                | 15.04.2024                             | 97%             |  |  |                                                                 |  |
| 7                                                                           | WPT Plant                                    |                                                                | 16.06.17                                | 17.05.19                                | 15.04.2024                             | 93%             |  |  |                                                                 |  |
| 8                                                                           | DM Plant                                     |                                                                | 06.10.17                                | 28.05.19                                | 15.04.2024                             | 93%             |  |  |                                                                 |  |
| 9                                                                           | Compressed Air System                        |                                                                | 10.12.17                                | 28.08.19                                | 31.01.2022                             | 100%            |  |  |                                                                 |  |
| 10                                                                          | Fire Protection System                       |                                                                | 01.07.17                                | 14.05.19                                | 10.04.2024                             | 90.5%           |  |  |                                                                 |  |
| 11                                                                          | Switch Yard                                  |                                                                | 19.08.17                                | 26.10.19                                | 05.04.2024                             | 99%             |  |  |                                                                 |  |
| 12                                                                          | Station Transformers                         | BHEL                                                           | 24.07.18                                | 28.04.19                                | 05.09.2020                             | 100%            |  |  |                                                                 |  |
| 13                                                                          | Unit Transformers                            | BHEL                                                           | 06.03.18                                | 27.02.19                                | 31.01.2023                             | 100%            |  |  |                                                                 |  |
| 14                                                                          | Railway Siding                               | NA                                                             | NA                                      | NA                                      | NA                                     | NA              |  |  |                                                                 |  |
| 15                                                                          | Power Evacuation Lines                       | TANTRANSCO, NCTPS St-III -North Chennai (PS), 765 KV, D/C line | 12.01.18                                | 11.11.19                                | Nov-2023                               | 98%             |  |  |                                                                 |  |

**CRITICAL ISSUES**

- Delay in AHP Readiness - mechanical works are still in progress. 4 out of 6 passes ready.
- Delay in CHP Readiness: Alternate arrangement for ECHS is made from NCTPS, St-I.

**REASONS OF DELAY**

Due to COVID Lock down in 2020 & 2021 and non-availability of Industrial Oxygen in 2020 & 21, Delay in CW pipe line readiness.

**UDANGUDI STPP, St-I, Unit# 1 & 2 (2x660 MW) / TANGEDCO (STATE SECTOR )**

Distt.- Thoothukudi, Tamil Nadu

E-Gen Portal Registration No. ( . Unit-1: 1200002175, Unit -2: 1200002176 )

| Project Developer / Implementing Agency – TANGEDCO |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          | Main Plant Vendor – M/s BHEL (EPC contract) |                                |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------|--------------------------------|--|
| Unit No.                                           | LOA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Original Trial Run Date                                  | Anticipated / Actual                        | Trial Run Date                 |  |
| Unit#1                                             | Dec-2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Jan-2021                                                 | Oct -2024                                   |                                |  |
| Unit#2                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mar-2021                                                 | Feb –2025                                   |                                |  |
| CLEARANCES AND STATIC DATA                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          | FINANCIAL DATA (Fig. in Rs. Crore)          |                                |  |
| FUEL TYPE                                          | Coal, Indigenous & Imported (Indonesia)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          | ORIGINAL ESTIMATED COST OF THE PROJECT      | 13076.71                       |  |
| COAL COMBUSTION TECHNOLOGY                         | Supercritical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                          | LATEST ESTIMATED COST                       | 13076.71                       |  |
| APPROVAL DATE / NTP                                | BGT-SE/E/T & H(P)/OT No. 01/ 2015-16.<br>BOP-SE/E/T&H(P)/OT.No.1/2020-21.<br>SWIOP-SE/C/TP/OT.NO.2/2016-17.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                          | DATE OF FINANCIAL CLOSURE                   | Financial tie up with M/s. PFC |  |
| EPC/BTG/BoP Contractor Details (Package Wise)      | Awarded to BHEL as EPC contractor on 07.12.2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          | YEAR WISE EXPENDITURE                       |                                |  |
| PPA                                                | NOT APPLICABLE. State sector project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          | 2017-18                                     | 118.93                         |  |
| COAL LINKAGE/FSA                                   | Allocated Mine – Chandrabila Coal Block for indigenous coal of G13 Grade for 3.647 MTPA and MDO selection is under process. Distance from mine (appx) : Railway distance for movement of coal through Rail-cum-Sea route via Paradip port is 200 km.(Chandrabila to Paradip port), from Paradip port to Udangudi captive Port, sea distance is 1224 Nautical Miles. Total requirement is 5.893 MTPA with Indigenous coal of 3.647 MTPA and import coal of 2.246 MTPA. Import coal (2.246 MTPA) will be procured to the requirements. Bridge Linkage with SCCL available for indigenous coal |                                                          | 2018-19                                     | 336.43                         |  |
| START UP POWER AGREEMENT                           | 230/11 KV Karaigudi Feeder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                          | 2019-20                                     | 654.76                         |  |
| POWER EVACUATION SYSTEM                            | Tx Line Developer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                          | 2020-21                                     | 1778.54                        |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          | 2021-22                                     | 1711.00                        |  |
|                                                    | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Udangudi STPP – Ottapidaram, 400 KV, D/C line (BHEL/L&T) | 2022-23                                     | 2817.92                        |  |
|                                                    | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          | EXPENDITURE OF MAR’2024                     | 421.30                         |  |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          | TOTAL EXPENDITURE (upto 31.03.2024)         | 9951.11                        |  |
| LAND POSSESSION                                    | Land required for the project is under TANGEDCO Possession. EPC Contracts awarded to M/s. BHEL & M/S L&T has been suspended as per the NGT(SZ), Chennai Judgment dated 17.03.2021, delivered on Appeal No. 144 of 2016(SZ) filed in the designated court for a period of six months or until further orders.                                                                                                                                                                                                                                                                                |                                                          |                                             |                                |  |
| WATER ALLOCATION                                   | Tamil Nadu Maritime Board has issued NOC for construction of Jetty for drawal and discharge of cooling water, vide 27.4.2015.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                          |                                             |                                |  |
| MOEF CLEARANCE                                     | Ministry of Environment and Forest has accorded clearance for the above Project on 18.05.2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                          |                                             |                                |  |
| CIVIL AVIATION CLEARANCE                           | Clearance expired on 21.11.2019. Clearance further extended up to 21.11.2024.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                          |                                             |                                |  |
| CPCB CLEARANCE                                     | NOT APPLICABLE. State sector project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          |                                             |                                |  |
| SPCB CLEARANCE                                     | CRZ committee of MOEF recommended the Project on 28.1.16 and MOM published in web site on 8.2.2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                          |                                             |                                |  |
| FOREST CLEARANCE                                   | NOT APPLICABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                          |                                             |                                |  |

**UDANGUDI STPP, St-I, Unit# 1 & 2 (2x660 MW) / TANGEDCO (STATE SECTOR)**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           |
|----------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           |
|                                              |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 12.09.18      | 10.04.21                  | 12.11.18      | 21.04.21                  |
| 2                                            | START OF BOILER ERECTION                     | 27.09.18      | 20.09.19                  | 27.11.18      | 16.09.19                  |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | -             | -                         | -             | -                         |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 09.02.19      | 26.06.21                  | 09.04.19      | 18.06.21                  |
| 5                                            | CONDENSER ERECTION START                     | 15.08.19      | 28.12.22                  | 15.10.19      | 01.04.23                  |
| 6                                            | TG ERECTION START                            | 12.09.19      | 01.02.23                  | 12.11.19      | 30.03.23                  |
| 7                                            | HP PIPING ERECTION START                     | 30.10.19      | 16.04.23                  | 30.10.19      | 15.05.23                  |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 27.02.20      | 15.12.22                  | 27.04.2020    | 20.12.22                  |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 02.07.20      | 30.04.24                  | 02.09.20      | 30.06.24                  |
| 10                                           | TG BOX UP                                    | 30.07.20      | 30.05.24                  | 30.09.20      | 31.07.24                  |
| 11                                           | HP PIPING ERECTION COMPLETION                | 06.08.20      | 02.07.24                  | 06.10.20      | 02.11.24                  |
| 12                                           | START OF OILFLUSHING                         | 30.07.20      | 08.06.24                  | 30.09.20      | 08.08.24                  |
| 13                                           | BOILER LIGHT UP                              | 09.07.20      | 31.05.24                  | 09.09.20      | 31.07.24                  |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 30.07.20      | 18.06.24                  | 30.09.20      | 18.08.24                  |
| 15                                           | STEAM BLOWING START                          | 13.08.20      | 20.06.24                  | 13.11.20      | 20.10.24                  |
| 16                                           | STEAM BLOWING COMPLETION                     | 03.09.20      | 30.07.24                  | 03.11.20      | 30.11.24                  |
| 17                                           | ROLLING & SYNC.                              | 12.11.20      | 31.08.24                  | 12.01.21      | 30.12.24                  |
| 18                                           | FULL LOAD                                    | 31.12.20      | 31.09.24                  | 28.02.21      | 31.01.25                  |
| 19                                           | TRIAL RUN                                    | 07.01.21      | Oct-24                    | 07.03.21      | Feb-25                    |
| 20                                           | COD                                          | 25.02.21      | Oct-24                    | 25.04.21      | Feb-25                    |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/s BHEL |                                     |                                                                                                             |                                  |                                  |                                              |                      |                      |
|-----------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------------|----------------------|----------------------|
| Sl.                                           | Packages                            | AREA                                                                                                        | UNIT-01                          |                                  | UNIT-02                                      |                      |                      |
|                                               |                                     |                                                                                                             | % Completion                     | % Completion                     |                                              |                      |                      |
| 1                                             | BOILER                              | CIVIL                                                                                                       | 92.64%                           | 94.35%                           |                                              |                      |                      |
|                                               |                                     | STRUCTURE                                                                                                   | 87.08%                           | 90.67%                           |                                              |                      |                      |
|                                               |                                     | PRESSURE PARTS                                                                                              | 96.44%                           | 97.54%                           |                                              |                      |                      |
| 2                                             | TG                                  | CIVIL                                                                                                       | 99.13%                           | 96.34%                           |                                              |                      |                      |
|                                               |                                     | STRUCTURE                                                                                                   | 83.55%                           | 77.93%                           |                                              |                      |                      |
|                                               |                                     | TG ERECTION                                                                                                 | 44.25%                           | 52.26%                           |                                              |                      |                      |
| 3                                             | ESP                                 | UNDER PROGRESS                                                                                              | 95.50%                           | 95.97%                           |                                              |                      |                      |
| 4                                             | FGD                                 | CIVIL WORK                                                                                                  | Work yet to be awarded           |                                  |                                              |                      |                      |
|                                               |                                     | MATERIAL SUPPLY                                                                                             |                                  |                                  |                                              |                      |                      |
|                                               |                                     | ERECTION WORK                                                                                               |                                  |                                  |                                              |                      |                      |
| STATUS OF BOPs (BHEL-EPC)                     |                                     |                                                                                                             |                                  |                                  |                                              |                      |                      |
| Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC-BHEL)                                                                        | Date of Award                    | Scheduled Date of Completion     | Anticipated /Actual Date of Completion       | UNIT-01 % Completion | UNIT-02 % Completion |
| 1                                             | Chimney                             | M/s.BHEL/ M/s Bygging- Civil Structural Erection                                                            | 08.10.18                         | 26.10.19<br>03.12.20             | 20.03.24<br>25.05.24                         | 100%<br>93.92%       |                      |
| 2                                             | Coal Handling Plant                 | M/s. BHEL/ M/s Kanwar/ M/s Priya- Civil                                                                     | 01.03.22                         | 25.06.20                         | 23.05.24                                     | 86.32%               |                      |
|                                               |                                     | M/s. BHEL/ M/s.RPP /URC                                                                                     | 15.07.19                         | 25.06.20                         | 15.04.24                                     | 42.10%               |                      |
|                                               |                                     | Structural Erection                                                                                         |                                  |                                  |                                              |                      |                      |
|                                               |                                     | M/s. BHEL/IGG                                                                                               | 09.05.19                         | -                                | 15.12.24                                     | -                    |                      |
| 3                                             | Ash Handling Plant                  | M/s.BHEL/ RPP/Srinic- Civil<br>M/s.BHEL/ M/s.RPP/URC- Structural Erection<br>M/s. BHEL Mechanical Equipment | 11.05.20<br>15.07.19<br>15.03.19 | 25.06.20<br>25.06.20<br>30.11.20 | 23.05.24<br>15.05.24<br>15.06.24<br>15.12.24 | 59.57%<br>-<br>-     |                      |
| 4                                             | Fuel Oil System                     | M/s.BHEL/ M/s.RPP Civil                                                                                     | 25.07.19                         | 22.01.20                         | 29.05.24                                     | 97.20%               |                      |
| 5                                             | Cooling Towers                      | M/s.BHEL/ M/s.Gammon                                                                                        | 16.12.2019                       | 22.10.20                         | 31.08.24<br>15.11.24                         | 74.92%               | 34.32%               |
| 6                                             | CW Pump house                       | M/s.BHEL/ M/s.B&B; M/s.BHEL/ M/s.Akash Techno                                                               | 04.06.19                         | 17.01.20                         | 20.04.24<br>09.05.24                         | 79.48%<br>75.65%     |                      |
| 7                                             | WPT Plant                           | M/s.BHEL/ M/s.B&B                                                                                           | 04.06.19                         | 07.02.20                         | 25.05.24                                     | 88.63%               |                      |
| 8                                             | DM Plant                            | M/s.BHEL/ M/s.RPP                                                                                           | 25.07.19                         | 12.10.19                         | 25.05.24                                     | 76.64%               |                      |
| 9                                             | Compressed Air System               | M/s.BHEL / M/s.Power Mech                                                                                   | 07.01.22                         | 01.11.20                         | 25.05.24                                     | 99.30%               |                      |
| 10                                            | Fire Protection System              | M/s. BHEL                                                                                                   | -                                | 22.10.20                         | 25.05.24                                     | -                    |                      |
| 11                                            | Switch Yard                         | M/s. BHEL/ M/s. RB Electrical                                                                               | 25.06.21                         | 23.05.19                         | 29.02.24                                     | 100%                 |                      |
| 12                                            | Station Transformers                | M/s.BHEL / M/s Power Mech                                                                                   | 30.12.21                         | 15.06.20                         | 30.05.24                                     | 98.67%               |                      |
| 13                                            | Generator Transformers              |                                                                                                             |                                  |                                  |                                              |                      |                      |
| 14                                            | Unit Transformers                   |                                                                                                             |                                  |                                  |                                              |                      |                      |
| 15                                            | Railway Siding                      | NA                                                                                                          | NA                               | NA                               | NA                                           | NA                   |                      |
| 16                                            | Power Evacuation Lines              | Udangudi STPP – Ottapidaram, 400 KV, D/C line (BHEL/L&T)                                                    | 27.01.20                         | 11.10.20                         | 29.02.24                                     | 100%                 |                      |

**CRITICAL ISSUES**

- Slow progress in areas viz. DM Water System, Sea water system
- The slow progress in GIS switchyard, NDCTs & critical piping erection;
- FGD work is yet to be awarded.( by TANGEDCO)

**REASONS OF DELAY**

COVID 19, Labor shortage / Vendor Mobilization delay by Contractor, Fishermen issue at Coal Jetty

**YADADRI TPS, Unit# 1, 2, 3, 4 & 5 (5x800 MW) / TSGENCO (STATE SECTOR )**

Veerlapalem village, Damercharla Mandal, Nalgonda, Telangana -508208

E-Gen Portal Registration No. (U#1-1200001092; U#2-1200001093; U#3-1200001094; U#4-1200001095; U#5-1200001096)

| Project Developer / Implementing Agency - TSGENCO |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                | Main Plant Vendor - BHEL (EPC contract)                                |           |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------|
| Unit No.                                          | LOA                                                                                                                                                                                                                                                                                                                                                 | Original Trial Run Date                                                                                                                                        | Anticipated / Actual                                                   | COD Date  |
| Unit#1                                            | Oct-2017                                                                                                                                                                                                                                                                                                                                            | Oct-2021                                                                                                                                                       | Sept-2024                                                              |           |
| Unit#2                                            |                                                                                                                                                                                                                                                                                                                                                     | Oct-2021                                                                                                                                                       | Sept-2024                                                              |           |
| Unit#3                                            |                                                                                                                                                                                                                                                                                                                                                     | Jun-2022                                                                                                                                                       | Dec-2024                                                               |           |
| Unit#4                                            |                                                                                                                                                                                                                                                                                                                                                     | Jun-2022                                                                                                                                                       | Feb-2025                                                               |           |
| Unit#5                                            |                                                                                                                                                                                                                                                                                                                                                     | Oct-2022                                                                                                                                                       | Apr-2025                                                               |           |
| CLEARANCES AND STATIC DATA                        |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                | FINANCIAL DATA (Fig. in Rs. Crore)                                     |           |
| FUEL TYPE                                         | Coal, Indigenous                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                | ORIGINAL ESTIMATED COST OF THE PROJECT                                 | 29965.48  |
| COAL COMBUSTION TECHNOLOGY                        | Supercritical                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                | LATEST ESTIMATED COST                                                  | 34542.95  |
| APPROVAL DATE / NTP                               | 04.10.2014 (MoU entered with BHEL)                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                | DATE OF FINANCIAL CLOSURE                                              | *         |
| EPC/BTG/BoP Contractor Details (Package Wise)     | LOI was issued to M/s BHEL as EPC contractor (BTG & BOP) on 01.06.2015 . Revised LOI issued on Dt:17.10.2017 for considering new norms & impact of GST with zero date as 17.10.2017.                                                                                                                                                                |                                                                                                                                                                | YEAR WISE EXPENDITURE                                                  |           |
| PPA                                               | Power purchase Agreement entered on 11.03.2020 with TSDISCOMS                                                                                                                                                                                                                                                                                       |                                                                                                                                                                | 2015-16                                                                | 499.46    |
| COAL LINKAGE/FSA                                  | Allocated Mine - SCCL; Distance from mine - 270 km (non pithead); Ministry of Coal vide File No.23014/1/2018-CLD, Dt:15-02-2018 has granted coal linkage from SCCL for supply of 14 MTPA of coal (grade-G9).                                                                                                                                        |                                                                                                                                                                | 2016-17                                                                | 59.29     |
|                                                   |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                | 2017-18                                                                | 941.44    |
|                                                   |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                | 2018-19                                                                | 2129.24   |
| START UP POWER AGREEMENT                          | As per clause no.2.2 of PPA , TSDISCOMS shall provide electrical energy to TSGENCO for construction, start up and maintenance, also for commissioning of the project.                                                                                                                                                                               |                                                                                                                                                                | 2019-20                                                                | 2935.56   |
|                                                   |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                | 2020-21                                                                | 4427.54   |
| POWER EVACUATION SYSTEM                           | Tx Line Developer                                                                                                                                                                                                                                                                                                                                   | TSTRANSCO                                                                                                                                                      | 2021-22                                                                | 3582.33   |
|                                                   | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                                                                    | i) YTPS –Dindi, 400 KV, D/C line;<br>ii) YTPS-Choutuppal,400 KV, D/C line;<br>iii) YTPS-Damarcherla, 400 KV, D/C line;<br>iv) YTPS-Janagaon, 400 KV, D/C line. | 2022-23                                                                | 5703.27   |
|                                                   | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                | EXPENDITURE OF Mar’2024                                                | 649.09    |
| LAND POSSESSION                                   | (Details about land area still to be acquired). Ac.5459.39 Gts                                                                                                                                                                                                                                                                                      |                                                                                                                                                                | TOTAL EXPENDITURE (upto 31.03.2024)                                    | 25,635.13 |
| WATER ALLOCATION                                  | Water Source from river Krishna Qty- 208cuses(i.e.6.60 TMC per year) allotted vide G.O.Ms.No.13, Dt:30.01.2015                                                                                                                                                                                                                                      |                                                                                                                                                                | * M/s REC Ltd vide Lr dt 11-08-2015. M/s PFC Ltd vide Lr dt 19-07-2015 |           |
| MOEF CLEARANCE                                    | EC obtained from MoEF&CC vide Lr.No.J-13012/18/2015-IA.I(T), Dt.29- 06-2017 with a validity of 7 years from the date of issue of MoEF clearance(i.e upto 29.06.2024)                                                                                                                                                                                |                                                                                                                                                                |                                                                        |           |
| CIVIL AVIATION CLEARANCE                          | 1.NOCID:NADI/SOUTH/B/071216/149982,Dt:26.07.2016.<br>2.NOCID:NADI/SOUTH/B/071216/149984,Dt:26.07.2016.<br>3.NOCID:NADI/SOUTH/B/071216/149988,Dt:26.07.2016.                                                                                                                                                                                         |                                                                                                                                                                |                                                                        |           |
| CPCB CLEARANCE                                    | Not Applicable                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                |                                                                        |           |
| SPCB CLEARANCE                                    | Consent for Establishment (CFE) received from TSPCB vide Order No.10/TSPCB/CFE/RO-NLG/HO/2017, Dt.25-07-2017.                                                                                                                                                                                                                                       |                                                                                                                                                                |                                                                        |           |
| FOREST CLEARANCE                                  | Approval was accorded by Central Govt. Ministry of Environment, Forest, Climate Change, MoEF &CC, GOI, FC Section, New Delhi for diversion of forest land to an extent of 1892.35 hectares vide lr.no.F.No.8.07/2015-FC dt.07-07-2015 Subsequent G.O. was issued by Govt. of Telangana vide G.O.Ms.No.38,dt.30-07-2015 by EFS & T (For) Department. |                                                                                                                                                                |                                                                        |           |
|                                                   |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                |                                                                        |           |

## YADADRI TPS, Unit# 1, 2, 3, 4 &amp; 5 (5x800 MW) / TSGENCO (STATE SECTOR )

## STATUS OF BTG WORKS

| Sl. | Packages | AREA            | UNIT-01      | UNIT-02      | UNIT-03      | UNIT-04      | UNIT-05      |
|-----|----------|-----------------|--------------|--------------|--------------|--------------|--------------|
|     |          |                 | % Completion | % Completion | % Completion | % Completion | % Completion |
| 1   | BOILER   | CIVIL           | 100.00%      | 100.00%      | 100.00%      | 100.00%      | 100.00%      |
|     |          | STRUCTURE       | 86.44%       | 93.85%       | 78.68%       | 88.76%       | 81.32%       |
|     |          | PRESSURE PARTS  | 100.00%      | 100.00%      | 93.69%       | 99.69%       | 99.56%       |
| 2   | TG       | CIVIL           | 99.00%       | 98.50%       | 98.00%       | 97.00%       | 96.00%       |
|     |          | STRUCTURE       | 99.63%       | 99.27%       | 98.31%       | 97.72%       | 90.96%       |
|     |          | TG ERECTION     | 91.05%       | 94.50%       | 69.50%       | 70.50%       | 66.50%       |
| 3   | ESP      | UNDER PROGRESS  | 96.90%       | 97.19%       | 93.75%       | 95.59%       | 88.76%       |
| 4   | FGD      | CIVIL WORK      | 33.00%       | 33.00%       | 33.00%       | 33.00%       | 33.00%       |
|     |          | MATERIAL SUPPLY | 72.00%       | 72.00%       | 72.00%       | 72.00%       | 72.00%       |
|     |          | ERECTION WORK   | 0.00%        | 0.00%        | 0.00%        | 0.00%        | 0.00%        |

## UNIT WISE MILESTONES (ANTICIPATED / ACTUAL )

| Sl. | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           | UNIT-03       |                           | UNIT-04       |                           | UNIT-05       |                           |
|-----|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|
|     |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1   | COMPLETION OF BOILER FOUNDATION              | 08.01.20      | 08.01.20                  | 29.12.19      | 29.12.19                  | 11.02.20      | 11.02.20                  | 16.02.20      | 16.02.20                  | 23.03.20      | 23.03.20                  |
| 2   | START OF BOILER ERECTION                     | 18.02.20      | 18.02.20                  | 30.07.20      | 30.07.20                  | 18.03.20      | 18.03.20                  | 30.07.20      | 30.07.20                  | 14.08.20      | 14.08.20                  |
| 3   | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           | NA            |                           | NA            |                           | NA            |                           |
| 4   | BOILER CEILING GIRDER LIFTING COMPLETION     | 31.01.21      | 20.03.21                  | 31.03.21      | 31.03.21                  | 11.04.21      | 11.04.21                  | 09.06.21      | 09.06.21                  | 07.09.21      | 07.09.21                  |
| 5   | CONDENSER ERECTION START                     | 31.03.21      | 20.10.21                  | 31.05.21      | 03.01.22                  | 30.05.21      | 13.12.22                  | 31.07.21      | 24.10.22                  | 15.10.21      | 09.10.22                  |
| 6   | TG ERECTION START                            | 03.05.21      | 20.12.21                  | 30.06.21      | 31.01.22                  | 31.08.21      | 21.12.22                  | 30.10.21      | 25.10.22                  | 30.11.21      | 20.10.22                  |
| 7   | HP PIPING ERECTION START                     | 01.04.21      | 16.09.21                  | 01.05.21      | 01.01.22                  | 01.06.21      | 15.07.22                  | 01.07.21      | 31.07.22                  | 01.08.21      | 31.07.22                  |
| 8   | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 31.01.22      | 31.07.22                  | 31.03.22      | 21.06.22                  | 31.05.22      | 26.05.23                  | 31.07.22      | 15.09.22                  | 30.09.22      | 26.05.23                  |
| 9   | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 15.07.22      | 15.03.23                  | 15.09.22      | 15.02.23                  | 15.11.22      | 01.08.23                  | 15.01.23      | 10.07.23                  | 15.03.23      | 15.08.23                  |
| 10  | TG BOX UP                                    | 31.05.22      | 30.03.23                  | 31.07.22      | 05.02.23                  | 31.08.22      | 30.05.24                  | 30.10.22      | 31.03.24                  | 30.11.22      | 31.08.24                  |
| 11  | HP PIPING ERECTION COMPLETION                | 13.10.22      | 30.04.24                  | 13.11.22      | 28.04.24                  | 13.12.22      | 28.06.24                  | 13.01.23      | 15.05.24                  | 13.02.23      | 15.07.24                  |
| 12  | START OF OIL FLUSHING                        | 30.04.22      | 09.06.23                  | 31.05.22      | 23.03.23                  | 31.07.22      | 30.10.24                  | 30.09.22      | 30.08.24                  | 30.10.22      | 30.09.24                  |
| 13  | BOILER LIGHT UP                              | 31.07.22      | 08.05.24                  | 30.09.22      | 08.05.24                  | 30.11.22      | 31.07.24                  | 31.01.23      | 31.05.24                  | 31.03.23      | 31.08.24                  |
| 14  | CHEMICAL CLEANING COMPLETION                 | 05.09.22      | 20.05.24                  | 29.09.22      | 20.05.24                  | 29.10.22      | 30.06.24                  | 29.11.22      | 15.06.24                  | 29.12.22      | 30.10.24                  |
| 15  | STEAM BLOWING START                          | 14.09.22      | 15.05.24                  | 14.10.22      | 30.05.24                  | 14.11.22      | 30.08.24                  | 14.12.22      | 31.10.24                  | 14.01.23      | 30.11.24                  |
| 16  | STEAM BLOWING COMPLETION                     | 14.10.22      | 15.06.24                  | 14.11.22      | 30.06.24                  | 14.12.22      | 30.09.24                  | 14.01.23      | 30.11.24                  | 14.02.23      | 30.12.24                  |
| 17  | ROLLING & SYNC.                              | 30.10.22      | 15.07.24                  | 31.12.22      | 06.07.24                  | 31.01.23      | 15.10.24                  | 31.03.23      | 30.12.24                  | 31.05.23      | 31.01.25                  |
| 18  | FULL LOAD                                    | 15.02.23      | 15.08.24                  | 15.03.23      | 15.08.24                  | 15.04.23      | 15.11.24                  | 15.05.23      | 15.01.25                  | 15.06.23      | 28.02.25                  |
| 19  | TRIAL RUN                                    | Feb'23        | Sept-24                   | Mar'23        | Sept-24                   | Apr'23        | Dec-24                    | May'23        | Feb-25                    | Jun'23        | Apr-25                    |
| 20  | COD                                          |               |                           |               |                           |               |                           |               |                           |               |                           |

## YADADRI TPS, Unit# 1, 2, 3, 4 &amp; 5 (5x800 MW) / TSGENCO (STATE SECTOR)

## STATUS OF BOPs

| Sl. | Packages/ Linked Project Milestones | Vendor/Contracting Agency                                                                                                                    | Date of Award                                            | Scheduled Date of Completion                             | Anticipated/Actual Date of Completion                    | UNIT-01                | UNIT-02      | UNIT-03                | UNIT-04      | UNIT-05      |
|-----|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|------------------------|--------------|------------------------|--------------|--------------|
|     |                                     |                                                                                                                                              |                                                          |                                                          |                                                          | % Completion           | % Completion | % Completion           | % Completion | % Completion |
| 1   | Chimney                             | Bygging India Ltd for Unit #1&2;Paharpur for Unit #3&4; ByggingIndia Ltdfor Unit #5                                                          | 03.02.20<br>24.02.20<br>12.02.20                         | 31.07.22                                                 | 30.12.23                                                 | Shell Concreting-100%  |              | Shell Concreting-100%  |              | SC-100%      |
|     |                                     |                                                                                                                                              |                                                          |                                                          |                                                          | Flue can Erection 100% |              | Flue can Erection 100% |              | FCE-100%     |
| 2   | Coal Handling Plant (Civil)         | Powermech (Conveyor package)                                                                                                                 | 09.08.20                                                 | 31.12.22                                                 | 15.04.24                                                 | 95.29%                 |              |                        |              |              |
|     |                                     | Powermech (Wagon tripler)                                                                                                                    | 10.12.20                                                 | 30.06.23                                                 | 30.04.24                                                 | 99.79%                 |              |                        |              |              |
|     |                                     | Powermech (Stacker Reclaimer )                                                                                                               | 08.10.20                                                 | 30.06.23                                                 | 30.08.23                                                 | 100%                   |              |                        |              |              |
| 3   | Ash Handling Plant                  | BHEL/ Powermech                                                                                                                              | 08.06.21                                                 | 31.12.22                                                 | 30.05.24                                                 | 80.75%                 |              |                        |              |              |
| 4   | Fuel Oil System                     | BHEL/Thermosystems                                                                                                                           | 19.02.21                                                 | 31.07.22                                                 | 30.06.23                                                 | 100%                   |              |                        |              |              |
| 5   | Cooling Towers                      | BHEL/NBCC for Unit #1 (Now M/s Paharpur)<br>BHEL/Gammon for Unit#2<br>BHEL/NBCC for Unit#3<br>BHEL/Gammon for Unit#4<br>BHEL/NBCC for Unit#5 | 09.01.21<br>18.12.20<br>06.02.21<br>25.02.21<br>18.03.21 | 30.10.22<br>28.02.23<br>31.03.23<br>30.04.23<br>31.05.23 | 31.05.24<br>31.05.24<br>31.07.24<br>31.08.24<br>30.09.24 | 92.74%                 | 94.64%       | 85.86%                 | 76.54%       | 56.12%       |
| 6   | CW Pump house                       | CW pump house & channel - BHEL/HES                                                                                                           |                                                          |                                                          | 31.07.24                                                 | 99%                    | 99%          | 85.63%                 | 85.63%       | 85.63%       |
| 7   | WPT Plant                           | BHEL/SCC                                                                                                                                     | 03.02.21                                                 | 31.01.22                                                 | 31.04.24                                                 | 97%                    |              |                        |              |              |
| 8   | DM Plant                            | BHEL/SCC                                                                                                                                     | 01.10.20                                                 | 31.01.22                                                 | 31.04.24                                                 | 99.85%                 |              |                        |              |              |
| 9   | Compressed Air System               | BHEL/HES                                                                                                                                     | 12.02.21                                                 | 31.05.22                                                 | 15.05.24                                                 | 99.17%                 |              |                        |              |              |
| 10  | Fire Protection System              | BHEL                                                                                                                                         | -                                                        | 31.07.22                                                 | 31.05.24                                                 | 20.00%                 |              |                        |              |              |
| 11  | Switch Yard                         | BHEL/Bluechip                                                                                                                                | 13.02.21                                                 | 31.07.22                                                 | 30.04.24                                                 | 95%                    |              |                        |              |              |
| 12  | Generator Transformers              | BHEL/EIPL for Unit-1<br>BHEL/KEPL for Unit-2                                                                                                 | 14.12.19<br>17.10.20                                     | 30.10.22<br>31.12.22                                     | 30.04.24<br>30.04.24                                     | 99.0%                  | 99%          | 98.5%                  | 97%          | 90%          |
| 13  | Station Transformers                | BHEL/EIPL for Unit-3<br>BHEL/KEPL for Unit-4                                                                                                 | 26.10.19<br>22.10.19                                     | 31.01.23<br>31.03.23                                     | 31.05.24<br>30.04.24                                     |                        |              |                        |              |              |
| 14  | Unit Transformers                   | BHEL/KEPL for Unit-5                                                                                                                         | 18.12.19                                                 | 31.05.23                                                 | 31.05.24                                                 |                        |              |                        |              |              |
| 15  | Railway Siding                      | Work in progress                                                                                                                             | 06.06.2022                                               | 06.12.23                                                 | 30.04.24                                                 | 70%                    |              |                        |              |              |
| 16  | Power Evacuation Lines              | TS TRANSCO/MEIL                                                                                                                              | 06.08.20                                                 | 24.02.22                                                 | 31.10.24                                                 | 87%                    |              |                        |              |              |

## CRITICAL ISSUES

Issue of fresh EC pending, hence all commissioning works on hold.  
MoEF&CC, GoI issued additional ToR on 08.11.2023 where in, it was directed to conduct public hearing. Public hearing conducted on 20-02-2024. Outcome of hearing presented before EAC and the same has to be considered by EAC.

## REASONS OF DELAY

- 1) Delay in agency finalization of Main plant civil works and Boiler erection works.
- 2) The works of YTPS were adversely affected due to Covid-19 (1.0) as lockdown was imposed by State Government. Further upon resumption of the site works also, the works could not progress at the required pace, due to acute shortage of man power as most of the available workers at site have left.
- 3) The impact of monsoons and unprecedented rains during other seasons resulted in frequent dewatering caused interruption to the movement of men and machinery which affected the work progress at YTPS site.
- 4) The outbreak of Covid-19 (2.0) again hit the country with higher magnitude from March 2021 onwards. Number of workers and engineers are effected with Covid-19 in the project. Erection works are hampered due to non-availability of oxygen cylinders as the oxygen is diverted to Hospitals as per the directions of State Government.

**BHUSAWAL SUPERCRITICAL TPP, Unit# 6 (1X660 MW) / MAHAGENCO (STATE SECTOR )**

Village Pimpri Sekam, Tal Bhusawal, Distt.- Jalgaon, Maharashtra, Pincode-425307

E-Gen Portal Registration No. (U#6 - 1200002450)

| Project Developer / Implementing Agency - MAHAGENCO |                                                                                                                                                                                                                                                                                 |                                                                        | Main Plant Vendor - M/s BHEL (EPC Contract) |        |                |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------|--------|----------------|
| Unit No.                                            | LoA                                                                                                                                                                                                                                                                             | Original Trial Run Date                                                | Anticipated /                               | Actual | Trial Run Date |
| Unit#6                                              | Jan-2018                                                                                                                                                                                                                                                                        | May-2022                                                               | Sept-2024                                   |        |                |
| CLEARANCES AND STATIC DATA                          |                                                                                                                                                                                                                                                                                 |                                                                        | FINANCIAL DATA (Fig. in Rs. Crore)          |        |                |
| FUEL TYPE                                           | Coal, Indigenous                                                                                                                                                                                                                                                                |                                                                        | ORIGINAL ESTIMATED COST OF THE PROJECT      |        | 4548.00        |
| COAL COMBUSTION TECHNOLOGY                          | Super Critical                                                                                                                                                                                                                                                                  |                                                                        | LATEST ESTIMATED COST                       |        | 6350.99        |
| APPROVAL DATE / NTP                                 | 25-09-2009                                                                                                                                                                                                                                                                      |                                                                        | DATE OF FINANCIAL CLOSURE                   |        | NA             |
| EPC/BTG/BoP Contractor Details (Package Wise)       | M/s BHEL (EPC Contract, LoA:17.01.2018)                                                                                                                                                                                                                                         |                                                                        | YEAR WISE EXPENDITURE                       |        |                |
| PPA                                                 | Long Term Power Purchase Agreement dated 24.12.2010 with Maharashtra state Electricity Distribution Co. ltd for 100% of installed capacity                                                                                                                                      |                                                                        |                                             |        |                |
| COAL LINKAGE/FSA                                    | Allocated Mine - WCL, Umred/Ghugus; Distance from mine – 403/430km; Allocation Date: 11-09-2020, Source:WCL mines ,Grade: G9/G10, Quantity : 318 million tonne.                                                                                                                 |                                                                        | 2018-19                                     |        | 51.21          |
| START UP POWER AGREEMENT                            | Maharashtra State Electricity Transmission Company Ltd (MSETCL) vide letter no MSETCL/CO/STU/302 B/B_GC/No. 12757,dated 06/12/2018 approved Grid connectivity, which is valid till 06.06.2021. Letter regarding extension up to Dec-2022, is sent to STU, MSETCL on 07.05.2021. |                                                                        | 2019-20                                     |        | 564.66         |
|                                                     |                                                                                                                                                                                                                                                                                 |                                                                        | 2020-21                                     |        | 889.57         |
|                                                     |                                                                                                                                                                                                                                                                                 |                                                                        | 2021-22                                     |        | 1261.79        |
|                                                     |                                                                                                                                                                                                                                                                                 |                                                                        | 2022-23                                     |        | 616.04         |
|                                                     |                                                                                                                                                                                                                                                                                 |                                                                        | EXPENDITURE OF Mar’2024                     |        | 349.09         |
| POWER EVACUATION SYSTEM                             | Tx Line Developer                                                                                                                                                                                                                                                               | MSETCL                                                                 | TOTAL EXPENDITURE (upto 31.03.2024)         |        | 4481.64        |
|                                                     | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                | LILOing of Bhusawal-II - Aurangabad I, 400 KV, D/C line at Thaptitanda |                                             |        |                |
|                                                     | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                           |                                                                        |                                             |        |                |
| LAND POSSESSION                                     | Total Land Required: 120.39 Hectare<br>Total land acquired: 118.415 Hectare<br>Total land in use: 118.415 Hectare                                                                                                                                                               |                                                                        |                                             |        |                |
| WATER ALLOCATION                                    | Source: - Tapi River, Quantity: - 18.85 MM3 Per Annum.                                                                                                                                                                                                                          |                                                                        |                                             |        |                |
| MOEF CLEARANCE                                      | Clearance obtained date from concerned authority: 27/11/2012 validity : 26/11/2022                                                                                                                                                                                              |                                                                        |                                             |        |                |
| CIVIL AVIATION CLEARANCE                            | Clearance obtained date from concerned authority: 27/08/2008 validity : 23/02/2022                                                                                                                                                                                              |                                                                        |                                             |        |                |
| CPCB CLEARANCE                                      | Not Applicable                                                                                                                                                                                                                                                                  |                                                                        |                                             |        |                |
| SPCB CLEARANCE                                      | Clearance obtained date from concerned authority: 10/06/2020 validity : The consent to establish is granted for period up to commissioning of the unit or up to 5 years whichever is earlier.                                                                                   |                                                                        |                                             |        |                |
| FOREST CLEARANCE                                    | Clearance obtained date from concerned authority: 14/01/2020 validity: 26/11/2022.                                                                                                                                                                                              |                                                                        |                                             |        |                |

**BHUSAWAL SUPERCRITICAL TPP, Unit# 6 (1X660 MW) / MAHAGENCO (STATE SECTOR )**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |                             |                                         |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-06                     |                                         |
|                                              |                                              | Original Date of Completion | Anticipated / Actual Date of Completion |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 25.11.2019                  | 15.11.2019                              |
| 2                                            | START OF BOILER ERECTION                     | 30.11.2019                  | 22.11.2019                              |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          | NA                                      |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 30.06.2020                  | 20.01.2021                              |
| 5                                            | CONDENSER ERECTION START                     | 31.10.2020                  | 30.03.2022                              |
| 6                                            | TG ERECTION START                            | 30.11.2020                  | 03.03.2022                              |
| 7                                            | HP PIPING ERECTION START                     | 11.05.2021                  | 22.03.2021                              |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 31.05.2021                  | 04.11.2022                              |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 10.11.2021                  | Mar-2023                                |
| 10                                           | TG BOX UP                                    | 30.11.2021                  | 10.04.2023                              |
| 11                                           | HP PIPING ERECTION COMPLETION                | 25.04.2022                  | Oct,2023                                |
| 12                                           | START OF OILFLUSHING                         | 04.12.2021                  | June-2023                               |
| 13                                           | BOILER LIGHT UP                              | 30.11.2021                  | Mar-2023                                |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 20.12.2021                  | Jun-2023                                |
| 15                                           | STEAM BLOWING START                          | 24.01.2022                  | Sep-2023                                |
| 16                                           | STEAM BLOWING COMPLETION                     | 19.02.2022                  | Oct-2023                                |
| 17                                           | ROLLING & SYNC.                              | 31.03.2022                  | 17-01-2024                              |
| 18                                           | FULL LOAD                                    | 30.04.2022                  | Sep-2024                                |
| 19                                           | TRIAL RUN                                    | 31.05.2022                  | Sep-2024                                |
| 20                                           | COD                                          | 31.05.2022                  | Aug-2024                                |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/s BHEL |                                     |                                                           |                        |                              |                                       |                         |
|-----------------------------------------------|-------------------------------------|-----------------------------------------------------------|------------------------|------------------------------|---------------------------------------|-------------------------|
| Sl.                                           | Packages                            | AREA                                                      | UNIT-06                |                              |                                       |                         |
|                                               |                                     |                                                           | % Completion           |                              |                                       |                         |
| 1                                             | BOILER                              | CIVIL                                                     | 96%                    |                              |                                       |                         |
|                                               |                                     | STRUCTURE WORKS                                           |                        |                              |                                       |                         |
|                                               |                                     | PRESSURE PARTS                                            |                        |                              |                                       |                         |
| 2                                             | TG                                  | CIVIL                                                     | 99%                    |                              |                                       |                         |
|                                               |                                     | STRUCTURE WORKS                                           |                        |                              |                                       |                         |
|                                               |                                     | PRESSURE PARTS                                            |                        |                              |                                       |                         |
| 3                                             | ESP                                 | PASS STATUS                                               | 98%                    |                              |                                       |                         |
| 4                                             | FGD                                 | CIVIL WORK                                                | 66%                    |                              |                                       |                         |
|                                               |                                     | MATERIAL SUPPLY                                           |                        |                              |                                       |                         |
|                                               |                                     | ERECTION WORK                                             |                        |                              |                                       |                         |
| STATUS OF BOPs                                |                                     |                                                           |                        |                              |                                       |                         |
| Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- BHEL)                     | Date of Award          | Scheduled Date of Completion | Anticipated/Actual Date of Completion | UNIT-01<br>% Completion |
| 1                                             | Chimney                             | M/s Powermech                                             | 30.05.2019             | 28.02.2022                   | Apr-2024                              | 99%                     |
| 2                                             | Coal Handling Plant                 | M/s BJCL & Macawber Beekay Pvt Ltd.(Conveyor package      | 27.05.2019             | 30.04.2022                   | May-2024                              | 78%                     |
|                                               |                                     | M/s BJCL& Promac (Wagon tippler)                          | 28.05.2019             | 30.04.2022                   | May-2024                              | 70%                     |
|                                               |                                     | M/s BJCL& Promac(Stacker Reclaimer)                       | 24.08.2019, 28.05.2019 | 30.04.2022                   | Apr-2024                              | 90%                     |
| 3                                             | Ash Handling Plant                  | M/s BJCL & Macawber Beekay Pvt Ltd.                       | 24.08.2019, 23.12.2021 | 31.03.2022                   | May-2024                              | 81%                     |
| 4                                             | Fuel Oil System                     | M/s. New Fire Engineers Pvt Ltd.                          | 19.09.2019             | 21.11.2021                   | Apr-2024                              | 97%                     |
| 5                                             | Cooling Towers                      | M/s Hayagrev civil engineering Pvt Ltd                    | 1.11.2019, 05.03.2022  | 31.03.2022                   | Apr-2024                              | 99%                     |
| 6                                             | CW Pump house                       | M/s Alpha power engineering services Pvt Ltd,G&J Pvt Ltd. | 29.01.2019             | 28.02.2022                   | Jan-2024                              | 100%                    |
| 7                                             | WPT Plant                           | M/s Clear Water company                                   | 17.02.2020             | 12.12.2021                   | Apr-2024                              | 86%                     |
| 8                                             | DM Plant                            | M/s Wipro Enterprises Pvt Ltd                             | 14.01.2020             | 30.11.2021                   | Sep-2023                              | 99%                     |
| 9                                             | Compressed Air System               | M/s Elgi equipment Ltd.                                   | 24.08.2020             | 04.11.2021                   | Mar-2023                              | 99%                     |
| 10                                            | Fire Protection System              | M/s Alpha power engineering services Pvt Ltd              | 29.01.2021             | 20.05.2021                   | April-2024                            | 98%                     |
| 11                                            | Switch Yard                         | M/s BNC Power Projects Ltd                                | 15.02.2021             | 28.02.2022                   | Jan-2023                              | 100%                    |
| 12                                            | Station Transformers                | M/s BHEL                                                  | 17.01.2018             | 08.07.2021                   | Jan-2023                              | 100%                    |
| 13                                            | Unit Transformers                   | M/s BHEL                                                  | 17.01.2018             | 20.01.2022                   | Apr-2024                              | 90%                     |
| 14                                            | Railway Siding                      | ISC Projects                                              | 02.01.2021             | 31.03.2022                   | May-2024                              | 86%                     |
| 15                                            | Power Evacuation Lines              | MSETCL/BNC Power Projects                                 | 15.02.2021             | 28.02.2022                   | Feb-2023                              | 100%                    |

**CRITICAL ISSUES**

- Rectification of deformation in spiral tubes (water wall) of boiler.
- Coal Bunker (RHS) & CHP structural welding works pending which is critical for coal firing activity.
- Railway siding: civil works are pending which may delay Trial Operation.

**REASONS OF DELAY**

Due to Covid-19 pandemic.

**SAGARDIGHI TPP, St-III, Unit# 5 (1X660 MW) / WBPDC (STATE SECTOR )**

PS-Sagardighi, PO-Manigram, Block-Sagardighi, Subdivision-Jangipur, Distt.-Murshidabad (W. B.), Pin-742 237  
E-Gen Portal Registration No. (U#5 - 1200002116)

| Project Developer / Implementing Agency - WBPDC |                                                                                                                                                                                    |                                                                                                                                                                                                          | Main Plant Vendor - M/s BHEL (EPC Contract)                               |        |                |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------|----------------|
| Unit No.                                        | LOA                                                                                                                                                                                | Original Trial Run Date                                                                                                                                                                                  | Anticipated /                                                             | Actual | Trial Run Date |
| Unit#5                                          | 27 <sup>th</sup> Dec-2018                                                                                                                                                          | Jan-2024                                                                                                                                                                                                 | Jan-2025                                                                  |        |                |
| CLEARANCES AND STATIC DATA                      |                                                                                                                                                                                    |                                                                                                                                                                                                          | FINANCIAL DATA (Fig. in Rs. Crore)                                        |        |                |
| FUEL TYPE                                       | Coal, Indigenous                                                                                                                                                                   |                                                                                                                                                                                                          | ORIGINAL ESTIMATED COST OF THE PROJECT                                    |        | 3862.65*       |
| COAL COMBUSTION TECHNOLOGY                      | Super Critical                                                                                                                                                                     |                                                                                                                                                                                                          | LATEST ESTIMATED COST                                                     |        | 4567.32#       |
| APPROVAL DATE / NTP                             | Notice to Proceed Date : 01.07.2020; The proposal was approved in the State Cabinet held on 23.03.2018.                                                                            |                                                                                                                                                                                                          | DATE OF FINANCIAL CLOSURE                                                 |        | 02.01.2017     |
| EPC/BTG/BoP Contractor Details (Package Wise)   | EPC contract awarded to BHEL (LOA : 27.12.2018)                                                                                                                                    |                                                                                                                                                                                                          |                                                                           |        |                |
| PPA                                             | Power Purchase Agreement executed with WBSEDCL                                                                                                                                     |                                                                                                                                                                                                          | YEAR WISE EXPENDITURE                                                     |        |                |
| COAL LINKAGE/FSA                                | Allocated Mine - Pachhwara (North) Captive Coal Mine of WBPDC. Distance from mine - 150 km (non pithead); Coal will be sourced mainly from captive coal mines of WBPDC             |                                                                                                                                                                                                          | 2018-19                                                                   |        | 70.00          |
| START UP POWER AGREEMENT                        | Start up power shall be obtained from the other running units of the Sagardighi Thermal Power Project                                                                              |                                                                                                                                                                                                          | 2019-20                                                                   |        | 56.25          |
| POWER EVACUATION SYSTEM                         | Tx Line Developer                                                                                                                                                                  |                                                                                                                                                                                                          | 2020-21                                                                   |        | 362.47         |
|                                                 | Tx Line Name<br>Tx Voltage Level                                                                                                                                                   | i) STPP – New Sagardighi, 220 KV, D/c line,<br>ii) STPP- Farakka, 400 KV D/c line,<br>iii) STPP-Purulia 400 KV D/c line,<br>iv) STPP- Baharampore 400 KV, D/C line,<br>v) STPP- Gokarna 400 KV D/C line. | 2021-22                                                                   |        | 330.97         |
|                                                 | Configuration of Tx Line (S/C or D/C)                                                                                                                                              |                                                                                                                                                                                                          | 2022-23                                                                   |        | 662.34         |
| LAND POSSESSION                                 | Adequate land is available for the project. (WBPDC have 365 Ha of land under possession for Phases I, II & III of the plant and another 184 Ha for ash disposal.)                  |                                                                                                                                                                                                          | EXPENDITURE OF Mar’2024                                                   |        | 91.72          |
| WATER ALLOCATION                                | Source:River Bhagirathi/Hooghly Quantity:74.36 cusec of water in total for the entire Project. Permission vide F. No. TE-15015/1/2019/NMCG, Dated: 01.07.2019 accorded by National |                                                                                                                                                                                                          | TOTAL EXPENDITURE (upto 31.03.2024)                                       |        | 2052.88        |
| MOEF CLEARANCE                                  | Environmental clearance vide F. No. J-13012/01/2019-IA. I (T) dated 24.03.2020 accorded by MoEF & CC Govt. of India for new unit No 5                                              |                                                                                                                                                                                                          | * Approved in the State Cabinet held on 23.03.2018<br># Awaiting Approval |        |                |
| CIVIL AVIATION CLEARANCE                        | NOC for height Clearance vide NOC ID: MALD/EAST/B/100316/175516, Dated: 19.10.2016 obtained from                                                                                   |                                                                                                                                                                                                          |                                                                           |        |                |
| CPCB CLEARANCE                                  | Not Applicable                                                                                                                                                                     |                                                                                                                                                                                                          |                                                                           |        |                |
| SPCB CLEARANCE                                  | Online application for Grant of Consent to Establish / NoC has been be made to WBPCB on 27.03.2021                                                                                 |                                                                                                                                                                                                          |                                                                           |        |                |
| FOREST CLEARANCE                                | Not Applicable                                                                                                                                                                     |                                                                                                                                                                                                          |                                                                           |        |                |

**SAGARDIGHI TPP, St-III, Unit# 5 (1X660 MW) / WBPDC (STATE SECTOR)**

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |                             |                                         |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-05                     |                                         |
|                                              |                                              | Original Date of Completion | Anticipated / Actual Date of Completion |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | 19.04.2021                  | 16.10.2021                              |
| 2                                            | START OF BOILER ERECTION                     | 29.04.2021                  | 27.03.2021                              |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA                          | NA                                      |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | 30.12.2021                  | 22.06.2022                              |
| 5                                            | CONDENSER ERECTION START                     | 03.03.2022                  | 03.08.2022                              |
| 6                                            | TG ERECTION START                            | 02.05.2022                  | 28.08.2022                              |
| 7                                            | HP PIPING ERECTION START                     | 25.11.2022                  | 15.04.23                                |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 30.12.2022                  | 28.02.2024                              |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 29.05.2023                  | june'24                                 |
| 10                                           | TG BOX UP                                    | 01.06.2023                  | Aug'24                                  |
| 11                                           | HP PIPING ERECTION COMPLETION                | 26.08.2023                  | Apr'24                                  |
| 12                                           | START OF OIL FLUSHING                        | 28.03.2023                  | July'24                                 |
| 13                                           | BOILER LIGHT UP                              | 13.06.2023                  | Aug'24                                  |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 28.06.2023                  | Jun,24                                  |
| 15                                           | STEAM BLOWING START                          | 13.07.2023                  | Oct'24                                  |
| 16                                           | STEAM BLOWING COMPLETION                     | 12.08.2023                  | Nov'24                                  |
| 17                                           | ROLLING & SYNC.                              | 01.09.2023                  | Dec'24                                  |
| 18                                           | FULL LOAD                                    | 01.11.2023                  | Dec'24                                  |
| 19                                           | TRIAL RUN                                    | 01.01.2024                  | Jan-25                                  |
| 20                                           | COD                                          | Jan-24                      | Jan-25                                  |

| STATUS OF MAIN PLANT PACKAGE (BTG) : M/s BHEL |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                              |                                       |                                                |
|-----------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|---------------------------------------|------------------------------------------------|
| Sl.                                           | Packages                            | AREA                                                                                                                                                                                                                                                                                                                                                                                                                  | UNIT-05          |                              |                                       |                                                |
|                                               |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                       | % Completion     |                              |                                       |                                                |
| 1                                             | BOILER                              | CIVIL                                                                                                                                                                                                                                                                                                                                                                                                                 | 100%             |                              |                                       |                                                |
|                                               |                                     | STRUCTURE                                                                                                                                                                                                                                                                                                                                                                                                             | 48.31%           |                              |                                       |                                                |
|                                               |                                     | PRESSURE PARTS                                                                                                                                                                                                                                                                                                                                                                                                        | 89.36%           |                              |                                       |                                                |
| 2                                             | TG                                  | CIVIL                                                                                                                                                                                                                                                                                                                                                                                                                 | 100%             |                              |                                       |                                                |
|                                               |                                     | STRUCTURE                                                                                                                                                                                                                                                                                                                                                                                                             | -                |                              |                                       |                                                |
| 3                                             | ESP                                 | CIVIL WORKS                                                                                                                                                                                                                                                                                                                                                                                                           | 100%             |                              |                                       |                                                |
|                                               |                                     | STRUCTURAL WORKS                                                                                                                                                                                                                                                                                                                                                                                                      | 93.69%           |                              |                                       |                                                |
| 4                                             | FGD                                 | NOT STARTED YET                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                              |                                       |                                                |
| STATUS OF BOPs                                |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                              |                                       |                                                |
| Sl.                                           | Packages/ Linked Project Milestones | Vendor/Contracting Agency (EPC- BHEL)                                                                                                                                                                                                                                                                                                                                                                                 | Date of Award    | Scheduled Date of Completion | Anticipated/Actual Date of Completion | UNIT-01                                        |
|                                               |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                              |                                       | % Completion                                   |
| 1                                             | Chimney                             | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | 17.08.2021 (ZERO | 17.05.2023                   | 30.09.2024                            | 100%                                           |
| 2                                             | Coal Handling Plant                 | Conveyor package: Bengal Tools Limited                                                                                                                                                                                                                                                                                                                                                                                | 27.12.2018 (ZERO | 15.12.2023                   | 30.12.2024                            | 40.25%.                                        |
|                                               |                                     | Twin Wagon Tippler : ThyssenKrupp                                                                                                                                                                                                                                                                                                                                                                                     | DATE AS PER      | 13.12.2023                   |                                       |                                                |
|                                               |                                     | Existing Stacker Reclaimer of Stage-II will be used                                                                                                                                                                                                                                                                                                                                                                   |                  |                              |                                       |                                                |
| 3                                             | Ash Handling Plant                  | M/s. MacawberBeekey Pvt. Ltd.                                                                                                                                                                                                                                                                                                                                                                                         | 27.12.2018 (ZERO | 28.03.2024                   | 30.12.2024                            | 45.25%                                         |
| 4                                             | Fuel Oil System                     | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | DATE AS PER      | 27.08.2023                   | 31.12.2024                            | 0%                                             |
| 5                                             | Cooling Towers                      | M/s. Paharpur Cooling Towers Limited                                                                                                                                                                                                                                                                                                                                                                                  | PER CONTRACT     | 31.12.2022                   | 30.06.2024                            | 97.40%                                         |
| 6                                             | CW Pump house                       | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | 01.07.2020)      | 09.12.2023                   | 27.12.2024                            | 39.75%                                         |
| 8                                             | WPT Plant                           | Will be used from Existing                                                                                                                                                                                                                                                                                                                                                                                            |                  |                              | 31.12.2023                            | Existing from Stage – II Project will be used. |
| 9                                             | DM Plant                            |                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                              | 31.12.2023                            |                                                |
| 11                                            | Compressed Air System               | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             |                  | 25.08.2023                   | 31.08.2024                            | 22.5%                                          |
| 12                                            | Fire Protection System              | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | 27.12.2018 (ZERO | 24.03.2024                   | 30.12.2024                            | 03.50%                                         |
| 15                                            | Switch Yard                         | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | DATE AS PER      | 22.03.2024                   | 30.12.2024                            | 73.50%                                         |
| 16                                            | Station Transformers                | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | CONTRACT         | 30.03.2023                   | 31.12.2024                            | 40.35%                                         |
| 18                                            | Unit Transformers                   | M/s. BHEL                                                                                                                                                                                                                                                                                                                                                                                                             | 01.07.2020)      | 27.08.2023                   | 31.12.2024                            |                                                |
| 19                                            | Railway Siding                      | Railway siding exists. M/s. Rites will do the modification job for connecting Twin Wagon Tippler for Stage 3.                                                                                                                                                                                                                                                                                                         |                  |                              |                                       |                                                |
| 20                                            | Power Evacuation Lines              | Power Evacuation from the proposed unit shall be done through the existing electrical network consisting of following feeders<br>i) STPP – New Sagardighi, 220 KV, D/c line,<br>ii) STPP- Farakka, 400 KV D/c line,<br>iii) STPP-Purulia 400 KV D/c line,<br>iv) STPP-Subhashgram 400KV D/c line,<br>v) STPP-Jeerat 400KV D/c line,<br>vi) STPP- Baharampore 400 KV, D/C line,<br>vii) STPP- Gokarna 400 KV D/C line. |                  |                              |                                       |                                                |

**CRITICAL ISSUES**

- Delay in supply of critical piping, LT Switchgear
- Slow progress in CHP
- Supply of SCR package for NO<sub>x</sub> control

**REASONS OF DELAY**

1. Effect of COVID -19 during Project Tenure:, Scarcity of Industrial Oxygen affected fabrication work. Quarantine of workers & officials.
2. Restrictions affected mobilization.
3. Delay in sequential supply of Critical Items, mainly Boiler Pressure Parts from BHEL-Trichy works.
4. Delay in supply of Double Girder EOT Crane (more than 100 MT capacity) which resulting in delay in delay in Turbine Erection. TPI completed in Feb 2023.
5. Delay in ordering of Bought out items, like :
  - Condensate Polishing Unit.
  - Mill Rejection System.
  - Control Valves.

**DCR TPP Extn., Unit# 3 (1X800 MW) / HPGCL (STATE SECTOR)**

Rattanpura, Yamunanagar, Yamunanagar, Haryana– 768001

E-Gen Portal Registration No. ( U#3 – Not yet registered )

| Project Developer / Implementing Agency -HPGCL |                  | Main Plant Vendor - M/s BHEL (EPC contract) |                                            |
|------------------------------------------------|------------------|---------------------------------------------|--------------------------------------------|
| Unit No.                                       | LOA              | Original Trial Run Date                     | Anticipated / <b>Actual</b> Trial Run Date |
| Unit#3                                         | 08-02-2024 (LOI) | Sept-29                                     | Sept-2029 (Tentative)                      |

| CLEARANCES AND STATIC DATA |                                                                                                                                                                                                                                                                                                                                                         | FINANCIAL DATA (Fig. in Rs. Crore)     |                                  |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------|
| FUEL TYPE                  | Coal, Non-Pithead                                                                                                                                                                                                                                                                                                                                       | ORIGINAL ESTIMATED COST OF THE PROJECT | 6900                             |
| COAL COMBUSTION TECHNOLOGY | Ultra-Supercritical                                                                                                                                                                                                                                                                                                                                     | LATEST ESTIMATED COST                  | 6900                             |
| APPROVAL DATE / NTP        | Letter of Intent issued to M/s BHEL on 08.02.2024                                                                                                                                                                                                                                                                                                       | DATE OF FINANCIAL CLOSURE              | Financial closure is in process. |
| PPA                        | HPGCL has the mandate to supply power to Haryana State Discoms only and thus no separate PPA needs to be signed and only quantum of power in existing PPA shall be added.                                                                                                                                                                               | YEAR WISE EXPENDITURE                  |                                  |
| COAL LINKAGE/FSA           | Standing Linkage Committee (Long Term) of Ministry of Coal in its meeting on 19.09.2023 has recommended bridge linkage of 37.1 Lac Metric Tonne per Annum for the project for a period of 3-years i.e. upto 23.02.2026.                                                                                                                                 | EXPENDITURE OF Jan'24                  | 1.39                             |
| START UP POWER AGREEMENT   | It will be drawn from existing 220 kV switchyard of DCRTTP, Yamunanagar, whereby, 2 Nos, 400/220 kV, 315 MVA ICTs will be provided to connect existing 220 kV switchyard with upcoming 400 kV switchyard of proposed 800 MW Unit-3. From 400 kV switchyard, power will be supplied for start up through 2 Nos, 400/11 kV, 130 MVA Station Transformers. | TOTAL EXPENDITURE (up to 31.03.24)     | 1.39                             |
| POWER EVACUATION SYSTEM    | Power will be evacuated through 2 Nos., 400 kV Transmission lines, to be drawn by Haryana Vidyut Prasaran Nigam Limited (HVPNL). Proposed 400 kV switchyard will also be connected to existing 220 kV switchyard by providing 2 Nos, 400/220 kV, 315 MVA ICTs .                                                                                         |                                        |                                  |
| LAND POSSESSION            | Unit shall be installed within the existing boundary of DCRTTP, no additional land is required.                                                                                                                                                                                                                                                         |                                        |                                  |
| WATER ALLOCATION           | Consent has been obtained from Irrigation Department for regular supply of 22 Cusecs of raw water from WJC canal for the proposed 800 MW Ultra Supercritical unit at DCRTTP, Yamunanagar.                                                                                                                                                               |                                        |                                  |
| MOEF CLEARANCE             | TOR has been granted for the project by MoEF&CC on 24.03.2023. Accordingly, baseline monitoring has been conducted at site by M/s MECON Ltd. EIA/EMP study report is being finalized, after which, Public Hearing shall be held at site through HSPCB. Subsequently, application for Environment Clearance shall be filed with MoEF&CC                  |                                        |                                  |
| CIVIL AVIATION CLEARANCE   | NoC for NDCT Height Clearance has been accorded by Airport Authority of India (AAI) on 27.06.2023 and NoC from Ministry of Defense (MoD) is awaited.                                                                                                                                                                                                    |                                        |                                  |
| CPCB CLEARANCE             | Not Applicable                                                                                                                                                                                                                                                                                                                                          |                                        |                                  |
| SPCB CLEARANCE             | Not Applicable                                                                                                                                                                                                                                                                                                                                          |                                        |                                  |
| FOREST CLEARANCE           | Not Applicable                                                                                                                                                                                                                                                                                                                                          |                                        |                                  |

## DCR TPP Extn., Unit# 3 (1X800 MW) / HPPGCL (STATE SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED/ ACTUAL ) |                                              |                             |                                         | STATUS OF MAIN PLANT PACKAGE (BTG)-BHEL |                                     |                                   |                           |
|----------------------------------------------|----------------------------------------------|-----------------------------|-----------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|---------------------------|
| Sl.                                          | Milestone                                    | UNIT-03                     |                                         | SI                                      | PACKAGE                             | AREA                              |                           |
|                                              |                                              | Original Date of Completion | Actual / Anticipated Date of Completion |                                         |                                     | UNIT-03                           |                           |
| 1                                            | Completion Of Boiler Foundation              |                             |                                         | 1                                       | BOILER                              | CIVIL                             |                           |
| 2                                            | Start Of Boiler Erection                     |                             |                                         |                                         |                                     | STRUCTURE                         |                           |
| 3                                            | Boiler Ceiling Girder Lifting Completion     |                             |                                         |                                         |                                     | PRESSURE PARTS                    |                           |
| 4                                            | Condenser Erection Start                     |                             |                                         | 2                                       | TG                                  | CIVIL                             |                           |
| 5                                            | TG Erection Start                            |                             |                                         |                                         |                                     | STRUCTURE                         |                           |
| 6                                            | HP Piping Erection Start                     |                             |                                         |                                         |                                     | TG ERECTION                       |                           |
| 7                                            | Boiler Hydro Test (Drainable) Completion     |                             |                                         | 3                                       | ESP                                 | UNDER PROGRESS                    |                           |
| 8                                            | Boiler Hydro Test (Non-Drainable) Completion |                             |                                         | 4                                       | FGD                                 | CIVIL WORK                        |                           |
| 9                                            | TG BOX UP                                    |                             |                                         |                                         |                                     | MATERIAL SUPPLY                   |                           |
| 10                                           | HP Piping Erection Completion                |                             |                                         |                                         |                                     | ERECTION WORK                     |                           |
| 11                                           | Start Of Oil Flushing                        |                             |                                         | STATUS OF BOPs                          |                                     |                                   |                           |
| 12                                           | Boiler Light Up                              |                             |                                         | Sl.                                     | Packages/ Linked Project Milestones | Vendor/ Contracting Agency (DPSI) | Date of Award             |
| 13                                           | Chemical Cleaning Completion                 |                             |                                         |                                         |                                     | Scheduled Date of Comp.           | Ant/ Actual Date of Comp. |
| 14                                           | Steam Blowing Start                          |                             |                                         |                                         |                                     |                                   | UNIT-3                    |
| 15                                           | Steam Blowing Completion                     |                             |                                         | 1                                       | Chimney                             |                                   |                           |
| 16                                           | Rolling & Sync.                              |                             |                                         | 2                                       | Coal Handling Plant                 |                                   |                           |
| 17                                           | Full Load                                    |                             |                                         | 3                                       | Ash Handling Plant                  |                                   |                           |
| 18                                           | Trial Run                                    |                             |                                         | 4                                       | Fuel Oil System                     |                                   |                           |
| 19                                           | COD                                          |                             |                                         | 5                                       | Cooling Towers                      |                                   |                           |
|                                              |                                              |                             |                                         | 6                                       | CW Pump house                       |                                   |                           |
|                                              |                                              |                             |                                         | 7                                       | WPT Plant                           |                                   |                           |
|                                              |                                              |                             |                                         | 8                                       | DM Plant                            |                                   |                           |
|                                              |                                              |                             |                                         | 9                                       | Compressed Air System               |                                   |                           |
|                                              |                                              |                             |                                         | 10                                      | Fire Protection System              |                                   |                           |
|                                              |                                              |                             |                                         | 11                                      | Switch Yard                         |                                   |                           |
|                                              |                                              |                             |                                         | 12                                      | Station Transformers                |                                   |                           |
|                                              |                                              |                             |                                         | 13                                      | Unit Transformers                   |                                   |                           |
|                                              |                                              |                             |                                         | 14                                      | Railway Siding                      |                                   |                           |
|                                              |                                              |                             |                                         | 15                                      | Power Evacuation Lines              |                                   |                           |

## CRITICAL AREAS

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## REASONS OF DELAY

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**MAHAN USCTPP, Ph-II, Unit# 3 & 4 (2X800 MW) / Mahan Energen Ltd. (PRIVATE SECTOR)**

Village: Bandhaura, Post: Karsualal, Tehsil: Mada, District: Singrauli, Madhya Pradesh – 486886

E-Gen Portal Registration No. (U#3 - 1200003898 ; U#4 - 1200003899 )

| Project Developer / Implementing Agency - Mahan Energen Ltd |                                                                                                                                                                                                 |                                                                                                  | Main Plant Vendor (BTG) - BHEL (Supply contract ) |                |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|
| Unit No.                                                    | LOA                                                                                                                                                                                             | Original Trial Run Date                                                                          | Anticipated / Actual                              | Trial Run Date |
| Unit#3                                                      | Aug-2023                                                                                                                                                                                        | Nov-2026                                                                                         | Dec-2026                                          |                |
| Unit#4                                                      |                                                                                                                                                                                                 | May-2027                                                                                         | May-2027                                          |                |
| CLEARANCES AND STATIC DATA                                  |                                                                                                                                                                                                 |                                                                                                  | FINANCIAL DATA (Fig. in Rs. Crore)                |                |
| FUEL TYPE                                                   | Coal Based                                                                                                                                                                                      |                                                                                                  | ORIGINAL ESTIMATED COST OF THE PROJECT            | 12439.00       |
| COAL COMBUSTION TECHNOLOGY                                  | Ultra-supercritical                                                                                                                                                                             |                                                                                                  | LATEST ESTIMATED COST                             | 12439.00       |
| APPROVAL DATE / NTP                                         | 20.06.2023                                                                                                                                                                                      |                                                                                                  | DATE OF FINANCIAL CLOSURE                         | 20.06.2023     |
| EPC/BTG/BoP Contractor Details (Package Wise)               | 20-Aug-23: BTG Supply & Supervision Ordering to M/s BHEL                                                                                                                                        |                                                                                                  | YEAR WISE EXPENDITURE                             |                |
| PPA                                                         | Long term Power Sale Agreement ("PSA") signed for supply of 1320 MW (Gross) power to Madhya Pradesh Power Management Co. Ltd. ("MPPMCL") for period of 25 years w.e.f. COD of the project term. |                                                                                                  | 2022-23                                           | 53             |
|                                                             |                                                                                                                                                                                                 |                                                                                                  | 2023-24                                           | 196            |
| COAL LINKAGE/FSA                                            | Allocated coal linkage of 5 MTPA from WCL under para b(iv) of the SHAKTI Policy. Balance coal requirement will be fulfilled by nearby commercial mine.                                          |                                                                                                  | EXPENDITURE OF MAR'2024                           | 60             |
|                                                             |                                                                                                                                                                                                 |                                                                                                  | TOTAL EXPENDITURE (upto 31.03.2024)               | 777.38         |
| START UP POWER AGREEMENT                                    | Startup power will be arranged from transmission to be developed by MPPMCL in line with the PSA.                                                                                                |                                                                                                  |                                                   |                |
| POWER EVACUATION SYSTEM                                     | Tx Line Developer                                                                                                                                                                               | MPPMCL                                                                                           |                                                   |                |
|                                                             | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                | As per PSA, Power Evacuation from the bus bar of the power station is to be developed by MPPMCL. |                                                   |                |
|                                                             | Configuration of Tx Line (S/C or D/C)                                                                                                                                                           |                                                                                                  |                                                   |                |
| LAND POSSESSION                                             | Total land required for proposed expansion area is 288 Acres which is already in possession. The total area of the Project site is 920 Acres including exsiting facility.                       |                                                                                                  |                                                   |                |
| WATER ALLOCATION                                            | Agreement signed on 18-Oct-22 for drawl of 36 MCM water from River Rihand (Govind Vallabh Pant Sagar) with the validity of 30 years                                                             |                                                                                                  |                                                   |                |
| MOEF CLEARANCE                                              | MoEFCC Clearance for the Project obtained on 27-Jul-23 (Validity of 10 years as per guideline)                                                                                                  |                                                                                                  |                                                   |                |
| CIVIL AVIATION CLEARANCE                                    | NOT APPLICABLE                                                                                                                                                                                  |                                                                                                  |                                                   |                |
| CPCB CLEARANCE                                              | NOT APPLICABLE                                                                                                                                                                                  |                                                                                                  |                                                   |                |
| SPCB CLEARANCE                                              | CTE awaited.                                                                                                                                                                                    |                                                                                                  |                                                   |                |
| FOREST CLEARANCE                                            | NOT APPLICABLE                                                                                                                                                                                  |                                                                                                  |                                                   |                |

## MAHAN USCTPP, Ph-II, Unit# 3 &amp; 4 (2X800 MW) / Mahan Energen Ltd. (PRIVATE SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           | STATUS OF MAIN PLANT PACKAGE (BTG) : BHEL (Supply contract) |                                                                              |                                           |                                           |                              |                  |                                    |                                                 |
|----------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------|------------------------------|------------------|------------------------------------|-------------------------------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-03       |                           | UNIT-04       |                           | Sl.                                                         | Packages                                                                     | AREA                                      | UNIT-03<br>% Completion                   | UNIT-04<br>% Completion      |                  |                                    |                                                 |
|                                              |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |                                                             |                                                                              |                                           |                                           |                              |                  |                                    |                                                 |
| 1                                            | COMPLETION OF BOILER FOUNDATION              | Oct-24        | Oct-24                    | May-25        | May-25                    | 1                                                           | BOILER                                                                       | CIVIL                                     | 0%                                        | 0%                           |                  |                                    |                                                 |
| 2                                            | START OF BOILER ERECTION                     | Jul-24        | Jul-24                    | Jan-25        | Jan-25                    |                                                             |                                                                              | STRUCTURE                                 | 0%                                        | 0%                           |                  |                                    |                                                 |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           |                                                             |                                                                              | PRESSURE PARTS                            | 0%                                        | 0%                           |                  |                                    |                                                 |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     | Jan-25        | Jan-25                    | Jul-25        | Jul-25                    | 2                                                           | TG                                                                           | CIVIL                                     | 0%                                        | 0%                           |                  |                                    |                                                 |
| 5                                            | CONDENSER ERECTION START                     | Jun-25        | Jun-25                    | Dec-25        | Dec-25                    |                                                             |                                                                              | STRUCTURE                                 |                                           |                              |                  |                                    |                                                 |
| 6                                            | TG ERECTION START                            | Sep-25        | Sep-25                    | Mar-26        | Mar-26                    |                                                             |                                                                              | TG ERECTION                               | 0%                                        | 0%                           |                  |                                    |                                                 |
| 7                                            | HP PIPING ERECTION START                     | Aug-25        | Aug-25                    | Feb-26        | Feb-26                    | 3                                                           | ESP                                                                          | UNDER PROGRESS                            | 0%                                        | 0%                           |                  |                                    |                                                 |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | Feb-26        | Feb-26                    | Aug-26        | Aug-26                    |                                                             |                                                                              | CIVIL WORK                                | 0%                                        | 0%                           |                  |                                    |                                                 |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | Apr-26        | Apr-26                    | Oct-26        | Oct-26                    |                                                             |                                                                              | MATERIAL SUPPLY                           | 0%                                        | 0%                           |                  |                                    |                                                 |
| 10                                           | TG BOX UP                                    | Jul-26        | Jul-26                    | Jan-27        | Jan-27                    | 4                                                           | FGD                                                                          | ERECTION WORK                             | 0%                                        | 0%                           |                  |                                    |                                                 |
| 11                                           | HP PIPING ERECTION COMPLETION                | Apr-26        | Apr-26                    | Oct-26        | Oct-26                    |                                                             |                                                                              | STATUS OF BOPs                            |                                           |                              |                  |                                    |                                                 |
| 12                                           | START OF OIL FLUSHING                        | Apr-26        | Apr-26                    | Oct-26        | Oct-26                    |                                                             |                                                                              | Sl.                                       | Packages/<br>Linked Project<br>Milestones | Vendor/Contracting<br>Agency | Date of<br>Award | Scheduled<br>Date of<br>Completion | Anticipated<br>/Actual<br>Date of<br>Completion |
| 13                                           | BOILER LIGHT UP                              | Aug-26        | Aug-26                    | Feb-27        | Feb-27                    | 1                                                           | Chimney                                                                      | Tender Floated, Pre-Bid<br>under progress | Mar-24                                    | Jul-26                       | Jul-26           | 0%                                 | 0%                                              |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | Jun-26        | Jun-26                    | Dec-26        | Dec-26                    | 2                                                           | Coal HandlingPlant<br>Conveyor Package<br>Wagon Tippler<br>Crusher House Pkg |                                           | Mar-24                                    | Jun-26                       | Jun-26           | 0%                                 | 0%                                              |
| 15                                           | STEAM BLOWING START                          | Aug-26        | Aug-26                    | Feb-27        | Feb-27                    |                                                             |                                                                              |                                           | NA                                        | NA                           | NA               | 0%                                 | 0%                                              |
| 16                                           | STEAM BLOWING COMPLETION                     | Sep-26        | Oct-26                    | Mar-27        | Mar-27                    |                                                             |                                                                              |                                           | Mar-24                                    | Apr-26                       | Apr-26           | 0%                                 | 0%                                              |
| 17                                           | ROLLING & SYNC.                              | Nov-26        | Dec-26                    | May-27        | May-27                    | 3                                                           | Ash Handling                                                                 |                                           | Mar-24                                    | Jun-26                       | Jun-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 4                                                           | Fuel Oil System                                                              |                                           | Jul-24                                    | Jun-26                       | Jun-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 5                                                           | Cooling Towers                                                               |                                           | Mar-24                                    | May-26                       | May-26           | 0%                                 | 0%                                              |
| 18                                           | FULL LOAD                                    | Nov-26        | Dec-26                    | May-27        | May-27                    | 6                                                           | CW Pump House and Piping                                                     |                                           | May-24                                    | May-26                       | May-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 7                                                           | WPT Plant                                                                    |                                           | Mar-24                                    | Jan-26                       | Jan-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 8                                                           | DM Plant                                                                     |                                           | Mar-24                                    | Jan-26                       | Jan-26           | 0%                                 | 0%                                              |
| 19                                           | TRIAL RUN                                    | Nov-26        | Dec-26                    | May-27        | May-27                    | 9                                                           | Compressed Air System                                                        |                                           | May-24                                    | Feb-26                       | Feb-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 10                                                          | Fire Protection System                                                       |                                           | Jun-24                                    | May-26                       | May-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 11                                                          | Switch Yard                                                                  |                                           | Mar-24                                    | May-26                       | May-26           | 0%                                 | 0%                                              |
| 20                                           | COD                                          | Dec-26        | Jan-27                    | Jun-27        | Jun-27                    | 12                                                          | Station Txer                                                                 |                                           | Mar-24                                    | Jul-26                       | Jul-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 13                                                          | Generator Txer                                                               |                                           | Mar-24                                    | Jul-26                       | Jul-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 14                                                          | Unit Txer                                                                    |                                           | May-24                                    | Mar-26                       | Mar-26           | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 15                                                          | Railway Siding                                                               |                                           | NA                                        | NA                           | NA               | 0%                                 | 0%                                              |
|                                              |                                              |               |                           |               |                           | 16                                                          | Power evacuation                                                             | NA                                        |                                           |                              |                  |                                    |                                                 |

## CRITICAL ISSUES

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## REASONS OF DELAY

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**YELAHANKA COMBINED CYCLE PP (YCCPP), Unit# 1 (1x370 MW) / KPCL (STATE SECTOR )**

Yelahanka Combined Cycle Power Plant (YCCPP), Doddballapura Road, Bengaluru (Karnataka)-560 064

E-Gen Portal Registration No. (U#1 -1200002031 )

| Project Developer / Implementing Agency - KPCL |                                                                                                                                                                                                                                                                                                                          |                                                                      | Main Plant Vendor - BHEL (EPC Contract) |        |                |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|--------|----------------|
| Unit No.                                       | LOA                                                                                                                                                                                                                                                                                                                      | Original Trial Run Date                                              | Anticipated /                           | Actual | Trial Run Date |
| Unit#1                                         | Nov-2015                                                                                                                                                                                                                                                                                                                 | Feb-2018                                                             | June-2024                               |        |                |
| CLEARANCES AND STATIC DATA                     |                                                                                                                                                                                                                                                                                                                          |                                                                      | FINANCIAL DATA (Fig. in Rs. Crore)      |        |                |
| FUEL TYPE                                      | RLNG (Regasified Liquefied Natural Gas)                                                                                                                                                                                                                                                                                  |                                                                      | ORIGINAL ESTIMATED COST OF THE PROJECT  |        | 1571.18        |
| COAL COMBUSTION TECHNOLOGY                     | NOT APPLICABLE                                                                                                                                                                                                                                                                                                           |                                                                      | LATEST ESTIMATED COST                   |        | 2055.23        |
| APPROVAL DATE / NTP                            | Approval Date: Government Of Karnataka Order No. EN78PPC2010 Bengaluru dated:05.07.2011                                                                                                                                                                                                                                  |                                                                      | DATE OF FINANCIAL CLOSURE               |        | 31.03.2021     |
| EPC/BTG/BoP Contractor Details (Package Wise)  | EPC Contractor: M/s BHEL<br>LOA Date:03.11.2015                                                                                                                                                                                                                                                                          |                                                                      | YEAR WISE EXPENDITURE                   |        |                |
| PPA                                            | Under Process                                                                                                                                                                                                                                                                                                            |                                                                      | 2015-16                                 |        | 4.87           |
| COAL LINKAGE/FSA                               | NOT APPLICABLE                                                                                                                                                                                                                                                                                                           |                                                                      | 2016-17                                 |        | 152.89         |
| START UP POWER AGREEMENT                       | 20000 KVA on HT basis vide BESCOM Letter No. CEE/BMAZ-N/SEE(O)/AEE-2/18-19/2473-78 dated:17.11.2018                                                                                                                                                                                                                      |                                                                      | 2017-18                                 |        | 1050.00        |
| POWER EVACUATION SYSTEM                        | Tx Line Developer                                                                                                                                                                                                                                                                                                        | KPTCL                                                                | 2018-19                                 |        | 140.93         |
|                                                | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                                         | 3 nos. of 220 kV lines are ready (Dec-2018) for the power evacuation | 2019-20                                 |        | 171.41         |
|                                                | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                                    |                                                                      | 2020-21                                 |        | 219.28         |
| LAND POSSESSION                                | The land was acquired during 1994 to establish Diesel generation plant and DG plant has been operated from 1994 to Aug 2013. The DC plant was stopped from Aug 2013 due to High operating cost & environmental issues. The YCCPP is established in the same plant by dismantling required space as per the order of GoK. |                                                                      | 2021-22                                 |        | 263.80         |
| WATER ALLOCATION                               | 15 MLD Tertiary treated plant at JAKKUR is supplying water to YCCP Plant                                                                                                                                                                                                                                                 |                                                                      | 2022-23                                 |        | 167.74         |
| MOEF CLEARANCE                                 | Approval No : State Level environment impact assessment authority(SEIAA) no SEIAA20IND 2014 DATED 1/9/2015                                                                                                                                                                                                               |                                                                      | EXPENDITURE OF FEB'2024                 |        | 4.87           |
| CIVIL AVIATION CLEARANCE                       | Approval no : AAI /KIA/ATM/NOC/488-92 DATED 5/5/2015                                                                                                                                                                                                                                                                     |                                                                      | TOTAL EXPENDITURE (upto 29.02.2024)     |        | 2339.61        |
| CPCB CLEARANCE                                 | NOT APPLICABLE                                                                                                                                                                                                                                                                                                           |                                                                      |                                         |        |                |
| SPCB CLEARANCE                                 | Approval No : KSPCB/CFE/CEO/KPCL/2015-16/H1033 DATED 02/11/2015                                                                                                                                                                                                                                                          |                                                                      |                                         |        |                |
| FOREST CLEARANCE                               | Letter No: SEIAA 20 IND 2014 dated 01.09.2015                                                                                                                                                                                                                                                                            |                                                                      |                                         |        |                |

| YELAHANKA COMBINED CYCLE PP (YCCPP), Unit# 1 (1x370 MW) / KPCL (STATE SECTOR) |                                              |    |                             |                                         |                                           |                                           |                                                      |                          |                                    |                                          |                            |
|-------------------------------------------------------------------------------|----------------------------------------------|----|-----------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|------------------------------------------------------|--------------------------|------------------------------------|------------------------------------------|----------------------------|
| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL)                                  |                                              |    |                             |                                         | STATUS OF MAIN PLANT PACKAGE (BTG) : BHEL |                                           |                                                      |                          |                                    |                                          |                            |
| Sl.                                                                           | MILESTONE                                    |    | UNIT-01<br>(GT+ST)          |                                         | Sl.                                       | Packages                                  | AREA                                                 | UNIT-01<br>(GT+ST)       |                                    |                                          |                            |
|                                                                               |                                              |    | Original Date of Completion | Anticipated / Actual Date of Completion |                                           |                                           |                                                      | % Completion             |                                    |                                          |                            |
| 1                                                                             | COMPLETION OF BOILER FOUNDATION              |    | 30.06.2016                  | 14.11.2016                              | 1                                         | BOILER                                    | CIVIL                                                | 100%                     |                                    |                                          |                            |
| 2                                                                             | START OF BOILER ERECTION                     |    | 01.07.2016                  | 09.11.2016                              |                                           |                                           | STRUCTURE                                            | 99%                      |                                    |                                          |                            |
| 3                                                                             | BOILER DRUM LIFTING (if sub-critical unit)   |    | 10.03.2017                  | 07.04.2017                              |                                           |                                           | PRESSURE PARTS                                       | 99%                      |                                    |                                          |                            |
| 4                                                                             | BOILER CEILING GIRDER LIFTING COMPLETION     |    | 30.11.2016                  | 21.12.2016                              | 2                                         | Gas T/ TG                                 | CIVIL                                                | 100%                     |                                    |                                          |                            |
| 5                                                                             | CONDENSER ERECTION START                     |    | 14.08.2017                  | Nov-17                                  |                                           |                                           | STRUCTURE                                            | 99%                      |                                    |                                          |                            |
| 6                                                                             | TG ERECTION START                            |    | -                           | -                                       |                                           |                                           | TG ERECTION                                          | 99%                      |                                    |                                          |                            |
| 7                                                                             | HP PIPING ERECTION START                     |    | -                           | Sep-17                                  | 3                                         | ESP                                       | Not Applicable                                       | Not Applicable           |                                    |                                          |                            |
| 8                                                                             | BOILER HYDRO TEST (DRAINABLE) COMPLETION     |    | 30.06.2017                  | 27.11.2017                              | 4                                         | FGD                                       | CIVIL WORK                                           | Not Applicable           |                                    |                                          |                            |
| 9                                                                             | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION |    | 30.06.2017                  | 27.11.2017                              |                                           |                                           | MATERIAL SUPPLY                                      |                          |                                    |                                          |                            |
| 10                                                                            | TG BOX UP                                    |    | 30.09.2017                  | Feb, 2021                               |                                           |                                           | ERECTION WORK                                        |                          |                                    |                                          |                            |
| 11                                                                            | HP PIPING ERECTION COMPLETION                |    | -                           | Nov-21                                  | STATUS OF BOPs                            |                                           |                                                      |                          |                                    |                                          |                            |
| 12                                                                            | START OF OILFLUSHING                         | GT | 09.10.2017                  | 29.08.2018                              | Sl.                                       | Packages/<br>Linked Project<br>Milestones | Vendor/Contracting Agency<br>(EPC- BHEL)             | Date of<br>Award         | Scheduled<br>Date of<br>Completion | Anticipated/Actual Date of<br>Completion | UNIT-01<br>%<br>Completion |
| 13                                                                            | BOILER LIGHT UP                              |    | NA                          | NA                                      | 1                                         | Chimney                                   | M/s BHEL (Mech.)<br>M/s BJCL (Civil)                 | Nov, 2015<br>18.08.2016  | 14.10.2017<br>-                    | 06.04.2017<br>10.11.2016                 | 100%<br>100%               |
| 14                                                                            | CHEMICAL CLEANING COMPLETION                 |    | 02.11.2017                  | Mar-24                                  | 2                                         | Coal Handling Plant                       | NA                                                   | NA                       | NA                                 | NA                                       | NA                         |
| 15                                                                            | STEAM BLOWING START                          |    | 01.12.2017                  | Mar-24                                  | 3                                         | Ash Handling Plant                        | NA                                                   | NA                       | NA                                 | NA                                       | NA                         |
| 16                                                                            | STEAM BLOWING COMPLETION                     |    | 15.12.2017                  | Apr-24                                  | 4                                         | Fuel Oil System                           | NA                                                   | NA                       | NA                                 | NA                                       | NA                         |
| 17                                                                            | ROLLING & SYNC.                              |    | 16.12.2017                  | Apr-24                                  | 5                                         | Cooling Towers                            | M/s BHEL/ Paharpur (Mech.)<br>M/s BHEL/ BJCL (Civil) | 09.11.2015<br>05.01.2017 | 09.02.2018<br>-                    | 31.12.2021<br>31.03.2021                 | 100%<br>100%               |
| 18                                                                            | FULL LOAD                                    |    | 17.12.2017                  | May-24                                  | 6                                         | CW Pump house                             | M/s BHEL (Mech.)<br>M/s BHEL/BJCL (Civil)            | 09.11.2015<br>02.11.2016 | 09.05.2018<br>-                    | 11.07.2020<br>30.11.2020                 | 100%<br>100%               |
| 19                                                                            | TRIAL RUN                                    |    | 07.02.2018                  | Jun-24                                  | 7                                         | WPT Plant                                 | NA                                                   | NA                       | NA                                 | NA                                       | NA                         |
| 20                                                                            | COD                                          |    | 01.03.2018                  | Jun-24                                  | 8                                         | DM Plant                                  | M/s BHEL/GE (Mech.)<br>M/s BHEL/BJCL (Civil)         | 09.11.2015<br>06.02.2017 | 09.05.2018<br>-                    | 06.02.2021<br>31.03.2017                 | 100%<br>100%               |
|                                                                               |                                              |    |                             |                                         | 9                                         | Compressed Air System                     | M/s BHEL/ELGI (Mech.)<br>M/s BHEL/BJCL (Civil)       | Nov,2015<br>10.03.2018   | 17.08.2017<br>-                    | 16.05.2019<br>31.10.2019                 | 100%<br>100%               |
|                                                                               |                                              |    |                             |                                         | 10                                        | Fire Protection System                    | M/s BHEL (Mech.)<br>M/s BHEL/BJCL (Civil)            | 09.11.2015<br>20.11.2020 | 09.05.2018<br>-                    | 15.07.2021<br>30.04.2021                 | 100%<br>100%               |
|                                                                               |                                              |    |                             |                                         | 11                                        | Switch Yard                               | M/s BHEL-TBG (Elect.)<br>M/s BHEL (TBG) (Civil)      | 03.01.2015<br>17.04.2017 | 04.04.2018<br>-                    | 19.01.2019<br>05.11.2018                 | 100%<br>100%               |
|                                                                               |                                              |    |                             |                                         | 12                                        | Station Transformers                      | M/s BHEL/BJCL (Civil)                                | 10.04.2017               | -                                  | 31.03.2020                               | 100%                       |
|                                                                               |                                              |    |                             |                                         | 13                                        | Generator Transformers                    | M/s BHEL PSSR                                        | 03.11.2015               | 04.04.2018                         | 21.01.19-GT<br>23.12.19-ST               | 100%                       |
|                                                                               |                                              |    |                             |                                         | 14                                        | Unit Transformers                         | M/s BHEL PSSR (Elect.)<br>M/s BHEL/BJCL (Civil)      | 03.01.2015<br>10.04.2017 | 04.04.2018<br>-                    | 21.01.2019- ST<br>31.03.2020             | 100%                       |
|                                                                               |                                              |    |                             |                                         | 15                                        | Railway Siding                            | NA                                                   | NA                       | NA                                 | NA                                       | NA                         |
|                                                                               |                                              |    |                             |                                         | 16                                        | Power Evacuation Lines                    | KPTCL                                                | 21.12.2017               | System ready                       | 28.12.2018                               | 95%                        |

**CRITICAL ISSUES**

Project is ready. Commissioning is pending due to non-availability of Gas from M/s GAIL.

**REASONS OF DELAY**

Non-mobilization of required man power & prioritization of works by M/s BHEL (EPC contractor).

**UPPUR STPP, Unit# 1 & 2 (2x800 MW) / TANGEDCO (STATE SECTOR)**

Uppur STPP, Ramnad District - 623503, Tamil Nadu

E-Gen Portal Registration No. (U#1 - NA; U#2 - NA)

| Project Developer / Implementing Agency - TANGEDCO |                                                                                                                                                                                                                                                                                                              |                                              | Main Plant Vendor - M/s BHEL           |                                   |                                |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------|-----------------------------------|--------------------------------|
| Unit No.                                           | LOA                                                                                                                                                                                                                                                                                                          |                                              | Original Trial Run Date                | Anticipated / <span>Actual</span> | Trial Run Date                 |
| Unit#1                                             | Feb-2016                                                                                                                                                                                                                                                                                                     |                                              |                                        | On Hold                           |                                |
| Unit#2                                             |                                                                                                                                                                                                                                                                                                              |                                              |                                        | On Hold                           |                                |
| CLEARANCES AND STATIC DATA                         |                                                                                                                                                                                                                                                                                                              |                                              | FINANCIAL DATA (Fig. in Rs. Crore)     |                                   |                                |
| FUEL TYPE                                          | Coal, Indigenous & Imported (MMTC)                                                                                                                                                                                                                                                                           |                                              | ORIGINAL ESTIMATED COST OF THE PROJECT |                                   | 12778.00                       |
| COAL COMBUSTION TECHNOLOGY                         | Supercritical                                                                                                                                                                                                                                                                                                |                                              | LATEST ESTIMATED COST                  |                                   | Not Applicable                 |
| APPROVAL DATE / NTP                                | BGT-SE/E/T & H(P)/OT No. 01/ 2015-16. BOP-SE/E/T&H(P)/OT.No.1/2020-21. SWIOP-SE/C/TP/OT.NO.2/2016-17.                                                                                                                                                                                                        |                                              | DATE OF FINANCIAL CLOSURE              |                                   | Financial tie up with M/s. PFC |
| EPC/BTG/BoP Contractor Details (Package Wise)      | Order placed on M/s. BHEL on 27/02/2016.                                                                                                                                                                                                                                                                     |                                              | YEAR WISE EXPENDITURE                  |                                   |                                |
| PPA                                                | NOT APPLICABLE. State sector project.                                                                                                                                                                                                                                                                        |                                              | 2016-17                                |                                   | 16.74                          |
| COAL LINKAGE/FSA                                   | Allocated Mine - SCCL (A.P.) to provide coal 3.942 MTPA; Distance from mine - 700 km (non pithead); Also, MoU entered with M/s. MMTC for supply of imported coal of 5.02 MTPA on dated 25-05-2015.                                                                                                           |                                              | 2017-18                                |                                   | 226.62                         |
|                                                    |                                                                                                                                                                                                                                                                                                              |                                              | 2018-19                                |                                   | 1594.15                        |
|                                                    |                                                                                                                                                                                                                                                                                                              |                                              | 2019-20                                |                                   | 924.32                         |
| START UP POWER AGREEMENT                           | 230KV/11 Karaigudi Feeder                                                                                                                                                                                                                                                                                    |                                              | 2020-21                                |                                   | 366.61                         |
| POWER EVACUATION SYSTEM                            | Tx Line Developer                                                                                                                                                                                                                                                                                            | TANTransco                                   | 2021-22                                |                                   |                                |
|                                                    | Tx Line Name<br>Tx Voltage Level                                                                                                                                                                                                                                                                             | Uppur SCTPP – Virudhunagar, 765 KV, D/C line | 2022-23                                |                                   |                                |
|                                                    | Configuration of Tx Line (S/C or D/C)                                                                                                                                                                                                                                                                        |                                              | EXPENDITURE OF JAN’2024                |                                   | 503.12                         |
| LAND POSSESSION                                    | Land required for the project is under TANGEDCO Possession. EPC Contracts awarded to M/s. BHEL & M/S L&T has been suspended as per the NGT(SZ), Chennai Judgment dated 17.03.2021, delivered on Appeal No. 144 of 2016(SZ) filed in the designated court for a period of six months or until further orders. |                                              | TOTAL EXPENDITURE (upto 31.01.2024)    |                                   | 3282.12                        |
| WATER ALLOCATION                                   | Tamil Nadu Maritime Board has issued NOC for construction of Jetty for drawal and discharge of cooling water, vide 27.4.2015.                                                                                                                                                                                |                                              |                                        |                                   |                                |
| MOEF CLEARANCE                                     | Ministry of Environment and Forest has accorded clearance for the above Project on 18.05.2016.                                                                                                                                                                                                               |                                              |                                        |                                   |                                |
| CIVIL AVIATION CLEARANCE                           | Clearance expired on 21.11.2019. Clearance further extended upto 21.11.2024.                                                                                                                                                                                                                                 |                                              |                                        |                                   |                                |
| CPCB CLEARANCE                                     | NOT APPLICABLE. State sector project.                                                                                                                                                                                                                                                                        |                                              |                                        |                                   |                                |
| SPCB CLEARANCE                                     | CRZ committee of MOEF recommended the Project on 28.1.16 and MOM published in web site on 8.2.16.                                                                                                                                                                                                            |                                              |                                        |                                   |                                |
| FOREST CLEARANCE                                   | NOT APPLICABLE                                                                                                                                                                                                                                                                                               |                                              |                                        |                                   |                                |

\* NOTE : The EPC contracts awarded to M/s. BHEL & M/S L&T have been suspended as per the NGT(SZ), Chennai Judgment dated 17.03.2021, delivered on Appeal No. 144 of 2016 (SZ) filed in the designated court for a period of six months or until further orders. Considering the issues like NGT order, land litigation, local fishermen litigation and BOP package retendering works, TANGEDCO Board vide on 29.04.2021 has accorded approval to shift the existing 2x800 MW Uppur STPP to Udangudi site as 2x800MW Udangudi Stage-III and consider Uppur as a fresh project once all the legal issues in NGT and other places are settled and to approach GOTT for administrative approval. Energy Secretary/GoTN has been addressed vide Letter dtd 10.05.2021 for approval of the above. Further, as informed by TANGEDCO, CMD has accorded approval on 27.08.2021 to form a high committee comprising of three directors and four Chief Engineers to re-study the shifting of UPPUR Project. High Level Committee have furnished report on 22.10.2021 and recommended that the 2X800 MW Uppur Project shall be executed at Uppur itself. TANGEDCO Board in its 102nd meeting held on 29.10.2021 has directed to obtain opinion from the Consultant M/s. Ernst & Young regarding the viability and feasibility of this project and the same is in progress.

## UPPUR STPP, Unit# 1 &amp; 2 (2x800 MW) / TANGEDCO (STATE SECTOR)

| UNIT WISE MILESTONES ( ANTICIPATED / ACTUAL) |                                              |               |                           |               |                           |
|----------------------------------------------|----------------------------------------------|---------------|---------------------------|---------------|---------------------------|
| Sl.                                          | MILESTONE                                    | UNIT-01       |                           | UNIT-02       |                           |
|                                              |                                              | Original Date | Actual / Anticipated Date | Original Date | Actual / Anticipated Date |
| 1                                            | COMPLETION OF BOILER FOUNDATION              |               | Project is on hold.       |               | Project is on hold.       |
| 2                                            | START OF BOILER ERECTION                     | 03.06.18      |                           | 03.06.18      |                           |
| 3                                            | BOILER DRUM LIFTING (if sub-critical unit)   | NA            |                           | NA            |                           |
| 4                                            | BOILER CEILING GIRDER LIFTING COMPLETION     |               |                           |               |                           |
| 5                                            | CONDENSER ERECTION START                     | 23.01.20      |                           | 23.01.20      |                           |
| 6                                            | TG ERECTION START                            | 19.03.20      |                           | 19.03.20      |                           |
| 7                                            | HP PIPING ERECTION START                     | 19.12.19      |                           | 19.12.19      |                           |
| 8                                            | BOILER HYDRO TEST (DRAINABLE) COMPLETION     | 22.07.19      |                           | 22.07.19      |                           |
| 9                                            | BOILER HYDRO TEST (NON-DRAINABLE) COMPLETION | 20.01.20      |                           | 20.01.20      |                           |
| 10                                           | TG BOX UP                                    | 13.02.20      |                           | 13.02.20      |                           |
| 11                                           | HP PIPING ERECTION COMPLETION                | 19.12.19      |                           | 19.12.19      |                           |
| 12                                           | START OF OILFLUSHING                         | 19.03.20      |                           | 19.03.20      |                           |
| 13                                           | BOILER LIGHT UP                              | 12.02.20      |                           | 12.02.20      |                           |
| 14                                           | CHEMICAL CLEANING COMPLETION                 | 19.03.20      |                           | 19.03.20      |                           |
| 15                                           | STEAM BLOWING START                          | 16.04.20      |                           | 16.04.20      |                           |
| 16                                           | STEAM BLOWING COMPLETION                     | 16.04.20      |                           | 16.04.20      |                           |
| 17                                           | ROLLING & SYNC.                              | 06.05.20      |                           | 06.05.20      |                           |
| 18                                           | FULL LOAD                                    | 03.06.20      |                           | 03.06.20      |                           |
| 19                                           | TRIAL RUN                                    | Nov-20        |                           | Nov-20        |                           |
| 20                                           | COD                                          | 01.02.21      |                           | 01.02.21      |                           |

| STATUS OF MAIN PLANT PACKAGE (BTG) |                                     |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
|------------------------------------|-------------------------------------|-------------------------------------------------------------------------------|-------------------------------|------------------------------|----------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Sl.                                | Packages                            | AREA                                                                          | UNIT-01                       |                              | UNIT-02                                |                                                                               |                                                                               |
|                                    |                                     |                                                                               | % Completion                  | % Completion                 |                                        |                                                                               |                                                                               |
| 1                                  | BOILER                              | CIVIL                                                                         | 23%                           | 30%                          |                                        |                                                                               |                                                                               |
|                                    |                                     | STRUCTURE                                                                     | 55%                           | 31%                          |                                        |                                                                               |                                                                               |
|                                    |                                     | PRESSURE PARTS                                                                | 1%                            | 0%                           |                                        |                                                                               |                                                                               |
| 2                                  | TG                                  | CIVIL                                                                         | Works yet to commence         |                              |                                        |                                                                               |                                                                               |
|                                    |                                     | STRUCTURE                                                                     |                               |                              |                                        |                                                                               |                                                                               |
|                                    |                                     | TG ERECTION                                                                   |                               |                              |                                        |                                                                               |                                                                               |
| 3                                  | ESP                                 | UNDER PROGRESS                                                                | 14%                           | 6%                           |                                        |                                                                               |                                                                               |
| 4                                  | FGD                                 | CIVIL WORK                                                                    | Contract is yet to be awarded |                              |                                        |                                                                               |                                                                               |
|                                    |                                     | MATERIAL SUPPLY                                                               |                               |                              |                                        |                                                                               |                                                                               |
|                                    |                                     | ERECTION WORK                                                                 |                               |                              |                                        |                                                                               |                                                                               |
| STATUS OF BOPs                     |                                     |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| Sl.                                | Packages/ Linked Project Milestones | Vendor/Contracting Agency                                                     | Date of Award                 | Scheduled Date of Completion | Anticipated /Actual Date of Completion | UNIT-01 % Completion                                                          | UNIT-02 % Completion                                                          |
| 1                                  | Chimney                             | The contract was short closed due to huge price escalation sought by M/s RIL. |                               |                              |                                        | The contract was short closed due to huge price escalation sought by M/s RIL. | The contract was short closed due to huge price escalation sought by M/s RIL. |
| 2                                  | Coal Handling Plant                 |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 3                                  | Ash Handling Plant                  |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 4                                  | Fuel Oil System                     |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 5                                  | Cooling Towers                      |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 6                                  | CW Pump house                       |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 7                                  | WPT Plant                           |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 8                                  | DM Plant                            |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 9                                  | Compressed Air System               |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 10                                 | Fire Protection System              |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 11                                 | Switch Yard                         |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 12                                 | Station Transformers                |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 13                                 | Unit Transformers                   |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 14                                 | Railway Siding                      |                                                                               |                               |                              |                                        |                                                                               |                                                                               |
| 15                                 | Power Evacuation Lines              |                                                                               |                               |                              |                                        |                                                                               |                                                                               |

## CRITICAL ISSUES

The EPC contracts awarded to M/s. BHEL & M/S L&T have been suspended as per the NGT(SZ), Chennai Judgment dated 17.03.2021, delivered on Appeal No. 144 of 2016(SZ) filed in the designated court for a period of six months or until further orders. Considering the issues like NGT order, land litigation, local fishermen litigation and BOP package retendering works, TANGEDCO Board on 29.04.2021 has accorded approval to shift the existing 2x800 MW Uppur STPP to Udangudi site as 2x800MW Udangudi Stage-III and consider Uppur as a fresh project once all the legal issues in NGT and other places are settled and to approach GOTN for administrative approval. Energy Secretary/GoTN has been addressed vide Letter dtd 10.05.2021 for approval of the above.

Against NGT order, SLP was filed by TANGEDCO in Supreme court on 16.04.2021. Honourable Supreme court of India granted stay on the impugned judgment passed by NGT on 01.07.2021. In the review meeting of energy department chaired by Hon'ble Chief Minister on 22.07.2021, it was requested to restudy the shifting of Uppur project considering the energy demand. CMD has accorded approval on 27.08.2021 to form a high level committee comprising of three Directors and four Chief Engineers to restudy the shifting of Uppur Project. TANGEDCO Board in its 102nd meeting held on 29.10.2021 has directed to obtain opinion from the Consultant M/s Ernst & Young regarding the viability and feasibility of this project and the same is in progress. Consultant has furnished the report on 07.01.22 and recommended "To develop the Project at Uppur site itself" and the same was placed before the TANGEDCO Board in its 105th meeting held on 19.01.2022. The Board Directed to place the subject in the next Board meeting for deliberations. In the next Board meeting held on 19.3.2022, the Board directed to restudy the viability & feasibility of consultant's report submitted.

Strategic Consultant M/s.E&Y report and recommendations were placed before the TANGEDCO The Board after deliberations directed that the subject shall be referred to the Aravind Subramanian Committee(EAC to Hon'ble CM of TN) seeking their expert views. As instructed by Board, all the relevant data's are furnished to the committee. Committee report is awaited.

## REASONS OF DELAY

NGT Ordered to stop the work.

**ENNORE EXPANSION TPP, Unit# 1 (1x660 MW) / TANGEDCO (STATE SECTOR )**

Ernavur Village, Tiruvottiyur Taluk, Thiruvallur District, Tamil Nadu

E-Gen Portal Registration No. (U#1 - 1200003521)

| Project Developer / Implementing Agency - TANGEDCO |                                                                                                                                                                             |                         | Main Plant Vendor - M/s BGRESL (EPC)   |        |                |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------|--------|----------------|
| Unit No.                                           | LOA                                                                                                                                                                         | Original Trial Run Date | Anticipated /                          | Actual | Trial Run Date |
| Unit#1                                             | 14.07.2014                                                                                                                                                                  |                         |                                        |        |                |
| CLEARANCES AND STATIC DATA                         |                                                                                                                                                                             |                         | FINANCIAL DATA (Fig. in Rs. Crore)     |        |                |
| FUEL TYPE                                          | Coal, Indigenous & Imported                                                                                                                                                 |                         | ORIGINAL ESTIMATED COST OF THE PROJECT |        | 4956           |
| COAL COMBUSTION TECHNOLOGY                         | Super Critical                                                                                                                                                              |                         | LATEST ESTIMATED COST                  |        | 7093           |
| APPROVAL DATE / NTP                                | 14.07.2014                                                                                                                                                                  |                         | DATE OF FINANCIAL CLOSURE              |        |                |
| EPC/BTG/BoP Contractor Details (Package Wise)      | M/s BGRESL (EPC) wef June-2022 ( earlier this project was awarded to M/s Lanco Infra)                                                                                       |                         | YEAR WISE EXPENDITURE                  |        |                |
| PPA                                                | Entire power is to be utilized by TANGEDCO                                                                                                                                  |                         | 2014-15                                |        | 239.70         |
| COAL LINKAGE/FSA                                   | Long term coal linkage submitted to Ministry of coal on 08.11.2006 and pending with Ministry of coal. MoU with MMTC on 23.07.2012 for supplying of 2.00 MTPA Imported coal. |                         | 2015-16                                |        | 288.91         |
|                                                    |                                                                                                                                                                             |                         | 2016-17                                |        |                |
|                                                    |                                                                                                                                                                             |                         | 2017-18                                |        |                |
|                                                    |                                                                                                                                                                             |                         | 2018-19                                |        |                |
| START UP POWER AGREEMENT                           |                                                                                                                                                                             |                         | 2019-20                                |        |                |
| POWER EVACUATION SYSTEM                            | Tx Line Developer                                                                                                                                                           | TANTRANSCO              | 2020-21                                |        |                |
|                                                    | Tx Line Name<br>Tx Voltage Level                                                                                                                                            |                         | EXPENDITURE OF DEC’2023                |        |                |
|                                                    | Configuration of Tx Line (S/C or D/C)                                                                                                                                       |                         | TOTAL EXPENDITURE (upto 31.12.2023)    |        |                |
| LAND POSSESSION                                    | Own land within the premises of existing ETPS                                                                                                                               |                         |                                        |        |                |
| WATER ALLOCATION                                   |                                                                                                                                                                             |                         |                                        |        |                |
| MOEF CLEARANCE                                     | MoEF clearance Lr J-13011/62/2008-IA.II(T) dated 18.09.2014                                                                                                                 |                         |                                        |        |                |
| CIVIL AVIATION CLEARANCE                           | Airport Authority’s Letter No AAI/20012/1468/2007-ARI(NOC),Dated 16 <sup>th</sup> May 2008.                                                                                 |                         |                                        |        |                |
| CPCB CLEARANCE                                     |                                                                                                                                                                             |                         |                                        |        |                |
| SPCB CLEARANCE                                     | Tamil Nadu Government GO (4D) No 01 Dated 15.11.2012.                                                                                                                       |                         |                                        |        |                |
| FOREST CLEARANCE                                   |                                                                                                                                                                             |                         |                                        |        |                |

## ABBREVIATIONS

| Abbreviation   | Description                                       |            |                                                                  |
|----------------|---------------------------------------------------|------------|------------------------------------------------------------------|
| AHP            | Ash Handling Plant                                | NDCT       | Natural Draft Cooling Tower                                      |
| ATT            | Air Tightness Test                                | NLTH       | Non Linear Time History                                          |
| BFP            | Boiler Feed Pump                                  | PAF        | Project Affected Families                                        |
| BLU            | Boiler Light Up                                   | PA Fan     | Primary Air Fan                                                  |
| BOP            | Balance of Plant                                  | PPA        | Power Purchase Agreement                                         |
| BTG            | Boiler Turbine Generator                          | ROW        | Right Of Way                                                     |
| C&I            | Control & Instrumentation                         | SBO        | Steam Blowing Operation                                          |
| CHP            | Coal Handling Plant                               | SCAPH      | Steam Coil Air Pre Heater                                        |
| COD            | Commercial Operation Date                         | SCR        | Selective Catalytic Reduction                                    |
| CRH            | Cold Re Heat                                      | SG         | Steam Generator                                                  |
| CST            | Condensate Storage Tank                           | ST         | Station Transformer                                              |
| CW System      | Circulating Water System                          | Synch.     | Synchronization                                                  |
| DM Water Plant | De Mineralization Water Plant                     | TDBFP      | Turbine Driven Boiler Feed Pump                                  |
| EOT            | Electric Overhead Travelling                      | TG         | Turbine Generator                                                |
| EPC            | Erection Procurement & Commissioning              | WT         | Wagon Tippler                                                    |
| ESP            | Electro Static Precipitator                       | UT         | Unit Transformer                                                 |
| FD Fan         | Forced Draft Fan                                  | GHP        | Gypsum Handling Plant                                            |
| FGD            | Flue Gas Desulfurization                          | LHP        | Limestone Handling Plant                                         |
| FL             | Full Load                                         | ARV        | Air Release Valve                                                |
| FO System      | Fuel Oil System                                   | WPT        | Water Pre Treatment                                              |
| FSA            | Fuel Supply Agreement                             | ETP        | Effluent Treatment Plant                                         |
| GT             | Generator Transformer                             | CPU/COLTCS | Condensate Polishing Unit/Condenser On Load Tube Cleaning System |
| HCSD           | High Concentrated Slurry Disposal                 |            |                                                                  |
| HPT            | High Pressure Turbine                             |            |                                                                  |
| HRH            | Hot Re Heat                                       |            |                                                                  |
| HT             | Hydraulic Test                                    |            |                                                                  |
| ICB            | Imported Coal Based                               |            |                                                                  |
| ID Fan         | Induced Draft Fan                                 |            |                                                                  |
| IDCT           | Induced Draft Cooling Tower                       |            |                                                                  |
| LOA            | Letter of Award                                   |            |                                                                  |
| MDBFP          | Motor Driven Boiler Feed Pump                     |            |                                                                  |
| MGR            | Merry Go Round                                    |            |                                                                  |
| MOEF&CC        | Ministry of Environment, Forests & Climate Change |            |                                                                  |