



ISO: 9001-2008

**Monthly progress Report of
Transmission Projects awarded
through
Tariff Based Competitive Bidding
(TBCB) Route
(As on 31.10.2019)**

**Government of India
Ministry of Power
Central Electricity Authority
New Delhi**

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Total Transmission Projects	:	52
Transmission Projects Commissioned/Ready for commissioning	:	23
Transmission Projects Under Construction	:	25
Tr. Projects whose construction could not be started due to litigation	:	02
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(1) Name of transmission project - Transmission system associated with IPPs of Nagapattinam/ Cuddalore Area – Package A

Background

This transmission scheme has been planned for evacuation of power from various generating station being developed by IPPs in Nagapattinam/ Cuddalore area.

Scope of transmission project

1. Nagapattinam Pooling Station-Salem 765 kV D/C line
2. Salem - Madhugiri 765 kV S/C line

General Details

Special Purpose Vehicle (SPV)	:	Powergrid Nagapattinam-Madhugiri Transmission Limited (A subsidiary of PGCIL)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs in crs)	:	1025
Levellised Tariff (Rs. Crs)	:	98.70
Request for Qualification	:	28.05.2011
Request for Proposal	:	20.09.2011
Letter of Intent	:	06.03.2012
Transmission Service Agreement (TSA)	:	02.02.2012
SPV acquisition	:	29.03.2012
Transmission License by CERC	:	20.06.2013
Tariff adoption by CERC	:	09.05.2013
Contract Performance Guarantee	:	29.03.2012
Clearance u/s 164 of EA2003	:	09.12.2013
Execution plan submitted to CEA	:	28.05.2011
NIT issued on	:	13.07.2012
EPC contract awarded on	:	16.05.2014
Scheduled Date of Completion	:	28.12.2015
Actual Date of Completion	:	Jan' 2019

Status of progress of transmission project

Work awarded on 16.5.2014 to M/s Gammon and M/s ICOMM.

1. Nagapattinam Pooling Station-Salem 765 kV D/C line

Length	203 Km
Locations	543 Nos.

Line commissioned on 23.10.16.

2. Salem - Madhugiri 765 kV S/C line

Length	219 km
Locations	575 nos.

Line completed on 31.12.18. DoCo declared on 26.01.19.

Transmission Project commissioned in Jan, 2019.

(2) Name of transmission project -Transmission System associated with IPPs of Vemagiri Package-A

Background

The transmission corridor covered under the present project has been evolved to evacuate power from the proposed IPP generation projects in the Vemagiri area, Andhra Pradesh. Vemagiri area in Andhra Pradesh has huge potential of Gas based generation projects due to availability of Gas in Krishna-Godavari basin. The availability of the Gas as fuel has attracted many IPP developers to establish power plants in the vicinity. In this regard, 4 nos. of IPP generation projects with the total installed capacity of about 5400 MW have been granted LTA for quantum of 5150 MW. Further, as per the connectivity applications made, there are few more generation capacities likely to be available in the vicinity.

In view of above, considering the huge generation potential in this area a comprehensive transmission system has been planned so as to take care of the evacuation needs of generation projects of Vemagiri area. For this a 765/400 kV pooling station at Vemagiri (GIS) is to be established through LILO of Gazuwaka – Vijayawada 400kV S/c with bypass arrangements. All the power from different power plants will be pooled at this pooling station through 400kV transmission lines. The power so pooled at Vemagiri Pooling Station shall be further dispersed through high capacity transmission corridors of 1xD/c 765kV lines towards Hyderabad via Khammam to supply target beneficiaries in Southern region through displacement.

Further the generation project has target beneficiaries in Western Region & Northern Region of about 1230MW & 450 MW respectively, for this power transfer a 765kV high capacity corridor have been planned viz. Hyderabad – Wardha – Jabalpur Pooling station 765 kV D/c lines. These high capacity transmission lines in conjunction with the already planned High Capacity Power Transmission Corridor – IX i.e. Jabalpur Pooling Station – Orai – Bulandshahr 765 kV S/c shall provide adequate transmission capacity for transfer of power to target regions.

Scope of transmission project

1. Vemagiri Pooling Station–Khammam 765 kV D/C line -I
2. Khammam - Hyderabad 765 kV D/C line-I

General Details:

Special Purpose Vehicle (SPV)	:	Powergrid Vemagiri Transmission Limited (A subsidiary of PGCIL)
Bid Processor Coordinator (BPC)	:	Rural Electrification Corporation (RECTPL)
Request for Qualification	:	Not Applicable as project scrapped
Request for Proposal	:	Not Applicable as project scrapped
Letter of Intent	:	Not Applicable as project scrapped
Transmission Service Agreement (TSA)	:	Not Applicable as project scrapped
SPV acquisition	:	18.04.2012
Transmission License by CERC	:	Not Applicable as project is scrapped
Tariff adoption by CERC	:	----do---
Contract Performance Guarantee	:	----do---
Clearance u/s 164	:	----do---
Execution plan submitted to CEA	:	----do---
NIT issued on	:	----do---

EPC awarded on	:	----do---
Scheduled Date of Completion	:	17.04.2015
Anticipated Date of Completion	:	Project scrapped

Status of Progress of transmission project:

Project has been scrapped Vide Order dated. 06.04.2015, CERC has directed that Project is not required to be implemented and ordered Generator/CTU to pay the cost of SPV to POWERGRID in 80:20 ratios. Generator has challenged the CERC order in Appellate Tribunal and outcome is still awaited. Regulatory approval for the Project has been withdrawn by CERC.

(3) Name of transmission project -Transmission system for Strengthening in Southern Region for import of Power from ER

Background

A Common High Capacity Transmission Corridor was planned for ISGS generations in Srikakulam area, which includes Srikakulam Pooling Station – Angul 765kV D/C line and Angul – Jharsuguda - Dharamjaigarh 765kV D/C lines. However, developments in coal regulation in Indonesia, Australia and other countries have resulted in slowing down of capacity addition based on imported coal. As a consequence, the Southern Region is expected to be a net importer of power from neighbouring regions. Under such uncertainty of generation projects and delay in implementation, the Southern Region may need to import huge quantum of power, which may need augmentation of existing / under implementation / planned inter-regional links. Under this transmission scheme, an additional inter-regional AC interconnection between Southern and Eastern regions is being established through Srikakulam Pooling Station to Vemagiri 765kV D/C line. This additional inter-regional link shall facilitate import of power to meet the requirement of power from other surplus regions. However, with the import through this link, beyond Khamman towards N'Sagar, critical loadings were observed and therefore, Khammam – N'Sagar 400kV D/C line is being envisaged to address such critical loadings. This line shall facilitate in dispersal of power to Southern Region constituents beyond Khammam.

Scope of transmission project

1. Srikakulam PP – Vemagiri-II Pooling Station 765kV D/c line.
2. Khammam – NagarjunaSagar 400 kV D/c line.

General Details:

Special Purpose Vehicle (SPV)	:	Powergrid Vizag Transmission Limited (A subsidiary of PGCIL)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. Crs)	:	1180
Levellised Tariff (Rs. Crs)	:	231.134
Request for Qualification	:	26.10.2012
Request for Proposal	:	06.03.2013
Letter of Intent	:	31.07.2013
Transmission Service Agreement(TSA)	:	14.05.2013
SPV acquisition	:	30.08.2013
Transmission License by CERC	:	08.01.2014
Tariff adoption by CERC	:	23.01.2014
Contract Performance Guarantee	:	29.08.2013
Clearance u/s 164	:	21.05.2014
Submission of execution plan to CEA	:	Dec.'2013
NIT issued on	:	08.10.2013
EPC Contract awarded on	:	12.03.2014
Scheduled Date of Completion	:	29.08.2016
Actual Date of Completion	:	Sep' 2016

Status of progress of transmission project

Work awarded on 20.05.2014 to M/s TPL, M/s ICOMM, M/S L&T and M/s Gammon

1. Srikakulam PP – Vemagiri-II PS 765 kV D/C line

- Length 668 CKm, Locations: 877 nos.

Line completed on 30.09.16

2. Khammam (existing) – Nagarjunasagar 400 kV D/C line

- Length 145 ckm, Tower Locations 388 nos

Line commissioned on 31.12.15

Project Commissioned in Sep-16.

(4) Name of transmission project - ATS of Unchahar TPS

Background

Feroz Gandhi Unchahar TPP-I to III (5x210MW) in District Raebareli, Uttar Pradesh is an existing generation of M/s NTPC Limited. The generations are at 220kV and are being evacuated through 220kV lines. M/s NTPC has now proposed augmentation of generation capacity by developing 1x500 MW at Feroz Gandhi Unchahar TPP (FGUTPP-IV). The beneficiaries along with quantum as informed by M/s NTPC are UPPCL (167.38MW), UPCL (23.19MW), Delhi Discoms (72.39MW), Haryana Discoms (33 MW), Rajasthan Discoms (64.67 MW), HPSEB (18.91 MW), PDD (38.4MW), EDC (Union Territory of Chandigarh) (3.46MW). The step up voltage of the generator is at 400kV and the proposed generating station is 1km route length from existing generating station. M/s NTPC Limited had submitted application for connectivity and Long Term Access and was discussed during the Connectivity and Long Term Access meeting held on 19/12/2011. During the meeting, it was discussed and agreed to connect the new generation directly to Fatehpur 765/400kV Substation of POWERGRID through 400kV D/C. Fatehpur is a major substation in Northern Region. Beyond Fatehpur, there would be two numbers of 765kV Lines to Agra. Agra is also well connected with high capacity 400kV and 765kV lines. Hence, no constraint is envisaged in evacuation of power to its beneficiary.

Scope of transmission project

1. Unchahar – Fatehpur 400 kV D/C line

General Details

Special Purpose Vehicle (SPV)	:	Powergrid Unchahar Transmission Limited (A subsidiary of PGCIL)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. Crs)	:	70
Levellised Tariff (Rs. Crs)	:	16.771
Request for Qualification	:	11.01.2013
Request for Proposal	:	17.10.2013
Letter of Intent	:	14.02.2014
Transmission Service Agreement(TSA)	:	20.12.2013
SPV acquisition	:	24.03.2014
Transmission License by CERC	:	21.07.2014
Tariff adoption by CERC	:	03.07.2014
Contract Performance Guarantee	:	20.03.2014
Clearance u/s 164	:	06.05.2015
Execution plan submitted to CEA	:	July'14
NIT issued on	:	25.07.2014
EPC contract awarded on	:	21.01.2015
Scheduled Date of Completion	:	24.09.2016
Actual Date of Completion	:	Dec' 2016

Status of progress of transmission project

1. Unchahar – Fatehpur 400 kV D/C line

- Length: 106 ckm, Locations: 145 nos.
- Line completed on 24th Sep'16. The power flow started only after completion of NTPC Unchahar bays in Dec.'16.

Project Commissioned in Dec-16.

(5) Name of transmission project- NR System strengthening Scheme-NRSS-XXXI (Part-A)

Background

Kala Amb/ Poanta/ Giri area is an existing load centre in Himachal Pradesh with a present power demand of about 350 MVA, which is likely to increase about 500 MVA. However, the available generation and transmission network in the area is not adequate to meet the present load. In order to meet the present and future load requirement of the area, this transmission scheme has been proposed. Further considering the issue of hilly terrain & scarcity of land in Himachal Pradesh, the substation shall be established as GIS station and the LILO would be carried out on Multi-Circuit Towers to conserve R-o-W. Karcham-Wangtoo-Abdullapur 400kV D/C line is an existing Quad conductor line and is connected in the grid in parallel to triple snowbird lines. In order to increase the loadability of this line for better sharing of load, 40% series compensation on 400 kV Karcham Wangtoo – Abdullapur D/c line is proposed under the scheme. This would not only improve the loadability of 400kV Karcham Wangtoo 400kV D/C line but also help in reducing the oscillations in the area.

Scope of transmission project

1. Establishment of a 7 x 105 MVA (1- ph.), 400/220 kV GIS substation at Kala Amb

400 kV

- Line Bays: 4 No.
- 400/220 kV ICT: 7 x 105 (1-ph)
- ICT bays: 2 no.
- Bus Reactor (80 MVAR): 2 no.
- Bus Reactor Bay: 2 no.
- Space for line/ICT bays: 4 no.
- Space for ICT: 1 no.

220 kV

- Line Bays: 6 no.
- ICT bays: 2 no.
- Space for line/ICT bays: 4 no.

2. LILO of both circuits of Karcham Wangtoo – Abdullapur 400 kV D/C (Quad Moose) line at Kala Amb (on multi Ckt towers)
3. 40% Series Compensation on 400 kV KarchamWangtoo – Kala Amb quad D/C line at Kala Amb ends

General Detail

Special Purpose Vehicle(SPV) Limited	:	Powergrid Kala Amb Transmission (A subsidiary of PGCIL)
Bid Process Coordinator(BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. Crs)	:	225
Levellised Tariff (Rs. Crs)	:	59.434
Request for Qualification	:	01.08.2013
Request for Proposal	:	09.12.2013

Date of Letter of Intent	:	26.02.2014
Transmission Service Agreement (TSA)	:	02.01.2014
SPV acquisition	:	12.05.2014
Transmission License by CERC	:	21.07.2014
Tariff adoption by CERC	:	03.07.2014
Contract Performance Guarantee	:	08.05.2014
Clearance u/s 164	:	27.04.2016
Execution plan submitted to CEA	:	Sept'14
NIT issued on	:	21.04.2014
EPC contract awarded on	:	09.12.2015
Scheduled Date of Completion	:	12.07.2017
Anticipated date of completion	:	12.07.2017
Actual Date of Completion	:	Jul' 2017

Status of progress of transmission project

1. 7x105 MVA, 400/220 kV GIS at Kala amb with 40% series compensation on 400 kV Karcham Wangtoo – Kala Amb D/C line at Kala Amb end

Work completed and DOCO declared w.e.f. 12.07.17

2. LILO of both ckt of Karcham Wangtoo - Abdullapur 400 kV D/C line at Kala Amb

Work completed and DOCO declared w.e.f. 12.07.17.

Project Commissioned in July 2017.

(6) Name of transmission project- Transmission System associated with Gadarwara STPS (2x800 MW) of NTPC (Part-A)

Background

NTPC Limited (NTPC) is establishing coal based Gadarwara STPS (2x800 MW) generation project at Gadarwara, Narsinghpur District in the State of Madhya Pradesh. NTPC Limited has been granted LTA for 1586.51 MW as per the LTA application and the details of drawl of power is given below:

CSPDCL	63.46 MW,	MPTradeco	793.25MW
GUVNL	209.86 MW,	MSEDCL	261.49 MW
Goa	10.47 MW,	DNH	6.03 MW
DD	3.96 MW,	Unallocated	237.99 MW

Transmission Scheme was planned for the evacuation and supply of power from Gadarwara STPS to the beneficiaries of the generation project. This transmission system strengthening shall facilitate immediate evacuation as well as supply of power to its beneficiaries with reliability and security. Beyond Solapur dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under inter-state Transmission System. The Transmission System has been split into two parts viz. Part A and Part B and both part-A and Part-B of Transmission scheme is to be implemented in the same time frame.

Scope of transmission project

1. Gadarwara STPS – Jabalpur Pool 765 kV D/C line*

*Considering the time schedule of generation project, an interim arrangement through LILO of existing Seoni – Bina 765 kV S/C line shall be established at Gadarwara STPP. At a later date, LILO portion would be de-linked from Seoni – Bina 765 kV S/C line to restore the Seoni – Bina 765 kV S/C direct line, and the LILO portion shall be extended to Jabalpur 765/400 kV pooling station to form Gadarwara STPS – Jabalpur Pool 765 kV D/C line.

2. Gadarwara STPS – New Pooling Station near Warora 765 kV D/C line.

3. LILO of both circuits of Wardha – Parli (PG) 400 kV D/C Quad line at Warora Pooling Station (Near Warora) (2 x D/C).

4. Establishment of 2x1500 MVA, 765/400 kV New Pooling Station near Warora.

765 kV

ICTs: 7 x 500 MVA, 765/400 kV (1 spare unit)

ICT bays: 2 no.

Line bays: 6 no.

Bus reactor: 3 x 110 MVAR

Bus reactor bay: 1 no.

Line reactors: 7 x 110 MVAR (1 unit spare) (for Gadarwara line)

Line reactors switchable: 6 x 110 MVAR (for Parli line)

Space for future bays: 4 no.

400 kV

ICT bays: 2 no.

Line bays: 4 no.

Space for future 400 kV bays: 4 no.

General Details

Special Purpose Vehicle (SPV)	:	Powergrid Warora Transmission Ltd
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. Crs)	:	4070
Levellised Tariff (Rs. Crs)	:	290.147
Request for Qualification	:	14.08.2014
Request for Proposal	:	14.11.2014
Letter of Intent	:	11.03.2015
Transmission Service Agreement (TSA)	:	09.02.2015
SPV acquisition	:	24.04.2015
Transmission License by CERC	:	05.08.2015
Tariff adoption by CERC	:	23.06.2015
Contract Performance Guarantee	:	18.04.2015
Clearance u/s 164	:	22.04.2017
Execution plan submitted to CEA	:	July'15
NIT issued on	:	08.06.2015
EPC contract awarded on	:	Sept.'15 onwards
Scheduled Date of Completion	:	November 2017*
*Revised Schedule Agreed by LTTCs	:	January 2018
Actual Date of completion	:	July, 2018

Status of progress of transmission project

(1) Gadarwara STPS - Jabalpur PS 765 kV D/C line

- Length: 15.5 km
- Locations: 43 nos.

Progress: Line completed on 23.11.2016 and DOCO declared on 30.11.2016

Stage-2 : Dismantle the LILO and extend Line upto Jabalpur S/S,

- Length: 87.5 ckm
- Locations: 227 nos.

Progress: Line completed on 23.05.2017 and DOCO declared on 31.05.2017

(2) Gadarwara STPS- Warora P.S. (New) 765kV D/C line

Length 313.3 km
Locations 837 nos.

Progress: Line commissioned on 10.07.2018

(3) LILO of both Ckts. of Wardha - Parli at Warora (New) Pooling Station

Length: 98 km
Locations: 269 nos.

Line commissioned in May'18.

(4) 7x500 MVA, 765/400 kV Warora (New) pooling station

- COD : July' 18

Transmission Project commissioned on July, 2018.

(7) Name of transmission project - Transmission System associated with Gadarwara STPS (2x800 MW) of NTPC (Part-B)

Background

NTPC Limited (NTPC) is establishing coal based Gadarwara STPS (2x800 MW) generation project at Gadarwara, Narsinghpur District in the State of Madhya Pradesh. NTPC Limited has been granted LTA for 1586.51 MW as per the LTA application and the details of drawl of power is given below:

CSPDCL	63.46 MW,	MPTradeco	793.25MW
GUVNL	209.86 MW,	MSEDCL	261.49 MW
Goa	10.47 MW,	DNH	6.03 MW
DD	3.96 MW,	Unallocated	237.99 MW

Transmission Scheme was planned for the evacuation and supply of power from Gadarwara STPS to the beneficiaries of the generation project. This transmission system strengthening shall facilitate immediate evacuation as well as supply of power to its beneficiaries with reliability and security. Beyond Solapur dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under inter-state Transmission System. The Transmission System has been split into two parts viz. Part A and Part B and both part-A and Part-B of Transmission scheme is to be implemented in the same time frame.

Scope of transmission project

1. Warora (Pooling Station) – Parli (New) 765 kV D/C line.
2. Parli (New) – Solapur 765 kV D/C line
3. Parli (New) – Parli (PG) 400 kV D/C (Quad) line
4. Establishment of 2 x 1500 MVA 765/400 kV Parli (New) S/S

765 kV

ICTs: 7 x 500 MVA, 765/400 kV (1 spare unit)

ICT bays: 2 no.

Line bays: 4 no.

Bus reactor: 3 x 110 MVAR

Bus reactor bay: 1 no.

Line reactors: 7 x 110 MVAR (1 unit spare) (for Warora-Parli (new) 765kV D/c line)

Space for future bays: 4 no.

400 kV

ICT bays: 2 no.

Line bays: 2 no.

Space for future 400 kV bays: 4 no.

General Details

Special Purpose Vehicle (SPV)	:	Power grid Parli Transmission Ltd
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. Crs)	:	3684
Levellised Tariff (Rs. Crs)	:	256.727

Request for Qualification	:	07.08.2014
Request for Proposal	:	14.11.2014
Letter of Intent	:	11.03.2015
Transmission Service Agreement (TSA)	:	09.02.2015
SPV acquisition	:	24.04.2015
Transmission License by CERC	:	10.07.2015
Tariff adoption by CERC	:	23.06.2015
Contract Performance Guarantee	:	18.04.2015
Clearance u/s 164	:	June' 17.
Execution plan submitted to CEA	:	Nov'16
NIT issued on	:	22.06.2015
EPC contract awarded on	:	Sep'2015
Scheduled Date of Completion	:	January, 2018
Actual Date of completion	:	June, 2018

Status of progress of transmission project

1. Warora Pooling Station - Parli (New) 765 kV D/C line

Length: 347 km
Locations: 920 nos.

Line commissioned in June 2018.

2. Parli (New) - Solapur 765 kV D/C line

Length: 118 km
Locations: 311 nos.

Line commissioned, DoCo declared on 27.04.2018

3. Parli (New) – Parli (PG) 400 kV D/C (Q) line

Length: 18.2km
Locations: 52 nos.

Line commissioned, DoCo declared on 27.04.2018

4. 2x1500 MVA, 765/400 kV Parli (New) sub station

- Substation partly commissioned on 27.04.2018, Balance commissioned in June'18.

Transmission Project commissioned on June, 2018.

(8) Transmission Project- Transmission System Strengthening associated with Vindhyachal- V

Background

NTPC Limited (NTPC) is augmenting 1x500MW unit at Vindhyachal generation project at Vindhyachal, Dist. Singrauli in the State of Madhya Pradesh. NTPC Limited has been granted LTA for 495.78 MW as per the LTA application and the details of drawl of power is given below:

CSPDCL	32.90 MW,	MPTradeco	129.04 MW
GUVNL	110.34 MW,	MSEDCL	138.29 MW
Goa	5.47 MW,	DNH	3.24 MW
DD	2.09 MW,	Unallocated	74.41 MW

Transmission scheme was planned for the evacuation and supply of power from the Vindhyachal-V to the beneficiaries of the generation project. This transmission scheme shall facilitate supply of power to its beneficiaries with reliability and security. Beyond Jabalpur Pooling Station, dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under Inter-State Transmission System.

Scope of transmission project

1. Vindhyachal Pooling Station-Jabalpur Pooling Station 765kV D/c Line

General Details

Special Purpose Vehicle (SPV)	:	Powergrid Jabalpur Trans. Limited
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. Crs)	:	2845
Levellised Tariff (Rs. Crs)	:	210.998
Request for Qualification	:	20.08.2014
Request for Proposal	:	22.10.2014
Letter of Intent	:	10.02.2015
Transmission Service Agreement (TSA)	:	19.11.2014
SPV acquisition	:	26.02.2015
Transmission License by CERC	:	15.06.2015
Tariff adoption by CERC	:	28.05.2015
Contract Performance Guarantee	:	25.02.2015
Clearance u/s 164	:	Sep' 16
Submission of execution plan to CEA	:	July'15
NIT issued on	:	26.06.2015
EPC contract awarded on	:	23.03.2016
Scheduled Date of Completion	:	26.06.2018
Actual Date of Completion	:	Jan'19

Status of progress of transmission project

1. Vindhyachal Pooling Station - Jabalpur Pooling Station line 765 kV D/C line
Awarded on M/s Tata & M/s. KEC on Mar'15.

Length: 374.5 km

Locations: 1010 nos

Line commissioned in Jan'2019

Transmission Project commissioned in Jan' 2019.

(9) Transmission Project- Strengthening of Transmission System beyond Vemagiri

Background

Presently Southern Region is facing severe power shortage. As per Operational data, the region faced Power deficit of about 8.4% (i.e. about 3270MW) during 2014-15 (Apr'14-Feb'15). This power deficit situation has arisen mainly due to (i) delay/deferment of anticipated generation projects and (ii) also due to non-availability of gas for existing gas projects in Southern Region. Presently the existing/planned system can facilitate import of about 9000 - 10000 MW into Southern Region. However under certain scenarios of non-availability / delay in commissioning of some of the generation projects in Southern region expected power transfer requirement is about 16000 MW by 2018-19. In view of large deficit and requirement of transmission system to meet future power transfer requirements, high capacity Inter-regional strengthening schemes were identified. The Present Scheme is part of the above identified scheme.

To facilitate import of power from North-East-West (NEW) grid to Southern Region grid, Angul – Srikakulam – Vemagiri corridor was envisaged and is under implementation. Under present proposed scheme, a 765kV D/c from Vemagiri to Cuddapah via Chilakaluripeta, wherein a 765/400kV Substation has been proposed, which would facilitate dispersal of power beyond Vemagiri. Further High capacity 400kV D/c have been proposed from Vemagiri, Chilakaluripeta and Cuddapah for Injection/ dispersal of power.

Scope of transmission project

Transmission Lines

1. Vemagiri-II – Chilakaluripeta 765kV D/c line with 240 MVAR switchable line reactor at both ends.
2. Chilakaluripeta – Cuddapah 765kV D/c line with 240 MVAR switchable line reactor at both ends.
3. Chilakaluripeta – Narsaraopeta 400kV (quad) D/c line.
4. Cuddapah – Madhugiri 400kV (quad) D/c line with 80 MVAR switchable line reactor at both ends.
5. Srikakulam Pooling Station – Garividi 400 kV (Quad) D/c line with 80 MVAR switchable line reactor at Garividi end.

Substation

1. Establishment of 765/400 kV substation at Chilakaluripeta with 7x500 MVA(one spare unit) transformers and 2x240 MVAR bus reactors each.
765/400kV Transformers bays at Chilakaluripeta: 2 nos.
765 kV
Line bays : 4 nos., Spare bays : 6 nos.
400 kV
Line bays : 2 nos., Spare bays : 8 nos.
2. Satenapalli (Narasaraopeta) 400 kV Substation extension
3. Garividi 400 kV Substation extension

General Detail

Special Purpose Vehicle (SPV)	:	Powergrid Southern Interconnector Transmission Limited (A subsidiary of PGCIL)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation

Estimated Cost (Rs. Crs)	:	5050
Levellised Tariff (Rs. Crs)	:	359.255
Request for Qualification	:	12.04.2015
Request for Proposal	:	10.07.2015
Letter of Intent	:	29.10.2015
Transmission Service Agreement (TSA)	:	31.08.2015
SPV acquisition	:	04.12.2015
Transmission License by CERC	:	14.03.2016
Tariff adoption by CERC	:	09.02.2016
Contract Performance Guarantee	:	26.11.2015
Clearance u/s 164		Received on 16.08.2017
Execution plan submitted to CEA:		Mar'16
NIT issued on	:	18.12.2015
EPC awarded on	:	19.03.2016
Scheduled Date of Completion	:	03.04.2019

Status of progress of transmission project

1. Vemagiri - Chilakaluripeta 765kV D/C Line

Award placed in Mar'16 to M/s. KPTL

Length:	279 Kms
Locations:	748 nos.
Foundation completed	745 nos.
Towers erected	734 nos.
Stringing completed	252 km
Scheduled COD	Apr'19

Constraints where Project Authority requires intervention:

27 Foundations, 58 Tower Erection & 40Km Stringing under severe RoW in Nandigram for want of increased compensation since Feb' 17. POWERGRID met Pr. Secretary (Energy) A.P. regarding the ROW issues in the above mentioned line,

- The project is under review by PRAGATI of Prime Minister's office(PMO) and meeting is expected shortly.
- Foundation works started in a few locations in Aug'19. Further the obstruction continued for stringing to enhance compensation for tree/ crop wrt. the damages. During the meeting on 25.09.2019 by district administration and MLA with the farmers, the issues have been deliberated and orders have been issued. Stringing works are now under progress.

Status of statutory approvals:

Forest Nil

Power line crossing

Total no. of crossings	:	27	nos.
Proposal submitted	:	27	nos. Date: 07.11.16 – 19.06.17

Approval obtained	:	27	nos.	(Submitted on various dates) Jun'17
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Railway crossing

Total no. of crossings	:	3	nos.	
Proposal submitted	:	3	nos.	Date: 24.08.16 – 02.05.17 (Submitted on various dates)
Approval obtained	:	3	nos.	Date: Jun'17, Oct'17(2 nos.)

National Highway Crossing

Total no. of crossings	:	3	nos.	
Proposal submitted	:	3	nos.	Date: 10.05.17
Approval obtained	:	3	nos.	Date: Jun'17. Oct'17 (2 nos)

River Crossings

Total no. of crossings	:	3	nos.
Proposal submitted	:	3	nos.
Approval obtained	:	3	nos.

PTCC approval

Proposal submitted to Defence on 27.07.17
 Proposal submitted to BSNL on 27.07.17
 Proposal submitted to Railways on 27.07.17

Current status:

Proposal received at PTCC, New Delhi, final clearance awaited

Defence/Civil Aviation

Proposal submitted to Defence on 17.06.17.
 Proposal submitted to Civil Aviation on 16.06.17.

Current Status:

Civil aviation NOC received, defence NOC awaited.

2. Chilakaluripeta - Cudappah 765kV D/C Line

Length	:	288Km
Locations	:	768 nos.

- **Line charged on 29.07.19 & completed trial operation on 30.07.19.**

3. Cudappah - Madhugiri 400 kV D/C (Quad Moose) Line

Length:	243 Km
Locations:	650 nos.

- **Line commissioned on 26.02.19**

4. Srikakulam - Garividi 400 kV (Quad Moose) D/C Line

Length: 144Km
Locations: 393 nos.

- **Line commissioned on 04.08.18 & put under commercial operation w.e.f. 06.08.18**

5. Chilkaluripeta - Narasaraopeta 400 kV (Quad Moose) D/C Line

Length: 30 Km
Locations: 81 nos.

- **Line commissioned w.e.f. 31.07.19.**

6. 765/400kV Chilakularipeta Substation

Awarded to M/s GE T&D INDIA LTD

Land acquired	:	100%
Civil work completed	:	100%
Equipment supplied	:	100%
Equipment erection	:	100%
Scheduled COD	:	Apr'19

- **765/400kV substation at Chilakaluripeta along with all bays and Equipment charged on 29.03.2019 & 30.03.2019 and completed trial operation on 31.03.2019**
- **2 nos. 400kV Line Bays associated with Chilakularipeta – Narasaraopeta Line are declared under Commercial Operation w.e.f. 31.07.19**

7. Satenapalli (Narasaraopeta) 400 kV Substation extension

- **Substation commissioned & put under Commercial Operation w.e.f. 31.07.19.**

8. Garividi 400 kV Substation extension

- **S/s commissioned & under commercial operation w.e.f. 06.08.2018.**

(10) Name of transmission project- Eastern Region Strengthening Scheme-XVIII (ERSS-XVIII)

Background

The major generation projects in ER in future are envisaged in the central and western part of the region (Odisha, Jharkhand and Bihar); however, no major generation addition is expected in the eastern part (West Bengal). Thus, in order to provide reliable and secure power supply within the region from various future generation sources and also to facilitate power exchange with the neighbouring regions under various operating conditions, it was felt necessary to build a strong transmission network interconnecting eastern and western part of ER.

Accordingly, implementation of high capacity Ranchi – Medinipur – Jeerat 765kV D/c line along with establishment of 765/400kV substations at Medinipur and Jeerat, was approved in the 17th Standing Committee Meeting on Power System Planning of ER to provide a strong East – West connection in the Eastern Region as well as to feed large load centres of West Bengal viz. Jeerat and Subhashgram area. For further dispersal of power from these 765/400kV sub-stations, various 400kV lines have been planned

Scope of transmission project

Transmission Lines

- Ranchi (New) – Medinipur 765kV D/c line with Hexa ACSR Zebra conductor along with 765kV, 240 MVAR switchable line reactor with 750Ω NGR in each circuit at Medinipur end (total: 765kV, 7x80 MVAR single phase units, 1 unit as spare).
- Medinipur - Jeerat (New) 765kV D/c line with Hexa ACSR Zebra conductor along with 765kV, 240 MVAR switchable line reactor with 600 Ω NGR in each circuit at Jeerat (New) end (total: 765kV, 7x80 MVAR single phase units, 1 unit as spare).
- LILO of both circuits of Chandithala – Kharagpur 400kV D/c line at Medinipur.
- Jeerat (New) – Subhasgram 400kV D/c line (ACSR Quad Moose)
- Jeerat (New) – Jeerat (WBSETCL) 400kV D/c line (ACSR Quad Moose)
- LILO of Jeerat (WBSETCL) – Subhasgram (PG) 400kV S/c section at Rajarhat (POWERGRID)

Substation

- (1) Establishment of 765/400kV, 2×1500MVA substation at Medinipur

765kV

- ICTs: 7×500 MVA, 765/400kV (1 spare unit)
- ICT bays: 2 no.
- Line bays: 4 no.
- Bus reactor: 7×110 MVAR single phase units including one (1) spare unit
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 4 no.
- Space for future ICT bays: 2 no.
- Space for future 765/400 kV ICT: (6x500MVA single phase units)

400kV

- ICT bays: 2 no.
- Line bays: 4 no.

- Bus reactor: 2×125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 6 no.
- Space for future ICT bays: 2 no.

(2) Establishment of 765/400kV, 2x1500MVA substations at Jeerat (New)

765kV

- ICTs: 7×500MVA, 765/400kV (1 spare unit)
- ICT bays: 2 no.
- Line bays: 2 no.
- Bus reactor: 7×110 MVAR single phase unit including one (1) spare unit
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 4 no.
- Space for future ICT bays: 2 no.
- Space for future 765/400 kV ICT: (6x500MVA single phase units)

400kV

- ICT bays: 2 no.
- Line bays: 4 no.
- Bus reactor: 2×125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 4 no.
- Space for future ICT bays: 2 no.

2 no. 400kV GIS line bays at Jeerat (WBSETCL)

General Detail

Special Purpose Vehicle (SPV)	:	Powergrid Medinipur-Jeerat Transmission Limited (A subsidiary of POWERGRID)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs in crs)	:	3246
Levellised Tariff (Rs. Crs)	:	498.65
Request for Qualification	:	14-Jun-2016
Request for Proposal	:	06-Oct-2016
Letter of Intent	:	21-Feb-2017
Transmission Service Agreement (TSA)	:	17-Nov-2016
SPV acquisition	:	28-Mar-2017
Transmission License by CERC	:	20-June-2017
Tariff adoption by CERC	:	12-June-2017
Contract Performance Guarantee	:	28-Mar-2017
Clearance u/s 164	:	15-Feb-2018
Execution plan submitted to CEA:	:	2-June-2017
NIT issued on	:	02-Nov-2016
EPC awarded on	:	31-Mar-2017
Scheduled Date of Completion	:	28-Jul-2020

Status of progress of transmission project

1. Ranchi – Medinipur 765kV D/C line

Award placed on 31.03.2017 to M/s L&T.

- Length : 269 Km
- Locations : 717 nos.
- Foundation completed : 691 nos.
- Towers erected : 674 nos.
- Stringing : 213.5 Km
- Scheduled COD July' 2020

Status of statutory approvals: Survey under Progress

Forest:

Details of Tr. Line Falling under Forest:-

Length: 10.40 kms

Forest area affected (ha) : 69.7

Forest proposals submitted on :

ER-I portion: - 6.45 Km (43.26 ha.). Proposal submitted on 12.04.2018. DFO completed in all sections. **Stage-I approval expected in Nov'19.**

ER-II portion: - 3.95 km (26.526ha.). **Stage-I approval obtained on 16.01.19. Working permission obtained on 14.03.19 & 18.03.19 .Stage-II approval under progress.**

Power line crossing (66kV and above)

Total no. of crossings	:	14	nos.	
Proposal submitted	:	07	nos.	Date: 26.03.18
		06	nos.	Date: 23.04.18
		01	no.	Date: 10.07.18
Approval obtained	:	14	nos.	[7 nos(WB) on 19/6, 21/8, 27/7, 29/8,8/5/18 & 2 nos. on 9/8/18]

Railway crossing

Total no. of crossings	:	04	nos. + 01 No. (Proposed line)
Proposal submitted	:	01	no. Date: 16.03.18
		02	no. Date: 26.03.18
		01	no. Date: 22.06.18
Approval obtained	:	04	nos. 29/09/18, 5/11/18 & 31/12/18.

National Highway Crossing

Total no. of crossings	:	05	nos.
Proposal submitted	:	01	no. Date: 15.03.18
		02	nos. Date: 26.03.18
		01	no. Date: 21.06.18
		01	no. Date: 23.07.18
Approval obtained	:	05	no. 06/08, 06/09 & 16/11/18

River Crossings

NIL

PTCC approval : 09.05.18 Online submission for Jharkhand
Approved for West Bengal

Defence/Civil Aviation : Online proposal submitted for Jharkhand.
Online proposal submitted for West Bengal.

2. Medinipur - Jeerat (New) 765kV D/C line

Award placed on 31.03.2017 to M/s L&T.
 Length: :169Km
 Locations: : 461 nos.
 Foundation completed : 415 nos.
 Towers erected : 341 nos.
 Stringing completed : 60.7 Km
 Scheduled COD :July' 2020

Constarints where Project Authority requires intervention:

Status of statutory approvals: Survey under Progress

Forest: Nil

Power line crossing (66kV and above)

Total no. of crossings	:	17	nos.	
Proposal submitted	:	10	nos.	Date: 26.03.18
		03	nos.	Date: 13.04.18
		01	nos.	Date: 24.04.18
		01	nos.	Date: 12.05.18
		01	nos.	Date: 14.09.18

Approval obtained : 17 nos. Approval obtained in Jun-Nov'18

Railway crossing

Total no. of crossings	:	05	nos.	
Proposal submitted	:	05	nos.	Date: 26.03.18 & 27.03.18
Approval obtained	:	05		

National Highway Crossing

Total no. of crossings	:	02	nos.	
Proposal submitted	:	01	nos.	Date: 26.03.18
		01	nos.	Date: 25.05.18
Approval obtained	:	02	nos.	Date: 07/12/18 & 04/01/19

River Crossings : 01 No. Proposal to be submitted on 22/01/19.

PTCC approval : Approved..

Defence/Civil Aviation : Online Proposal submitted on 20.09.18.

3. Jeerat (New) – Subhasgram 400kV D/C line

Award placed on 31.03.2017 to M/s. L&T.

- Length: 107 Km
- Locations: 304 nos.
- Foundation 100 nos .
- Tower erection 35 nos.
- Stringing NIL
- Scheduled COD July' 2020

Constraints where Project Authority requires intervention:

Severe RoW being faced. Administration support required for clearance of fronts

Status of statutory approvals: Survey under Progress

Forest: Nil

Power line crossing (66kV and above)

Total no. of crossings	:	09	nos.
Proposal submitted	:	06	nos. Date: 3 nos. each in Jul & Nov'18
Approval obtained	:	06	nos. Date: 3 nos each in Sep & Nov'18

Railway crossing

Total no. of crossings	:	03	nos.
Proposal submitted	:	03	
Approval obtained	:	01	

National Highway Crossing

Total no. of crossings	:	01	nos.
Proposal submitted	:		Proposal under submission.
Approval obtained	:		NIL

River Crossings NIL

PTCC approval	:	Proposal under submission
Defence/Civil Aviation	:	Proposal under submission

4. Jeerat (New) – Jeerat (WBSETCL) 400kV D/C line

Award placed on 31.03.2017 to M/s. L&T

- Length : 25 Km
- Locations : 81 nos.
- Foundation completed : 72 nos.
- Tower Erection : 67 nos.
- Stringing : 11.5 Km
- Scheduled COD : July' 2020

Status of statutory approvals: Survey under Progress

Forest: Nil

Power line crossing (66kV and above)

Total no. of crossings	:	07	nos.
Proposal submitted	:	04	nos. Date: 06.04.18
		01	nos. Date: 13.04.18
		02	nos. Date: 26.05.18
Approval obtained	:	04	nos. Date: Jul'18
		01	nos. Date: Aug'18
		02	nos. Date: Dec'18

Railway crossing

Total no. of crossings	:	NIL
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Proposal submitted	:	NIL
Approval obtained	:	NIL

National Highway Crossing

Total no. of crossings	:	NIL
Proposal submitted	:	NIL
Approval obtained	:	NIL

River Crossings	:	NIL
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PTCC approval	:	Proposal submitted on 02.06.18.
Defence/Civil Aviation	:	Proposal submitted on 11.09.18

5. LILO of Jeerat (WBSETCL) – Subhasgram (PG) 400kV at Rajarhat

Award placed on 31.03.2017 to M/s. L&T.

Length:	:	12 Km
Locations:	:	37 nos.
Scheduled COD	:	July' 2020

Status: Scope deleted vide CEA letter dated 04.04.18.

6. LILO of both circuits of Chandithala – Kharagpur 400kV D/C line at Medinipur

Award placed on 31.03.2017 to M/s. L&T

- Length : 73 Km
- Locations : 199 Nos.
- Foundation completed : 190 Nos.
- Towers erected : 177 Nos.
- Stringing : 56.5 Km
- Scheduled COD : July' 2020

Status: Foundation work & Tower Erection work under progress.

Status of statutory approvals: Survey under Progress

Forest: 0.108 Km (0.497 ha.). The proposal had been submitted on 02.07.2018.

Stage-I approval obtained on 16.01.19. Stage-I compliances has been submitted on 16.07.19. Stage-II approval under process.

Power line crossing (66kV and above)

Total no. of crossings	:	02	nos.
Proposal submitted	:	02	nos. Date: 19.03.18
Approval obtained	:	02	Nos. Date: 18/05, 3/8/18

Railway crossing

Total no. of crossings	:	NIL
Proposal submitted	:	NIL
Approval obtained	:	NIL

National Highway Crossing

Total no. of crossings	:	NIL
Proposal submitted	:	NIL
Approval obtained	:	NIL

River Crossings NIL

PTCC approval : Approval received.

Defence/Civil Aviation : Online Proposal submitted on 11/09/18.

7. 2x1500 MVA , 765/400 kV Substation at Medinipur

Award placed on 29.09.2017 to M/s BHEL.

Land acquired	:	100%
Civil work completed	:	80 %
Equipment supplied	:	90 %
Equipment erection	:	32 %
Scheduled COD	:	July' 2020

Constarints where Project Authority requires intervention: Substation work being stopped due to local agitation since Oct'18. Matter resolved with the help of local/ state administration

8. 2x1500 MVA , 765/400 kV Substation at Jeerat (New)

Award placed on 29.09.2017 to M/s BHEL. Work under progress.

Land acquired	:	100%
Civil work completed	:	16 %
Equipment supplied	:	80 %
Equipment erection	:	0 %
Scheduled COD	:	July' 2020

9. Extension of 400 kV Substation at Jeerat (WBSETCL) (Work being executed by WBSETCL.)

Land acquired	:	100%
Civil work completed	:	45%
Equipment supplied	:	20%
Equipment erection	:	0%
Scheduled COD	:	July' 2020

Constraints if any:

- Severe RoW anticipated in most of Transmission lines.

(11) Name of transmission project - Eastern Region Strengthening Scheme(ERSS) XXI

Background

Demand of Bihar has touched 3717MW under unrestricted condition in FY 2016-17 and may go up to 8774MW by 2018-19 due to segregation of agricultural feeders. The demand is expected to reach about 11000 MW by the end of 13th plan (FY 2021-22). For meeting this demand, ISTS network including two (3) 400kV sub-stations at Sitamarhi, Saharsa and Chandauti (Gaya) (Total transformation capacity of 4900 MVA) along with augmentation of 400/132kV Motihari S/s and associated 400kV transmission lines (about 500 ckm) have been planned.

Scope of transmission project

Transmission Lines

1. Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor
2. Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor
3. LILO of both circuits of Nabinagar-II – Gaya 400kV D/c (Quad Moose) line of PGCIL at Chandauti (New)
4. LILO of Kishanganj – Patna 400kV D/c (Quad Moose) line of PGCIL at Saharsa (New)

Substation

1. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Sitamarhi (New)

400 kV

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 no.
- Line bays with space for switchable line reactor: 4 no.
[2 no. for Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor and 2 no. for Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor]
- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (including space for switchable line reactor): 6 no.
- Space for future ICT bays: 2 no.

220 kV

- ICTs: 220/132 kV, 2x200 MVA
- ICTs bays: 4 no.
- Line bays: 4 no.
[2 no. for Sitamarhi (New) – Motipur (BSPTCL) and 2 no. for Sitamarhi (New) – Motihari (New of BSPTCL) 220kV D/c lines]
- Space for future line bays: 4 no.

Space for future ICT bays: 4 no.

132 kV

- ICTs bays: 2 no.
- Line bays: 4 no.
[2 no. for Sitamarhi (New) – Sitamarhi 132kV D/c (Single Moose) line and 2 no. for Sitamarhi (New) – Pupri 132kV D/c line]
- Space for future line bays: 4 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs

Space for future 220/132 kV, 2x200 MVA ICTs

2. Establishment of 400/220/132 kV, 3x500 MVA + 3x200 MVA S/s at Chandauti (New)

400 kV

- ICTs: 400/220 kV, 3x500 MVA
- ICTs bays: 3 no.
- Line bays with space for switchable line reactor: 4 no.
[4 no. for LILO of both circuits of Nabinagar-II – Gaya 400kV D/c (Quad Moose) line of PGCIL at Chandauti (New)]
- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (including space for switchable line reactor): 6 no.
- Space for future ICT bays: 2 no.

220 kV

- ICTs: 220/132 kV, 3x200 MVA
- ICTs bays: 6 no.
- Line bays: 4 no.
[4 no. for LILO of Gaya (PGCIL) – Sonenagar 220kV D/c at Chandauti (New). Gaya (PGCIL) – Sonenagar shall be LILOed at Bodhgaya (BSPTCL) also, so as to form Gaya (PGCIL) – Bodhgaya (BSPTCL) – Chandauti (New) – Sonenagar 220kV D/c line]
- Space for future line bays: 4 no.
- Space for future ICT bays: 4 no.

132 kV

- ICTs bays: 3 no.
- Line bays: 4 no.
[2 no. for LILO of Chandauti (BSPTCL) – Rafiganj and 2 no. for LILO of Chandauti (BSPTCL) – Sonenagar 132kV S/c (HTLS conductor of 240MVA, ampacity - 1050A) lines at Chandauti (New)]
- Space for future line bays: 4 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs

Space for future 220/132 kV, 2x200 MVA ICTs

3. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Saharsa (New)

400 kV

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 no.
- Line bays with space for switchable line reactor: 4 no.
[4 no. for LILO of Kishanganj – Patna 400kV D/c (Quad Moose) line of PGCIL at Saharsa (New)]

- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (including space for switchable line reactor): 6 no.

Space for future ICT bays: 2 no.

220 kV

- ICTs: 220/132 kV, 2x200 MVA
- ICTs bays: 4 no.
- Line bays: 4 no.
[2 no. for Saharsa (New) – Begusarai and 2 no. for Saharsa (New) – Khagaria (New) 220kV D/c lines]
- Space for future line bays: 4 no.
- Space for future ICT bays: 4 no.

132 kV

- ICTs bays: 2 no.
- Line bays: 2 no.
[2 no. for Saharsa (New) – Saharsa 132kV D/c line]
- Space for future line bays: 6 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs

Space for future 220/132 kV, 2x200 MVA ICTs

4. Substation extension at Darbhanga S/s

- 400kV Line bays with space for switchable line reactor: 2 no.

[2 no. for Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor]

5. Substation extension at Motihari S/s

400kV

- ICTs: 400/132kV, 315MVA (3rd)
- ICT bays: 1 no.
- Line bays with space for switchable line reactor: 2 no.[2 no. for Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor]

132kV

ICT bays: 1 no.

General Detail

Special Purpose Vehicle (SPV)	:	ERSS XXI Transmission Limited
Bid Process Coordinator (BPC)	:	REC TPCL
Estimated Cost(Rs in crs)	:	Rs.1349 Cr
Levelling Tariff (Rs. Crs)	:	Rs.138.586 Cr
Request for Qualification	:	28.12.2016
Request for Proposal	:	11.08.2017
Letter of Intent	:	27.09.2017
Transmission Service Agreement (TSA)	:	22.12.2017
SPV acquisition	:	12.01.2018
Transmission License by CERC	:	Application on 16.01.2018
Tariff adoption by CERC	:	Application on 16.01.2018

Contract Performance Guarantee	:	Submitted on 11.01.2018
Clearance u/s 164	:	14.05.19
Execution plan submitted to	:	29.01.2018
EPC awarded on	:	24.01.2018
Scheduled Date of Completion	:	12.03.2021

Status of progress of transmission project

1. Darbhanga – Sitamarhi (New) 400kV D/C line

Award placed on 24.01.2018 to M/s. TATA. Survey completed.

- Length: 80.5Km
- Locations: 221 Nos.
- Foundation completed: 185 Nos.
- Tower Erected: 124 Nos.
- Stringing: 20.7 Km
- Scheduled COD Mar'21

Power line crossing

Total no. of crossings	:	07	Nos.	
Proposal submitted	:	07	Nos	Date: 30.09.2018, 29.07.2019
Approval obtained	:	6	Nos.	

Railway crossing

Total no. of crossings	:	02	Nos.	
Proposal submitted	:	02	Nos.	Date: 04.01.2019
Approval obtained	:	02	Nos	

National Highway Crossing

Total no. of crossings	:	03	Nos.	
Proposal submitted	:	03	Nos.	30.09.2018
Approval obtained	:	NIL		

Forest: 1.02 ha (2 divisions i.e; DBG, SMH)

FRA Certificate from DM (Darbhanga) & Sitamarhi received & forwarded to Nodal officer. **Stage-I approval by 15th Nov'19.**

PTCC approval: Submitted on 04.01.2019. Approval awaited

Work Progress severely affected due to floods

2. Sitamarhi (New) – Motihari 400kV D/C line

Award placed on 24.01.2018 to M/s. TATA.

- Length: 85.3 Km
- Locations: 229 Nos.
- Foundation completed: 191 Nos.
- Tower Erected: 117 Nos.

- Stringing 24 Km
- Scheduled COD : Mar'21

Work Progress severely affected due to floods

Power line crossing

Total no. of crossings : 03 Nos.
 Proposal submitted : 03 [2 Nos. on 30.09.2018 & 1 No. on 24.12.2018]
 Approval obtained : 03 Nos

Railway crossing

Total no. of crossings : 02 Nos.
 Proposal submitted : 02 No. Date: 04.01.2019
 Approval obtained : NIL

National Highway Crossing

Total no. of crossings : 05 Nos.
 Proposal submitted : 05 Nos. 05.10.2018
 Approval obtained : NIL

Forest: 2.0 ha (3 divisions i.e; E. Chap, Sheohar, SMH))

Prosposal submitted on 16.10.2018. Report pending for submission by DFO.

Stage-I approval by 30th Nov'19.

PTCC: Submitted.

3. LILO of both circuits of Nabinagar-II – Gaya 400KV D/c (Quad Moose) line of PGCIL at Chandauti (New)

Award placed on 24.01.2018 to M/s. TATA.

- Length: 2.2 Km
- Locations: 9 Nos.
- Foundation completed 7 nos.
- Towers erected
- Stringing
- Scheduled COD Mar'21

Crossing :NIL

Forest: NIL

PTCC approval: Being Prepared.

Work Progress severely affected due to floods

4. LILO of Kishanganj – Patna 400KV D/c (Quad Moose) line of PGCIL at Saharsa (New)

Award placed on 24.01.2018 to M/s. TATA.

- Length: 75 Km
 - Locations: 211 Nos.
 - Foundation completed: 119 Nos.
 - Tower Erected: 86 nos.
 - Stringing Nil
 - Scheduled COD Mar'21
- **Work Progress severely affected due to floods**

Power line crossing

Total no. of crossings	:	8 nos.	
Proposal submitted	:	8 nos.	Date: 26.03.2019
Approval obtained	:	7 nos.	

Railway crossing

Total no. of crossings	:	2 nos.	
Proposal submitted	:	2 nos.	Date: 12.03.2019
Approval obtained	:	2 nos.	

National Highway Crossing

Total no. of crossings	:	6 nos.	
Proposal submitted	:	6 nos.	Date: 26.03.2019
Approval obtained	:	NIL	

Forest: 2.38 Ha in Saharsa. Proposal submitted on 08.03.2019.

Joint verification done. Issuance of FRA letter from DM, Saharsa is still awaited.

Stage-I approval by 15th Nov'19.

PTCC: Submitted on 09.02.19.

5. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Sitamarhi (New)

Awarded on 27.02.2018 to M/s KEC. Engg. Under progress.

- Land acquired : 97.7 %
- Civil work completed : 20 %
- Equipment supplied : 85 %
- Equipment erection : 0 %
- Scheduled COD : Mar'21

Work was stalled due to heavy rain & flood.

6. Establishment of 400/220/132 kV, 3x500 MVA + 3x200 MVA S/s at Chandaoti (New)

Awarded on 20.03.2018 to M/s ABB. Engg. Under progress.

Land acquired	:	100 %
Civil work completed	:	46 %
Equipment supplied	:	32 %
Equipment erection	:	12 %

Scheduled COD	:	Mar' 21
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Work Progress severely affected due to floods

7. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Saharsa (New)

Awarded on 20.03.2018 to M/s ABB.

- Land acquired : 94 %
- Civil work completed : 12 %
- Equipment supplied : 22 %
- Equipment erection : 0 %
- Scheduled COD : Mar' 21
- **Work was stalled due to heavy rain & flood.**

8. Substation extension at Darbhanga S/s

Awarded on 27.02.2018 to M/s KEC.

- Land acquired : 100%
- Civil work completed : 80 %
- Equipment supplied : 15 %
- Equipment erection : 0 %
- Scheduled COD : Mar'21

9. Substation extension at Motihari S/s

Awarded on 27.02.2018 to M/s KEC.

- Land acquired : 100%
- Civil work completed : 75 %
- Equipment supplied : 15 %
- Equipment erection : 0 %
- Scheduled COD : Mar'21

(12) Name of transmission project - New WR-NR 765 kV Inter-Regional Corridor

Background

To enhance the power transfer capability between Western and Northern Regions, the following WR - NR Inter-regional corridor has been approved.

The corridor shall provide strong connectivity between NR and WR grids and facilitate reliable flow of power from various generation projects in WR to load centers in NR.

Scope of transmission project

765 kV Vindhyanchal Pooling Station- Varanasi D/C line

General Detail

Special Purpose Vehicle (SPV)	:	WR-NR Power Transmission Limited
Bid Process Coordinator (BPC)	:	REC TPCL
Estimated Cost (Rs in crs)	:	Rs.1076 Cr
Levellers Tariff (Rs. Crs)	:	Rs.92.733 Cr
Request for Qualification	:	19.12.2016
Request for Proposal	:	22.09.2017
Letter of Intent	:	01.03.2018
Transmission Service Agreement (TSA)	:	27.04.2017
SPV acquisition	:	27.03.2018
Transmission License by CERC	:	27.08.2018
Tariff adoption by CERC	:	05.06.2018
Contract Performance Guarantee	:	Submitted on 27.03.2018
Clearance u/s 164	:	Received on 14.03.2019
Execution plan:	:	Submitted in Apr'18
EPC awarded on	:	Awarded 11.04.18
Scheduled Date of Completion	:	27.07.2021

Status of progress of transmission project

1. 765 kV Vindhyanchal Pooling Station- Varanasi D/C line

Line awarded on 11.04.2018

- Length: 189.5 Km
- Locations: 521 Nos.
- Foundation completed 336 Nos.
- Tower Erection 264 Nos.
- Stringing: 16.21 km
- Scheduled COD: Jul'21

Western Region portion:

Forest:

Stage-I approval obtained on 27.05.19. Working permission of Rewa forest division obtained on 25.06.19. Demand note for Rewa division obtained on 10.07.19 and

subsequently amount deposited on 18.07.19. Stage-I working permission for Singrauli forest obtained on 30.07.19.

Working permission for singrauli forest (where trees are not there) obtained on 30.08.2019 .

Permission for tree cutting (affected under tower area only) for Rewa obtained on 30.08.2019 .

Working Permission of Sidhi forest division obtained on 05.09.2019.

Demand Note for tree vidohan from Sidhi Forest obtained on 09.09.2019. tree vidohan amount deposited to Sidhi on 24.09.2019.

Wildlife (Son Ghariyal wildlife sanctuary): Letter regarding permission for construction of T/L over Son & Gopad river submitted on 14.03.19. Part-I & Part-II of Son Ghariyal wildlife sanctuary crossing over Son & Gopad river submitted online on 23.05.19. **CCF Sanjay Tiger reserve inspected site on 22.06.19.** part-III of the proposal has been filled and hard copy of the proposal forwarded to APCCF Bhopal on 26.06.19.

Power line crossing

Total no. of crossings	:	15 Nos.
Proposal submitted	:	15 Nos Date: 16.10.18
Approval obtained	:	7 Nos. For 400 kV Crossing on 11.12.18
Approval obtained	:	5 Nos. For 765 kV Crossing on 03.01.19
Powerline crossing of MPPTCL	:	3 Nos. Joint survey completed on 29.03.19

Railway Crossing

Proposal submitted	:	2 Nos. Date: 28.09.18
Approval obtained	:	NIL

((Railway authorities provided letter for feasibility of proposal and submission of applicaion charges on 03.09.2019 and subsequently amount deposited on 19.09.2019)

National Highway Crossing

Proposal submitted	:	1 No. Date: 06.09.18
Approval obtained	:	NIL (Joint inspection with MPRDC done on 20.04.19)

PTCC

Proposal submitted	:	Proposal submitted on 02.05.19
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Civil Aviation

Proposal submitted	:	submitted on 20.06.19. Resubmitted on 16.07.19
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Civil aviation approval received on 03.09.2019 (for two parts) and 11.09.2019 (for three parts).*Application was splited into five parts*

Defence Aviation

Proposal submitted	:	Proposal sent in hard copy on 26.06.19
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Northern Region portion:

Forest:

Forest proposal's soft copy uploaded on forest portal on 07.09.18.
NoC received from PWD, Irrigation, Railway & NHAI.

FRA & CA land for Varanasi finalized and submitted. For Mirzapur- FRA done & digital map of CA land is submitted. **Forest clearance awaited.**

Power line crossing

Total no. of crossings	:	13 Nos.	
Proposal submitted	:	13 Nos	Date: 16.10.18
Approval obtained	:	13 Nos.	[Date: 13.12.18, 21.12.18, 07.05.19, 12.06.19, 02.08.19]

Railway Crossing

Total no. of crossings	:	2 Nos.	
Proposal submitted	:	2 No.	Date: 30.10.18
Approval obtained	:	1 No.	[Date: 16.04.19] [2nd crossing proposal forwarded by DFCCIL office to Railway, Ald Demand note expected shortly.]

National Highway Crossing

Total no. of crossings	:	2 Nos.	
Proposal submitted	:	2 Nos.	Date: 04.10.18
Approval obtained	:	NIL	(Proposal is presently at MORTHA, Lucknow)

River crossing (Ganga): (1 Pile & 2 RC)

Pile foundation stopped due to rain. 40/48 nos.of pile completed

Present status: Forest proposal (30 Km, Mirzapur : 210 Ha, Varanasi : 0.28 Ha) Forest proposal's soft copy uploaded on 17.09.18. Proposal for Varanasi and Mirzapur forwarded to respective CF(s) on 06.09.19/01.10.19 respectively. Proposal forwarded to NO on 26.10.19. NO raised queries on 26.10.19 which are under process.

PTCC: Proposal submitted on 02.09.19

Aviation (Civil): Proposal submitted on 20.06.19

(13) Name of Scheme: Transmission system associated with LTA applications from Rajasthan SEZ Part-C

Background

India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW Solar, 60 GW Wind generation capacity. To identify ISTS connectivity of renewable energy projects from potential solar energy zones (SEZs) and potential wind energy zones (WEZs) of about 50 GW and 16.5 GW respectively, MNRE vide its order dated 08.06.2018 had constituted a Sub-Committee. SEZs and WEZs envisaged in 7 RE rich states (Tamil Nadu, Andhra Pradesh, Karnataka, Gujarat, Rajasthan, Maharashtra and Madhya Pradesh) were identified by SECI in association with MNRE in consultation with RE power developers. To ease the implementation of transmission infrastructure, it has been proposed to bifurcate these requirements in two phases. A total of 20GW solar & 9 GW wind projects has been planned in Phase-I (up to Dec. 2020) and 30 GW solar & 7.5 GW wind has been planned for Phase-II (December 2021)

Project Description

Transmission system for 8.9 GW of solar RE projects from Bhadla (3.55 GW), Fatehgarh (3.5 GW), Bikaner (1.85 GW) complexes in Rajasthan was technically agreed in the 2nd meeting of NRSCT held on 13.11.2018. The scheme is required for evacuation of power from balance 6050 MW of RE potential out of total quantum of 8.9 GW (2.850 GW LTA already granted)

Scope of Transmission Project-

Transmission Lines

1. Khetri – Sikar (PG) 400kV D/c line (AL59)
400kV line bays at Sikar (PG) for Khetri – Sikar (PG) 400kV D/c line (Twin AL59)
2. Khetri– Jhatikara 765kV D/c line
765kV bays at Jhatikara for Khetri– Jhatikara 765kV D/c line
1x240 MVAR Switchable Line reactors for each circuit at Jhatikara end of Khetri – Jhatikara 765kV D/c line along with reactor bays

Substation

1. Establishment of 765/400kV, 2X1500 MVA S/s at suitable location near Khetri with 765kV (2x240MVAR) and 400kV (1x125 MVAR) bus reactor along with bays. Following line bays shall also be constructed under present scope of work:
400kV line bay-2
765kV line bay-2
220kV line bays-7

2. 400kV line bays at Sikar (PG) for Khetri – Sikar (PG) 400kV D/c line (Twin AL59).
3. 765kV bays at Jhatikara for Khetri– Jhatikara 765kV D/c line.

General Details

Special Purpose Vehicle (SPV)	:	Powergrid Khetri Transmission System Ltd
Bid Process Coordinator (BPC)	:	REC Transmission Projects Company Ltd.
Estimated Cost (Rs in crs)	:	1448.15
Levellised Tariff (Rs in crs)	:	122.042
Request for Qualification	:	12.01.2019
Request for Proposal	:	13.03.2019
Letter of Intent	:	31.07.2019
Transmission Service Agreement (TSA)	:	23.04.2019
SPV acquisition	:	29.08.2019
Transmission License by CERC	:	Applied on 04.09.2019
Tariff adoption by CERC	:	Applied on 04.09.2019
Contract Performance Guarantee	:	30.08.2019
Clearance u/s 164	:	To be Applied
Execution plan submitted to CEA	:	is being prepared.
NIT issued on	:	All NOAs to Execution Agency issued.
EPC awarded on	:	All NOAs to Execution Agency issued
Scheduled Date of Completion	:	Dec'2020

Status of progress of transmission project:-

1. Khetri– Jhatikara 765kV D/c line
(Award placed in Sep'19 to M/s. TRANSRail)
- | | |
|----------------------|---------------|
| Length: | 142.577Kms |
| Locations: | 404 nos. |
| Foundation completed | 06 nos. |
| Towers erected | NIL nos. |
| Stringing completed | NIL km |
| Scheduled COD | Dec'20 |
| Anticipated COD | Dec'20 |

Constraints where Project Authority requires intervention:

Proposal for Land Acquitiuon of Khetri Substation applied before DM Jhujhunu on 12.09.2019. Till date propsoal is in office of DM, Jhunjhnu

Status of statutory approvals:

Forest:	Survey work is in progress. However, 1.179kM Line length may encounter forest of 7.89Hec
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Power line crossing

Total no. of crossings	:	30	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

Railway crossing

Total no. of crossings	:	4	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

National Highway Crossing

Totalno. of crossings	:	2	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	nil	nos.

River Crossings

Totalno. of crossings	:	NIL	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

PTCC approval : Proposal is being prepared

Defence/Civil Aviation : Propsoal is being prepared

2. Khetri– Sikar (PG) 400kV D/c line

(Award placed in Sep'19 to M/s. TRANSRAIL)

Length:	78.610Kms
Locations:	221 nos.
Foundation completed	NIL nos.
Towers erected	NIL nos.
Stringing completed	NIL km

Scheduled COD	Dec'20
Anticipated COD	Dec'20

Constraints where Project Authority requires intervention:

Work is being started in Sep'2019

Status of statutory approvals:

Forest : Survey work is in progress. However encountering of forest may be avoided.

Power line crossing

Total no. of crossings	:	10	nos.
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Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

Railway crossing

Total no. of crossings	:	2	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

National Highway Crossing

Totalno. of crossings	:	NIL	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	nil	nos.

River Crossings

Totalno. of crossings	:	1	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

PTCC approval	:	Proposal is being prepared
Defence/Civil Aviation	:	Propsoal is being prepared

Status of progress of Substation and Bay Extensions project:-

NOA to Execution Agency for New 765kV Khetri Substation and Bay Extension at 765kV Jhatikara and 400kV Sikar Substation awarded and Engineering activities and contouring at existing site is in progress.

(14) Name of Scheme: Transmission system associated with LTA applications from Rajasthan SEZ Part-A

Background

India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW Solar, 60 GW Wind generation capacity. To identify ISTS connectivity of renewable energy projects from potential solar energy zones (SEZs) and potential wind energy zones (WEZs) of about 50 GW and 16.5 GW respectively, MNRE vide its order dated 08.06.2018 had constituted a Sub-Committee. SEZs and WEZs envisaged in 7 RE rich states (Tamil Nadu, Andhra Pradesh, Karnataka, Gujarat, Rajasthan, Maharashtra and Madhya Pradesh) were identified by SECI in association with MNRE in consultation with RE power developers. To ease the implementation of transmission infrastructure, it has been proposed to bifurcate these requirements in two phases. A total of 20GW solar & 9 GW wind projects has been planned in Phase-I (up to Dec. 2020) and 30 GW solar & 7.5 GW wind has been planned for Phase-II (December 2021)

Project Description

The subject transmission scheme involves implementation of Ajmer (PG) – Phagi 765 kV D/c line which shall facilitate in transfer of power from RE sources in above complexes for onward dispersal of power to various beneficiaries.

The proposal has been technically agreed in the 2nd meeting of Northern Region Standing Committee on Transmission (NRSCT) held on 13.11.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementation through TBCB route with commissioning schedule as September, 2020

Scope of Transmission Project-

Transmission Lines

1. Ajmer (PG) – Phagi (RVPN) 765kV D/C line.

Substation

1. 2 nos 765kV line bays (AIS) at Ajmer (PG) S/s for Ajmer (PG) –Phagi (RVPN) 765kV D/c line.

2. 01 no of 765kV bay (AIS) & 01 complete GIS DIA 765kV (2 main Breakers & 1 Tie Breaker) at Phagi S/S for Ajmer (PG) – Phagi (RVPN) 765kV D/c line.
3. 3 x 80 MVAR 765kV bus reactor with GIS bay (2main bay of new DIA being created for termination of 765kV D/c line from Ajmer) at Phagi S/s along with 1X80 spare MVAR, 765kV reactor (Spare).

General Details

Special Purpose Vehicle (SPV)	:	Ajmer Phagi Transco Limited
Bid Process Coordinator (BPC)	:	REC Transmission Projects Company Ltd
Estimated Cost (Rs in crs)	:	872.06
Levellised Tariff (Rs in crs)	:	61.331
Request for Qualification	:	12.01.2019
Request for Proposal	:	13.03.2019
Letter of Intent	:	29.08.2019
Transmission Service Agreement (TSA)	:	23.04.2019
SPV acquisition	:	03.10.2019
Transmission License by CERC	:	Applied on 07.10.2019
Tariff adoption by CERC	:	Applied on 07.10.2019
Contract Performance Guarantee	:	30.08.2019
Clearance u/s 164	:	To be Applied
Execution plan submitted to CEA :	:	is being prepared.
NIT issued on	:	All NOAs to Execution Agency issued.
EPC awarded on	:	NOAs for S/Stn and T/L issued
Scheduled Date of Completion	:	Dec'2020

Status of progress of transmission project:-

1. Ajmer (PG) – Phagi (RVPN) 765kV D/C line
Award placed to M/s BAJAJ Electricals Ltd. (BAJAJ)

Length:	134.196km
Locations:	360 nos.
Foundation completed	NIL nos.
Towers erected	NIL nos.
Stringing completed	NIL km
Scheduled COD	Dec'20
Anticipated COD	Dec'20

Status of statutory approvals:

Forest	:	Exact Area of Forest could be assed only after completion of detailed survey which is likely to be completed in Oct'2019. However, Line Length of 0.85km is expected to fall under Forest Area as per the route alignment.
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Power line crossing

Total no. of crossings	:	9	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

Railway crossing

Total no. of crossings	:	2	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

National Highway Crossing

Totalno. of crossings	:	9	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	nil	nos.

River Crossings

Totalno. of crossings	:	2	nos. (River Mashi and Bandi)
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

PTCC approval : Proposal is being prepared

Defence/Civil Aviation : Propsoal is being prepared

Status of progress of Bay Extensions project:-

NOAs for AIS Type 765kV Bay Extensions both at Ajmer and Phagi is placed to M/s ABB and GIS Type 765kV Bays at Phagi to M/s GE T&D India Ltd.
Presently detailed Engineering by both the Parties are in progress.

(15) Name of Scheme: Transmission system associated with LTA applications from Rajasthan SEZ Part-B

Background

India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW Solar, 60 GW Wind generation capacity. To identify ISTS connectivity of renewable energy projects from potential solar energy zones (SEZs) and potential wind energy zones (WEZs) of about 50 GW and 16.5 GW respectively, MNRE vide its order dated 08.06.2018 had constituted a Sub-Committee. SEZs and WEZs envisaged in 7 RE rich states (Tamil Nadu, Andhra Pradesh, Karnataka, Gujarat, Rajasthan, Maharashtra and Madhya Pradesh) were identified by SECI in association with MNRE in consultation with RE power developers. To ease the implementation of transmission infrastructure, it has been proposed to bifurcate these requirements in two phases. A total of 20GW solar & 9 GW wind projects has been planned in Phase-I (up to Dec. 2020) and 30 GW solar & 7.5 GW wind has been planned for Phase-II (December 2021)

Scope of Transmission Project-

Transmission Line

1. Fatehgarh-II – Bhadla-II 765kV D/c line.

Substation

1. 2 nos of 765kV bays each at Fatehgarh-II and Bhadla-II S/s for Fatehgarh-II – Bhadla-II 765kV D/c line.
2. 240MVAR switchable line reactor with NGR of 400ohm on each circuit of Fatehgarh-II – Bhadla-II 765kV D/c line at Fatehgarh-II end.

General Details

Special Purpose Vehicle (SPV)	:	Fatehgarh-II Transco Limited
Bid Process Coordinator (BPC)	:	PFC Consulting Ltd.
Estimated Cost (Rs in crs)	:	1186
Levelling Tariff (Rs in crs)	:	71.558.
Request for Qualification	:	19.02.2019
Request for Proposal	:	03.06.2019
Letter of Intent	:	11.09.2019
Transmission Service Agreement (TSA)	:	16.07.2019
SPV acquisition	:	14.10.2019

Transmission License by CERC	:	Applied on 16.10.2019
Tariff adoption by CERC	:	Applied on 16.10.2019
Clearance u/s 164		To be Applied
Execution plan submitted to CEA :		is being prepared.
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs except L/R Package issued
Scheduled Date of Completion	:	Dec'2020

Status of progress of transmission project:-

1. Fatehgarh-II – Bhadla-II 765kV D/c line.
Award placed to M/s SKIPPER BAJAJ Electricals Ltd. (BAJAJ)

Length:	184.977 km
Locations:	520 nos.
Foundation completed	NIL nos.
Towers erected	NIL nos.
Stringing completed	NIL km

Scheduled COD	Dec'20
Anticipated COD	Dec'20

Status of statutory approvals:

Forest	:	As per the Route Alignment No Forest is expected to Encountering to Line Route, however, exact Line Length or area could be assessed only after completion of detailed survey.
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Power line crossing

Total no. of crossings	:	14	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

Railway crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

National Highway Crossing

Totalno. of crossings	:	4	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	nil	nos.

River Crossings

Totalno. of crossings	:	NIL	nos.
Proposal submitted	:	NIL	nos.
Approval obtained	:	NIL	nos.

PTCC approval : Proposal is being prepared

Defence/Civil Aviation : Propsoal is being prepared

Status of progress of Bay Extensions project:-

NOAs for 765kV Bay Extensions both at Fathegarh-II(PG) Substation and Bhadla-II Substation (PG) is placed to M/s BHEL.

Presently detailed Engineering by both the Parties are in progress.

(16) Name of Scheme: Transmission System for providing connectivity to RE Projects at Bhuj-II (2000 MW) in Gujarat

Scope of Transmission Project-

Transmission Line

1. Reconfiguration of Bhuj PS – Lakadia PS 765kV D/c line so as to establish Bhuj-II –Lakadia 765 kV D/C line as well as Bhuj-Bhuj-II 765kV D/C line

Substation

1. Establishment of 765/400/220kV, Bhuj-II PS (GIS) with 7x500MVA, 1-ph 765/400 /33kV ICT at Bhuj-II PS (GIS) and 4x500MVA, 3-ph 400/220/ 33kV ICT at Bhuj-II PS(GIS).
2. 7x80MVAR, 765kV Line Reactor at Bhuj-II
3. 4x110MVAR, 1-ph 765kV Bus Reactor at Bhuj-II PS(GIS)
4. 1x125MVAR, 3-ph 420kV Bus Reactor at Bhuj-II PS(GIS)

General Details

Special Purpose Vehicle (SPV)	:	Bhuj-II transmission limited
Bid Process Coordinator (BPC)	:	PFC Consulting Ltd.
Estimated Cost (Rs in crs)	:	1409.17
Levellised Tariff (Rs in crs)	:	123.767
Request for Proposal	:	12.06.2019
Letter of Intent	:	31.07.2019
Transmission Service Agreement (TSA)	:	23.04.2019
SPV acquisition	:	16.10.19
Transmission License by CERC	:	
Tariff adoption by CERC	:	
Clearance u/s 164	:	To be Applied
Execution plan submitted to CEA	:	is being prepared.
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOA issued for TL work
Scheduled Date of Completion	:	Dec'2020

Status of progress of transmission project:-

2. Reconfiguration of Bhuj PS – Lakadia PS 765kV D/c line so as to establish Bhuj-II – Lakadia 765 kV D/C line as well as Bhuj-Bhuj-II 765kV D/C line
Award placed to M/s Transrail Lighting Limited

Detailed Survey work is under progress.

3. Establishment of 765/400/220kV, Bhuj-II PS (GIS)

NOA to be issued to EPC.

(17) Name of transmission project- System strengthening for WR

Background

A large number of IPP projects totaling to an installed capacity of 35000 MW are proposed to come in Chhattisgarh, MP, Odisha, Jharkhand and West Bengal and scheduled to commissioned by 12th plan and targeted beneficiaries are constituents of NR & WR. For evacuating power from these IPPs and delivering it to the target beneficiaries a comprehensive system has been evolved. The evolved transmission system consists of (i) dedicated transmission system from generating station to pooling point and their interconnection (ii) System strengthening common to WR and NR (iii) System strengthening in WR (iv) System strengthening in NR. This scheme is part of High Capacity Power Transmission Corridor(HPTC)-I & V, which has been planned for evacuation of power from Phase-I generation projects in Odisha and system strengthening of WR respectively.

Scope of transmission project

1. Jabalpur-Bhopal 765 kV S/C line
2. Bhopal-Indore 765 kV S/C line
3. Bhopal-Bhopal (MP) 400 kV D/C line
4. Aurangabad-Dhule 765 kV S/C line
5. Dhule-Vadodara 765 kV S/C line
6. Dhule - Dhule(Mah) 400 kV D/C Line
7. 2x1500 MVA 765/400 kV s/s at Bhopal
8. 2x1500 MVA, 765/400 kV s/s at Dhule

General Details

Special Purpose Vehicle (SPV)	:	Bhopal Dhule Trans. Co. Ltd. (SPTL)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	2900
Levellised Tariff (Rs. Crs)	:	199.5
Request for Qualification	:	02.03.2010
Request for Proposal	:	10.01.2011
Letter of Intent	:	19.01.2011
Transmission Service Agreement (TSA)	:	07.12.2010
SPV acquisition	:	31.03.2011
Transmission License by CERC	:	12.10.2011
Tariff adoption by CERC	:	28.10.2011
Clearance u/s 164	:	29.01.2013
Execution plan submitted to CEA	:	
Scheduled Date of Completion	:	30.03.2014
Actual Date of Completion	:	Jun'2015

Status of progress of transmission project

- | | | |
|--|---|------------------------------|
| 1. Jabalpur-Bhopal 765 kV S/C line | : | Line commissioned on 06/2015 |
| 2. Bhopal-Indore 765 kV S/C line | : | Line commissioned on 10/2014 |
| 3. Bhopal-Bhopal (MP) 400 kV D/C line. | : | Line commissioned on 07/2014 |
| 4. Aurangabad-Dhule 765 kV S/C line | : | Line commissioned on 10/2014 |

- | | | |
|---|---|------------------------------|
| 1. Dhule-Vadodara 765 kV S/C line | : | Line commissioned on 02/2015 |
| 2. Dhule - Dhule(Mah) 400 kV D/C Line | : | Line commissioned on 11/2014 |
| 3. 2x1500 MVA 765/400 kV s/s at Bhopal: | | S/s commissioned on 07/2014 |
| 8. 2x1500 MVA, 765/400 kV s/s at Dhule: | | S/s Commissioned on 11/2014 |

Transmission project commissioned on Jun-2015.

(18) Name of transmission project - System strengthening for WR and NR

Background

A large number of IPP projects totaling to an installed capacity of 35000 MW are proposed to come in Chhattisgarh, MP, Odisha, Jharkhand and West Bengal and scheduled to commissioned by 12th plan and targeted beneficiaries are constituents of NR & WR. For evacuating power from these IPPs and delivering it to the target beneficiaries a comprehensive system has been evolved. The evolved transmission system consists of (i) dedicated transmission system from generating station to pooling point and their interconnection (ii) System strengthening common to WR and NR (iii) System strengthening in WR (iv) System strengthening in NR. This scheme is part of High Capacity Power Transmission Corridor (HPTC)-II, which has been planned for strengthening of transmission system required for transfer of power from Generating projects in Jharkhand to NR/WR.

Scope of transmission project

1. Dhramjaygarh -Jabalpur 765 kV D/C line
2. Jabalpur-Bina 765 kV S/C line

General Details

Special Purpose Vehicle(SPV)	:	Jabalpur Transmission Company Limited (Sterlite Power Trans. Limited)
Bid Process Coordinator(BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	1720
Levellised Tariff (Rs. Crs)	:	142.1
Request for Qualification	:	
Request for Proposal	:	28.12.2010
Letter of Intent	:	31.01.2011
Transmission Service Agreement(TSA)	:	12.11.2013
SPV acquisition	:	31.03.2011
Transmission License by CERC	:	12.10.2011
Tariff adoption by CERC	:	28.10.2011
Contract Performance Guarantee	:	
Clearance u/s 164	:	2.07.2013
Execution plan submitted to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	30.03.2014
Actual Date of Completion	:	Sep' 2015

Status of progress of transmission project

1. Dhramjaygarh -Jabalpur 765 kV D/C lines - Line commissioned on 09/2015
2. Jabalpur-Bina 765 kV S/C line - Line commissioned on 06/2015

Transmission project commissioned on September, 2015.

(19) Name of transmission project - Scheme for enabling import of NER/ER surplus by Northern Region

Background

For meeting its power requirements in the XI plan and beyond, NR would need to import substantial amount of power from other regions. Most of this power would be imported from surplus ER and NER. For import of power by NR from generation projects proposed to come up in northern part of ER and NER, system strengthening would be required in the transmission corridors connecting from NER to ER and in the eastern part of ER. This transmission project has been proposed for strengthening of NER-ER transmission corridor. Though the scheme is physically located in North eastern and eastern region it has been conceived as an extension of NR network as this will be utilized mainly by NR for meeting its power import requirement from projects located in NER and Sikkim in ER. Substantial exportable power would be available in the NER after commissioning of Tripura Gas (740 MW), Bongaigaon TPS (9750 MW), Kameng HEP (600 MW). Subansiri HEP (2000 MW) would add further to the exportable surplus of NER. Power from hydro projects in Sikkim would also be imported by NR. The constituents of NR are likely to be allocated power from hydro projects of Kameng and Subansiri.

Scope of transmission project

1. Bongaigaon - Siliguri 400 kV D/C line
2. Purnea – Biharsharif 400 kV D/C line

General Details

Special Purpose Vehicle (SPV)	:	East-North Interconnection Company Ltd (A subsidiary of Sterlite Power Trans. Limited)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	1700
Levelling Tariff (Rs. Crs)	:	118.8
Request for Qualification	:	
Request for Proposal	:	20.10.2008
Letter of Intent	:	07.01.2010
Transmission Service Agreement	:	10.08.2009
SPV acquisition	:	31.03.2010
Transmission License by CERC	:	28.10.2010
Tariff adoption by CERC	:	28.10.2010
Contract Performance Guarantee	:	
Clearance u/s 164	:	19.05.2011
Execution plan submitted to CEA	:	20.10.2008
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	
Actual Date of Completion	:	Nov' 2014

Status of progress of transmission project

1. Bongaigaon-Siliguri 400 kV (Q) D/C: Line commissioned on 11/2014
2. Purnea-Biharsharif 400 kV D/C (Q): Line commissioned on 09/2013

Transmission project commissioned on November, 2014.

(20) Name of transmission project- Part ATS for RAPP U-7&8 in Rajasthan

Background

For evacuation of power from RAPP-5 to 8(1840 MW), RAPP–5&6 (440 MW) and RAPP-7&8 (2x700 MW), following composite system was evolved and planned to be developed in a phased manner matching with generation projects.

For RAPP -5&6 generation, following transmission system have been commissioned and are in operation;

- RAPP – Kankroli 400kV D/C line
- RAPP – Kota 400kV S/C line

For RAPP -7&8 generation, following transmission system have been planned

- RAPP – Jaipur 400kV D/C line with one ckt via Kota
- RAPP – Shujalpur 400kV D/C line

While element 1 is being taken by PGCIL, the element 2 is proposed under TBCB. This 400 kV line would also act as an inter-regional link between NR and WR. The link would also help in evacuation of power from the complex even in case of any grid constraints in NR.

Scope of transmission project

1. RAPP – Shujalpur 400 kV D/C line

General Details

Special Purpose Vehicle(SPV)	:	RAPP Transmission Company Limited (A subsidiary of Sterlite Power Trans. Limited)
Bid Process Coordinator(BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	310
Levellised Tariff (Rs. Crs)	:	36.5
Request for Qualification	:	10.01.2013
Request for Proposal	:	09.09.2013
Letter of Intent	:	17.09.2013
Transmission Service Agreement(TSA)	:	24.07.2013
SPV acquisition	:	12.03.2014
Transmission License by CERC	:	31.07.2014
Tariff adoption by CERC	:	23.07.2014
Contract Performance Guarantee	:	23.11.2013
Clearance u/s 164	:	07.01.2015
Execution plan submitted to CEA	:	30.06.2014
NIT issued on	:	08.11.2013
EPC contract awarded on	:	18.09.2014
Scheduled Date of Completion	:	28.02.2016
Actual Date of completion	:	November, 2016

Status of progress of transmission project

- (1) RAPP - Shujalpur 400kV D/C line : Line Charged on 15th November 2016
Transmission project commissioned on Nov-16.

(21) Name of transmission project - Eastern Region System Strengthening Scheme-VII

Background

In view of the growth of generation projects in different pockets of ER, it is felt desirable to strengthen the interconnection of the state grids with the regional grid to facilitate exchange of additional power between them. This scheme has been planned as the system-strengthening scheme for exchange of power between West Bengal grid and inter-state transmission system (ISTS).

Scope of transmission project

1. Purulia PSPP – Ranchi 400 kV D/C line
2. Kharagpur – Chaibasa 400 kV D/C line

General Details

Special Purpose Vehicle (SPV):	Purulia & Kharagpur Transmission Company Limited (A subsidiary of Sterlite Power Trans. Limited)	
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. Crs)	:	370
Levelling Tariff (Rs. Crs)	:	58.9
Request for Qualification	:	28.12.2012
Request for Proposal	:	06.09.2013
Letter of Intent	:	17.09.2013
Transmission Service Agreement (TSA)	:	06.08.2013
SPV acquisition	:	09.12.2013
Transmission License by CERC	:	30.05.2014
Tariff adoption by CERC	:	20.08.2014
Contract Performance Guarantee	:	22.11.2013
Clearance u/s 164	:	20.05.2015
Execution plan submitted to CEA	:	10.03.2014
NIT issued on	:	08.11.2013
EPC contract awarded on	:	02.12.2014 (For KC Line) & 27.05.2015 (For PR line)
Scheduled Date of Completion	:	April 2016
Actual Date of completion	:	January, 2017

Status of progress of transmission project

1. Purulia PSP (WB) – Ranchi (PG) 400 kV D/C line
 - Length: 223.4 Ckm .Line commissioned on 07-Jan-17
2. Chaibasa – Kharagpur 400 kV D/C line
 - Length: 323 Ckm Locations: 426 nos

Line Completed on Jun-16, Project Commissioned on Jan-17.

(22) Name of transmission project - Northern Region System Strengthening Scheme(NRSS-XXIX)

Background

Presently the power supply to the valley is through Kishenpur – Wagoora 400 kV D/C line, Kishanpur- Pampore 220 kV D/C line and Udampur – Pampore 132 kV D/C line. Kishanpur -newwanpoh 400 kV D/C Line is under construction. All the existing and under construction line are routed through Udampur – Batote – Banihal – Pir Panjal pass. The common corridor of the transmission line is highly prone to snow storm, landslides and other natural calamities making power supply to the Kashmir valley vulnerable. There was a complete collapse of power supply to Kashmir valley on 6th and 7th Jan.'12 due to heavy snowfall and breakdown/tripping of all three existing links between Jammu region and Kashmir valley. Further power supply to Jammu and Kashmir is basically through 400/220 kV Kishanpur substation and there is an immediate need for providing an alternate route for transfer of power from Jammu region to Kashmir valley. Further to meet the high load growth anticipated in northern part of Kashmir and to cater to projected loads, a 400/220 kV substation at Amargarh in North Kashmir area is required. Accordingly, to mitigate above constraints present scheme has been proposed.

Scope of transmission project

1. Establishment of 7 x 105 MVA, 400/220 kV GIS substation at Amargarh
2. Jalandhar – Samba 400 kV D/C line
3. Samba – Amargarh 400 kV D/C routed through Akhnoor & Rajouri
4. LILO of both circuits of Uri – Wagoora 400 kV D/c line at Amargarh

General Details

Special Purpose Vehicle (SPV)	:	NRSS-XXIX Transmission Limited (Sterlite Power Trans. Limited)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. crs)	:	2621
Levelised Tariff(Rs. Crs)	:	437.705
Request for Qualification	:	02.08.2013
Request for Proposal	:	09.05.2014
Letter of Intent	:	23.05.2014
Transmission Service Agreement (TSA)	:	02.01.2014
SPV acquisition	:	04.08.2014
Transmission License by CERC	:	14.11.2014
Tariff adoption by CERC	:	10.12.2014
Contract Performance Guarantee	:	26.06.2014
Clearance u/s 164	:	30.09.2015
Execution plan submitted to CEA	:	07.11.2014
NIT issued on	:	15.09.2014(For J-S Line), 05.03.2015(For S-A line) & 18.09.2014(For Amargarh S/S)
EPC contract awarded on	:	15.12.2014(for JS Line), 29.07.2015 (for SA Line) & 21.12.15 (for Amargarh S/S)
Scheduled Date of Completion	:	04.10.2018

Actual Date of completion : August, 2018

Status of progress of transmission projects

1. Jullandhar – Samba 400 kV D/C line

Length: 270 Ckm .

Line Commissioned on June-16.

2. Samba – Amargarh 400 kV D/C line

Length: 546.8 Ckm .

Locations: 761 nos

Line Commissioned in Aug'18.

3. 7x105 MVA, 400/220 kV Amargarh GIS

Substation commissioned in May'18.

4. LILO of both circuit of Uri – Wagoora 400 kV D/C line at Amargarh

Length: 13.64 ckm

Locations: 23 nos.

Line commissioned in Mar'18/Apr'18.

Transmission Project commissioned on Aug'18.

(23) Name of transmission project - Connectivity lines for Maheshwaram 765/400 kV Pooling Station

Background

Presently Southern Region is facing severe power shortage. This power deficit situation has arisen mainly due to (i) delay/deferment of anticipated generation projects and (ii) also due to non-availability of gas for existing gas projects in Southern Region. Presently the existing/planned system can facilitate import of about 9000 - 10000 MW into Southern Region. However, under certain scenarios of non-availability / delay in commissioning of some of the generation projects in Southern region expected power transfer requirement is about 16000 MW by 2018-19. In view of large deficit and requirement of transmission system to meet future power transfer requirements, high capacity Inter-regional strengthening schemes were identified. The Present Scheme is part of the above identified scheme.

Scope of transmission project

1. Maheshwaram (PG) – Mehboob Nagar 400 kV D/C line
2. Nizamabad – Yeddumailaram (Shankarpalli) 400kV D/c line
3. 2 No. of 400 kV line bays at Mehboob Nagar S/S of TSTRANSCO
4. 2 No. of 400 kV line bays at Yeddumailaram S/S of TSTRANSCO.

General Detail

Special Purpose Vehicle (SPV)	:	Maheshwaram Transmission Ltd. (Sterlite Power Trans. Limited)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. crs)	:	534
Levellised Tariff (Rs. Crs)	:	55.251
Request for Qualification	:	21.08.2014
Request for Proposal	:	03.08.2015
Letter of Intent	:	21.07.2015
Transmission Service Agreement (TSA)	:	10.06.2015
SPV acquisition	:	20.08.2015
Transmission License by CERC	:	23.11.2015
Date of tariff adoption by CERC	:	24.11.2015
Contract Performance Guarantee	:	18.08.2015
Clearance u/s 164	:	23.09.2016
NIT issued on	:	02.11.2015
EPC contract awarded on	:	13.01.2016
Execution plan submitted to CEA	:	01.12.2015
Scheduled Date of Completion	:	20.06.2018
Actual Date of completion	:	December, 2017

Status of progress of transmission project:

1. Maheshwaram – Mahboobnagar 400 kV D/C line

- Length: 197.178 ckm
- Locations: 255 nos

Line commissioned on Dec'17.

2. Nizamabad – Yeddumailaram (Shankarpalli) 400 kV D/C line

- Length: 279.326 ckm
- Locations: 367 nos

Line commissioned on Oct'17.

3. 2 No. of 400 kV line bays at Mehboob Nagar S/S of TSTRANSCO

Bay commissioned on Dec'17

4. 2 No. of 400 kV line bays at Yeddumailaram S/S of TSTRANSCO.

Bay commissioned on Oct'17.

Transmission Project commissioned on Dec'17.

(24) Name of transmission project - Common Transmission system for phase-II generation projects in Orissa and immediate evacuation system for OPGC project (Orissa)

Background

Various IPPs, expected to be commissioned in Odisha, had applied for grant of connectivity and LTOA/LTA. Seven IPPs were considered under phase-I and transmission system for the same under implementation under HCTPC-I scheme. Further following 5 projects were considered under phase-II generation projects in Odisha;

Sterlite Energy Ltd (Ph-I project) (LTA of 1000 MW under Ph-II)	2400 MW
GMR Kamalanga Energy Ltd(Ph-II)	350 MW
OPGC	1350 MW
Darlipalli(NTPC)	1600 MW
NSL Nagapatnam Power & Infratech	1320 MW

and following transmission system has been finalized for evacuation of power from above mentioned generation projects;

1. Immediate evacuation system for Ph-II generation projects in Odisha

- Sterlite TPP – Jharsuguda 400 kV D/C line
- GMR – Angul 400 kV D/C line
- OPGC – Jharsuguda 400 kV D/C line
- Darlipalli –Jharsuguda 400 kV D/C line
- NSL Nagapatnam – Angul 400 kV D/C line

2. Common transmission system associated with Ph-II generation projects in Odisha

- Angul – Jharsuguda – Dharamjaygarh 765 kV D/C line(2nd)
- Jharsuguda – Raipur pool 765 kV D/C line
- LILO of Rourkela – Raigarh 400 kV D/C line(2nd) at Jharsuguda
- Addition of 2x1500 MVA, 765/400 kV ICT at Jharsuguda
- Addition of 2x1500 MVA, 765/400 kV ICT at Angul
- Split bus arrangement at 400 kV and 765 kV bus in both Angul and Jharsuguda

Scope of transmission project

1. Jharsuguda – Raipur pool 765 kV D/C line
2. OPGC – Jharsuguda 400 kV D/C line

General Detail

Special Purpose Vehicle (SPV)	:	Odisha Generation Phase-II Trans. Limited (A subsidiary of Sterlite Power Trans. Limited)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	1698
Levellised Tariff (Rs. Crs)	:	139.793
Request for Qualification	:	23.04.2015
Request for Proposal	:	15.12.2015
Letter of Intent	:	06.01.2016

Transmission Service Agreement :	20.11.2015
SPV acquisition :	08.04.2016
Transmission License by CERC :	30.06.2016
Tariff adoption by CERC :	31.05.2016
Contract Performance Guarantee :	28.01.2016
Clearance u/s 164 :	07.03.2017
Execution plan submitted to CEA :	14.07.2016
NIT issued on :	10.01.2016
EPC contractor awarded on :	23.06.2016
Scheduled Date of Completion :	08.08.2019
Anticipated Date of Completion :	Jan'19

Status of progress of transmission project

1. Jharsuguda – Raipur 765 kV D/C (hexa) line

Length:	609.9 CKm
Locations:	782 nos
Foundation completed:	782 nos
Tower erected:	782 nos
Stringing completed:	609.9 CKm
Scheduled COD:	Aug'19

Received Approval for Energization certificate from CEA on 14.12.18 and line is ready for charging.

Constraints where Project Authority requires intervention:

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Chattisgarh Portion-

Locations	:	27 nos.
Length	:	40 km
Forest area affected (ha)	:	71.76 ha
Forest proposals submitted on	:	13.09.2016
Current status	:	Stage-I Approval / tree cutting permission received

Odisha Portion-

Locations	:	31 nos.
Length	:	25 km
Forest area affected (ha)	:	94.65 ha
Forest proposals submitted on	:	03.10.2016
Current status:	:	Stage-I Approval / tree cutting permission received.

Power line crossing

Total no. of crossings	:	46	nos.
Proposal submitted	:	46	nos.
Approval obtained	:	46	nos.

Railway crossing

Total no. of crossings	:	6	nos.
Proposal submitted	:	6	nos.
Approval obtained	:	6	nos.

National Highway Crossing

Total no. of crossings	:	6	nos.
Proposal submitted	:	6	nos.
Approval obtained	:	6	nos.

River Crossings

Total no. of crossings	:	0	nos.
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PTCC approval (Chattisgarh Portion)

Proposal submitted to Defence on	:	23.06.2016
Proposal submitted to BSNL on	:	23.06.2016
Proposal submitted to Railways on	:	23.06.2016
Current status	:	Received

PTCC approval (Odisha Portion)

Proposal submitted to Defence on	:	23.06.2016
Proposal submitted to BSNL on	:	23.06.2016
Proposal submitted to Railways on	:	23.06.2016
Current status: Approval Obtained on	:	05.09.2017

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on	:	
Current Status	:	Obtained

2. OPGC TPS– Jharsuguda 400 kV D/C (triple) line

- Length: 102.5 ckm
- Locations: 152 nos

Line commissioned on Dec'17.

(25) Name of transmission project - Creation of new 400 kV GIS in Gurgaon area and Palwal as a part of ISTS

Background

HVPNL furnished district wise load projections of Haryana for 13th Plan (2021-22). Looking at the load growth in Prithala and around Gurgaon areas, new three-400kV substation one at Kadarapur, other at Sohna Road in Gurgaon area and 400kV substation at Prithla in Palwal area as a part of Inter State Transmission System (ISTS) has been proposed to cater the load demand of Gurgaon and Palwal. The first two S/S are to cater the load demand of sector 58 to sector 67 and sector 68 to sector 80 sectors of Gurgaon respectively. The creation of Prithala S/S would meet the power demand of the area to be developed under Prithala Development Plan. Beside this it will also act as a main feeding source to Palwal, Rangla Rajpur and Meerpur Kurli.

Scope of transmission project

1. Aligarh-Prithala 400 kV D/C HTLS line
2. Prithala-Kadarapur 400 kV D/C HTLS line
3. Kadarapur-Sohna road 400 kV D/C HTLS line
4. LILO of Gurgaon – Manesar 400 kV D/C (Q) line at Sohna Road
5. Neemrana(PG) – Dhanonda 400 kV D/C HTLS line
6. 2x500 MVA, 400/220 kV GIS at Kadarapur (Gurgaon)
7. 2x500 MVA, 400/220 kV GIS at Sohna Road (Gurgaon)
8. 2x500 MVA, 400/220 kV GIS at Prithala(Palwal)
9. 2 nos. of 400kV bays at Dhanonda S/S

General Detail

Special Purpose Vehicle (SPV)	:	Gurgaon Palwal Transmission Limited. (Sterlite Power Trans. Limited)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	1640
Levellised Tariff (Rs. Crs)	:	125.542
Request for Qualification	:	15.10.2015
Request for Proposal	:	07.03.2016
Letter of Intent	:	17.03.2016
Transmission Service Agreement (TSA)	:	04.03.2016
SPV acquisition	:	14.07.2016
Transmission License by CERC	:	29.09.2016
Tariff adoption by CERC	:	06.09.2016
Contract Performance Guarantee	:	11.07.2016
Clearance u/s 164	:	31.03.2017
Execution plan submitted to CEA	:	09.11.2016
NIT issued on	:	24.06.2016 (For Transmission Line) 21.04.2016 (For S/s- Pre-Bid tie up)
EPC contract awarded on	:	25.11.2016 (For Transmission Line) 28.10.2016 (For Substation)
Scheduled Date of Completion	:	Sep'19 (38 months)

Status of progress of transmission project:

1. Aligarh-Prithala 400 kV D/C HTLS line

Length: 98.92 CKm
Locations: 108 nos.

Line declared deemed commissioned in July'19.

2. Prithala-Kadarpur 400 kV D/C HTLS line

Length: 57.9 Ckm
Locations: 69 nos.
Foundation completed: 69 nos
Tower erected: 69 nos
Stringing completed: 57.9 ckm
Scheduled COD: May'19

Constraints where Project Authority requires intervention:

1. Right of way (RoW) issue raised by Indiabulls in Village – Harcharndpur, Tehsil – Sohna, District – Gurgaon (Haryana) and the same is pending at High Court, Chandigarh

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	:	7 nos.
Length	:	3188 mtrs
Forest area affected (ha)	:	14.6613
Forest proposals submitted on	:	
Current status	:	Stage-II received.

Power line crossing

Total no. of crossings	:	4	nos.
Proposal submitted	:	4	nos.
Approval obtained	:	4	nos.

Railway crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

National Highway Crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

River Crossings

Total no. of crossings	:	0	nos.
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Proposal submitted	:	0	nos.
Approval obtained	:	0	nos.

PTCC approval

Proposal submitted to Defence on	:	
Proposal submitted to BSNL on	:	
Proposal submitted to Railways on	:	
Current status	:	Approval Received.

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on :

Current Status: NOC from Defence and civil aviation received.

3. Kadarapur-Sohna road 400 kV D/C HTLS line

Length:	20.56 Ckm
Locations:	29 nos.
Foundation completed:	29 nos
Tower erected:	27 nos
Stringing completed:	0 ckm
Scheduled COD:	Sep'19

Constraints where Project Authority requires intervention:

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- Locations: 7 nos. Length: 3146 mtrs

Forest area affected (ha) : 14.4716

Forest proposals submitted on .04.10.17

Current status: Stage-II Received.

Power line crossing

Total no. of crossings	:	3	nos.	
Proposal submitted	:	3	nos.	Date:
Approval obtained	:	3	nos.	Date:

Railway crossing

Total no. of crossings	:	0	nos.	
Proposal submitted	:	0	nos.	Date:
Approval obtained	:	0	nos.	Date:

National Highway Crossing

Total no. of crossings	:	1	nos.	
Proposal submitted	:	1	nos.	Date:
Approval obtained	:	1	nos..	Date:

River Crossings

Total no. of crossings	:	0	nos.
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PTCC approval

Proposal submitted to Defence on
Proposal submitted to BSNL on
Proposal submitted to Railways on
Current status : Approval Received

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation
Current Status: Received Civil and Defence clearance..

4. LILO of Gurgaon – Manesar 400 kV D/C (Q) line at Sohna Road

Length: 2.16 Ckm
Locations: 6 nos.
Foundation completed: 0 nos
Tower erected: 0 nos
Stringing completed: 0 nos
Scheduled COD: Sep'19

Constraints where Project Authority requires intervention: Nil

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- Locations:0 nos. Length: 0 kms
Forest area affected (ha) : **Nil**
Forest proposals submitted on
Current status:

Power line crossing

Total no. of crossings	:	0	nos.	
Proposal submitted	:	0	nos.	Date:
Approval obtained	:	0	nos.	Date:

Railway crossing

Total no. of crossings	:	0	nos.	
Proposal submitted	:	0	nos.	Date:
Approval obtained	:	0	nos.	Date:

National Highway Crossing

Total no. of crossings	:	0	nos.	
Proposal submitted	:	0	nos.	Date:
Approval obtained	:	0	nos.	Date:

River Crossings

Total no. of crossings	:	0	nos.	
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PTCC approval

Proposal submitted to Defence on

Proposal submitted to BSNL on
Proposal submitted to Railways on
Current status: **Approval Received**

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on.....
Current Status: **Received Civil and Defense clearance**

5. Neemrana(PG) – Dhanonda 400 kV D/C HTLS line

Length: 93.43 Ckm
Locations: 111 nos.

Transmission line commissioned in Feb'19

6. 2x500 MVA, 400/220 kV GIS at Kadarpur (Gurgaon)

Land Acquired: 100%.
Civil work completed: 100%
Equipment supplied: 100%
Equipment erection: 100%
Scheduled COD May'19
Electrical Inspection was held on 31-10-2019

Constraints/Approval if any:

7. 2x500 MVA, 400/220 kV GIS at Sohna Road (Gurgaon)

Land Acquired: 100%.
Civil work completed: 63%
Equipment supplied: 99.74%
Equipment erection: 48%
Scheduled COD Sep'19

Constraints/Approval if any:

1. During meeting held in CEA, HVPNL has raised the issue of difficulty in finalizing the route of 220 kV D/S line. In pursuance to the meeting, a committee comprising of the members from CEA, HVPNL and GPTL have been formed to review the route of D/s 220 kV line from Sohna road, Kadarpur and Prithla S/s. In the meeting held on 16-11-2018 during site visit of Technical Committee comprising officers from CEA, HVPNL and GPTL, M/s GPTL conveyed that construction of 220kV line up to and including dead end tower is not in the scope of TBCB work. However, M/s GPTL had agreed for providing technical support for termination of 220kV lines at Sohna Substation.

8. 2x500 MVA, 400/220 kV GIS at Prithala(Palwal)

Scheduled COD May'19

Substation declared deemed commissioned in July'19

9. 2 nos. of 400kV bays at Dhanonda S/S

Scheduled COD May'19

Bays charged on 20-06-2018 and 14-07-2018

(26) Name of transmission project - Connectivity system for Khargone TPP (2x660 MW)

Background

NTPC Ltd. has planned to establish a 1320MW (2x660MW) thermal power project at Khargone in the state of Madhya Pradesh. Accordingly, transmission system for evacuation of power from generation project has been evolved.

Scope of transmission project

1. LILO of one ckt of Khandwa - Rajgarh 400kV D/C line at Khargone TPP
(The LILO shall be used for start-up power and commissioning activities requirement. After commissioning of balance transmission system, the LILO would be bypassed at Khargone generation switchyard and may be utilized only under contingency condition)
2. Khargone TPP – Khandwa pool 400 kV D/C (Quad) line
3. System strengthening in WR
 - i. Khandwa Pool – Indore 765kV D/C line
 - ii. Khandwa Pool – Dhule 765 kV D/C line
 - iii. Establishment of 765/400kV, 2x1500MVA pooling station at Khandwa
765 kV:
 - ICTs: 7x500MVA, 765/400 kV (1 spare unit)
 - ICT bays: 2 no.
 - Line bays: 4 no. (2 no. for Khandwa pool – Indore 765 kV D/C & 2 no. for Khandwa Pool – Dhule 765 kV D/C)
 - Bus reactor: 3 X 80 MVAR
 - Bus reactor bay: 1 no.
 - Switchable Line reactors: 7 X 80 MVAR (1 unit is as a spare unit) for Khandwa Pool – Dhule 765 kV D/C (each 240 MVAR reactor with 800 Ω NGR along with its auxiliaries)
 - Space for line bays (future): 4 no.
 - Space for ICT bays (future): 3 no.
 - Space for 1500 MVA, 765/400 kV ICTs (future): 3 no.**400 kV:**
 - ICT bays: 2 no.
 - Line bays for termination of Khargone TPP– Khandwa PS 400 kV D/C line: 2 no.
 - Bus reactor: 1 X 125 MVAR
 - Bus reactor bay: 1
 - Space for line bays (future): 6 no.
 - Space for ICT bays (future): 3 no.
 - iv. 2 nos. of 765 kV line bays and 7 X 80 MVAR Switchable line reactors (1 unit as spare) along with 800 Ω NGR & its auxiliaries for Khandwa Pool – Dhule 765 kV D/C at Dhule 765/400 kV substation of M/s BDTCL.

General Details

Special Purpose Vehicle (SPV)	: Khargone Transmission Limited (SPTL)
Bid Process Coordinator (BPC)	: RECTPCL
Estimated Cost (Rs. crs)	: 2136
Levelling Tariff (Rs. Crs)	: 159.11334
Request for Qualification	: 30.11.2015
Request for Proposal	: 11.02.2016
Letter of Intent	: 26.05.2016
Transmission Service Agreement (TSA)	: 14.03.2016
SPV acquisition	: 22.08.2016
Transmission License by CERC	: 17.11.2016
Tariff adoption by CERC	: 11.11.2016
Contract Performance Guarantee	: 08.07.2016
Clearance u/s 164	: 05.07.2017
Execution plan submitted to CEA	: 18.12.2016
NIT issued on	: 27.05.2016 (For Transmission Lines) 29.06.2016 (For Substation)
EPC contract awarded on	: 25.11.2016 (For Transmission Lines)
Scheduled Date of Completion	: July 2019

Status of progress of transmission project;

1. LILO of one ckt of Khandwa - Rajgarh 400kV D/C line at Khargone TPP

Length	:13.574 CKm
Locations	:21 nos.

Line Commissioned in Feb, 2018.

2. Khargone TPP – Khandwa pool 400 kV D/C (Quad) line

• Length:	50.1 CKm
• L Locations:	66 nos.
• Foundation completed:	63 nos
• Tower erected:	62 nos
• Stringing completed:	24 ckm
• Scheduled COD:	Jul'19

Constraints where Project Authority requires intervention:

1. KTL had to divert the route for construction of KK line in order to avoid interception of KK Line with under progress NTPC Railway line.
2. RoW issues at Location no 7/0 (Village-Bhogawa Nipani, Tehsil – Sanawad, District - Khargone), 19/1 (Village – Delwada, Tehsil – Sanawad, District - Khargone) and 20/0 (Village – Mortakka Mafi, Tehsil – Punas, District – Khandwa). Apart from this, farmers from Mortakka and Moraghadi (Tehsil – Punasa, District – Khandwa) are creating hinderance for 33kV line required for Substation Auxiliary power.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest: Locations: 0 nos. Length: 1095.69 Mtr.
Forest area affected (ha): 0.828 (Barwah Division)
Forest proposals submitted on 16 Nov 2016

Current status: **Approval IN-PRINCIPLE (Working Permission Recieved) Stage-II Approval under progress**

Power line crossing

Total no. of crossings : 6 nos.
Proposal submitted 6 nos
Approval obtained : 6 nos

Railway crossing

Total no. of crossings : 0 nos.
Proposal submitted : 0 nos. Date:
Approval obtained : 0 nos. Date:

National Highway Crossing

Total no. of crossings : 0 nos.
Proposal submitted : 0 nos. Date:
Approval obtained : 0 nos. Date:

River Crossings

Total no. of crossings : 0 nos.

PTCC approval

Proposal submitted to Defence on 29-06-17
Proposal submitted to BSNL on 17-06-17
Proposal submitted to Railways on 19-06-17
Current status: NOC Recieved

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on 13-07-17 (DA) / NR (CA)
Current Status: NOC received vide letter no. AirHQ/S 17726/4/ATS(ty BM-DCCI) dated 16th Oct'17.

3. System strengthening in WR

i. Khandwa Pool – Indore 765kV D/C line

Length:	180.08 CKm
Locations:	243 nos.
Foundation completed:	243 nos.
Tower erected:	243 nos.
Stringing completed:	179.4 ckm
Scheduled COD:	Jul'19

Constraints where Project Authority requires intervention:

NH-3 Crossing Approval is pending with NHAI. A meeting was held in Project Director (PIU) office at Indore by officers of CEA and he was appraised about the importance of the line for evacuation of power from Khargone TPP (2x660 MW) of NTPC, first unit of which is likely to be commissioned in July, 2019. After discussions, he had assured to take up the matter with Regional Office (NHAI), Bhopal for early resolution. Member (Project), NHAI has also been requested, on 22.07.19, to intervene for early resolution of the matter. M/s

KTL is requested to pursue the matter with Regional Office, NHAI Bhopal for getting NOC at the earliest.

Project Director (PIU-Indore) has forwarded the proposal on 18-09-2019 to Project Director (PIU-Ujjain) for their examination in view of the future requirement as the upcoming DPR of Ujjain-Dewas projects is under the jurisdiction of PIU-Ujjain.

Project Director (PIU-Ujjain) vide letter dated 30-09-2019 informed that the KTL NH crossing doesn't affect any project of this PIU.

DGM (Tech), Regional Office – Bhopal vide letter to M/s KTL in which the NOC for overhead crossing proposal for 765kV D/C Khandwa Pool – Indore Transmission line in between kms 583 and 584 (NH-3) has been accorded subject to the submission of Performance Guarantee of Rs 5 lacs in form of BG and an undertaking from CEA for any shifting of tower / raising of conductor in future which will not attract any financial implication on NHAI.

CEA vide letter dated 18-10-2019 & 1-11-2019 once again requested RO, Bhopal (NHAI) to kindly issue the NOC for the aforementioned transmission line.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest: Locations: 49nos. Length: 25847Mtr.

Forest area affected (ha): 112.672 {40.223 (Barwah Division) + 72.449 (Indore Div.)}

Forest proposals submitted on 16 Nov 2016

Current status: Tree cutting permission received vide letter No. F-11/2018/10-11/18 dtd 02.01.18. (Tree cutting Permission Received) Stage II Approval under progress

Power line crossing

Total no. of crossings : 14 nos.

Proposal submitted : 14 nos

Approval obtained : 14 nos

Railway crossing

Total no. of crossings : 2 nos.

Proposal submitted : 2 nos. Date: 23-05-2017

Approval obtained : **NOC Received**

National Highway Crossing

Total no. of crossings : 2 nos.

Proposal submitted : 2 Nos

Approval obtained : 1 no

River Crossings

Total no. of crossings : 1 no.

Proposal submitted : Not Required 1 no. Date:

Approval obtained: Not Required 1 no. Date:

PTCC approval

Proposal submitted to Defence on 20-05-17

Proposal submitted to BSNL on 12-05-17

Proposal submitted to Railways on 19-06-17

Current status: **NOC Recieved**

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on 13-07-17 (DA) / 01-06-17 (CA)

Current Status: NOC received vide letter no. AirHQ/S 17726/4/ATS(ty BM-DCCI) dated 16th Oct'17.(DA) / NOC RECIEVED 22-06-17 (CA)

ii. Khandwa Pool – Dhule 765 kV D/C line

Length:	378.88 CKm
Locations:	486 nos.
Foundation completed:	483 nos.
Tower erected:	480 nos.
Stringing completed:	350.44 ckm
Scheduled COD:	Jul'19

Constraints where Project Authority requires intervention:

1. Objection has been raised by D.C., Dhule for traversing of line through submergence area of proposed Jamphal Dam in Maharastra and diversion of line is requested. Work is stopped now.
2. Construction site of Jamphal dam area was visited by CEA officers on 05.07.2019 and it was found that construction work of dam is running in full swing. During the meeting with District Collector (DC), in his office at Dhule, it was informed that being a location specific project, construction of line in submergence area can't be allowed. However, he had assured to provide full support in getting clearance from various agencies for diversion of line.
3. Based on site visit and meeting with DC, Dhule in July 2019, CEA had advised M/s KTL for diversion of the route of transmission line. Now re-routing work of line has been started and the Forest Diversion Prposal has been submitted to MoEF. Approval under Section 164 of Electricity Act, if required, will be processed on fast track.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest: Locations: 62 nos. Length: 61144Mtrs.

Forest area affected (ha): 159.126 [KD-MP: 39.437 {11.866 (Barwah Division) + 27.571 (Sendhwa Division)} + KD-MH: 119.689 (Dhule Division)]

Forest proposals submitted on KD-MP: 30 Nov 2016 KD-MH: 03 Dec 2016

Current status:

KD-MP: Stage I Recieved (Working Permssion Recieved) Stage II Approval under progress

KD-MH: REC meeting done, Stage I clearance recieved, Stage II Approval under progress

Power line crossing

Total no. of crossings : 9 (EB-MP), 1 (EB-MH), 2 (PG-KNW), 2(BDTCL), 1(KTL) nos.

Proposal submitted : 9 (EB-MP), 1 (EB-MH), 2 (PG-KNW) nos. Date: 29-06-17 (EB-MP), 30-05-17 (EB-MH), 21-02-17 (PG-KNW) , 01-07-17 (BDTCL) ;2Nos.

1Nos. Submission pending(For U/C line KTL)

Approval obtained : 7nos. (EB-MP) Date: 16-10-17, 20-11-17, 26-11-17, 29-11-17, 1no. (EB-MH) Date: 19-07-17, 2nos. (PG-KNW) Date: 19-08-17, 2nos. (U/C EB-MP) Date: 26-02-18

Railway crossing

Total no. of crossings : 1 no.
Proposal submitted : 1 nos., 07-05-17 (NH3)
Approval obtained : 1 no

National Highway Crossing

Total no. of crossings : 1 nos.
Proposal submitted : 1 nos., 07-05-17 (NH3)
Approval obtained : 1 no

River Crossings

Total no. of crossings : 1 no.
Proposal submitted : Not Required 1 no. Date:
Approval obtained: Not Required 1 no. Date:.

PTCC approval

Proposal submitted to Defence on 20-05-17
Proposal submitted to BSNL on 12-05-17
Proposal submitted to Railways on 19-06-17
Current status: **NOC Recieved**

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on 13-07-17 (DA) / NR (CA)
Current Status: NOC received vide letter no. AirHQ/S 17726/4/ATS(ty BM-DCCI) dated 16th Oct'17.(DA).

iii. Establishment of 2x1500MVA, 765/400kV, pooling station at Khandwa

Land Acquired:	100%
Civil work completed:	85%
Equipment supplied:	99.84%
Equipment erection:	63%
Scheduled COD	Jul'19

Constraints where Project Authority requires intervention:

1. Agitation from farmers for land acquisuion and obstruction by them on Construction work.

iv. 2 No. of 765 kV line bays at Dhule S/S of BDTCL for Khandwa Pool – Dhule 765kV D/C Line

Land Acquired:	100%
Civil work completed:	100%
Equipment supplied:	100%
Equipment erection:	100%
Scheduled COD	Jul'19
Anticipated COD:	15-Oct-2018 (Electrical Inspection Done on 18-Sept-2018)

(27) Transmission project - Transmission system for NER System Strengthening Scheme-II (Part-B) and V (NER-IIB & V)

Background

This scheme has been planned to strengthen the interconnection between the states of Assam and Arunachal Pradesh and strong interconnection between northern and southern part of North Eastern Region and would also facilitate dispersal of power from central sector/private generation projects to various parts of NER.

Scope of transmission project

1. Establishment of 400/132 kV, 7x105MVA single phase (including one spare) S/s at Surajmaninagar

400kV

- ICTs: 400/132 kV, 7x105 MVA single phase (including one spare)
- ICTs: bays: 2 no.
- Line bays: 2 no.
[2 no. for Palatana – Surajmanigagar and 2 no. for Surajmaninagar – PK Bari 400 kV D/C Line]
- Bus reactor bays: 2x125 MVAR
- Bus reactor bays: 2 no.
- Space for future line bays (incl. space for sw. line reactor): 6 no.
- Space for ICT bays: 1 no.

132 kV

- ICTs bays: 2 no.
- Line bays: 2 no.
[2 no. for Surjmaninagar (TSECL) - Surajmaninagar (TBCB) 132 kV Line with high capacity/HTLS (equivalent to single moose)]
- Space for future line bays: 6 no.
- Space for ICT Bays: 1 no.
Space for future 400/132 kV, 315MVA ICT
TSP is free to choose the location of Surajmaninaagar S/s within a radius of 10 km from the Surajmaninagar (TSECL) S/s.

2. Establishment of 400/132 kV, 7x105 MVA Single phase (including one spare) S/s at P.K. Bari.

400 kV

- ICTs 400/132 kV, MVA single (including one spare)
- ICTs bays: 2 no.
- Line bays: 4 no.
[2 no. for Surajmaninagar – P. K. Bari and 2 no. for P. K. Bari – Silchar 400 kV D/C line]
- Bus reactor: 2x125 MVAR
- Bus reactor bays: 2 no.
- Space for future line bays (including space for sw. line reactor): 6 no.
Space of ICT bays: 1 No

132 kV

- ICTs bays; 2 no.
 - Line bays: 2no.
[2 no. for P.K. Bari (TSECL) – P. K. Bari (TBCB) 132kV D/C line with high Capacity/HTLS (equivalent of single moose)]
 - Space for future line bays: 6 no.
 - Space for ICT bays: 1 no.
Space for future 400/132 kV, 315 MVA ICT
3. Surajmaninagar - P. K. Bari 400 kV D/c line (Twin ACSR Moose)
4. AGTPP (NEEPCO) – P.K. Bari (TSECL) 132 kV D/c line with high capacity HTLS conductor (equivalent to single moose ampacity at 85°C)
5. Biswanath Chariyalli (POWERGRID) – Itanagar 132kV D/c (Zebra conductor) line
6. Silchar (POWERGRID) – Misa (POWERGRID) 400kV D/c (Quad) line.
7. LILO of one circuit of Biswanath Chariyalli (POWERGRID) – Itanagar 132kV D/c (Zebra conductor) line at Gohpur (AEGCL)
8. Line Bays:
- 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at AGTPP (NEEPCO) Switchyard:
 - 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at P.K. Bari (TSECL) S/s:
 - 2 nos. 132kV line bays for termination of Biswanath Chariyalli (POWERGRID) – Itanagar 132kV D/c (Zebra conductor) line at Itanagar S/s (Ar. Pradesh)
 - 2 no. 400 kV line bays at Palatana GBPP switchyard for termination of Palatana - Surajmaninagar 400kV D/c line.

General Details

Special Purpose Vehicle	:	NER II Transmission Limited (SPTL)
Bid Process Coordinator	:	Rural Electrification Corporation
Estimated Cost (Rs. crs)	:	2471
Levellised Tariff (Rs. Crs)	:	431.653
Request for Qualification	:	29.12.2015
Request for Proposal	:	18.01.2017
Letter of Intent	:	22.02.2017
Transmission Service Agreement (TSA)	:	27.12.2016
SPV acquisition	:	31.03.2017
Transmission License by CERC	:	20.06.2017
Tariff adoption by CERC	:	12.06.2017
Contract Performance Guarantee	:	27.03.2017
Clearance u/s 164	:	31.08.2018
Execution plan submitted to CEA	:	24.07.2017
Scheduled Date of Completion	:	Nov 2020

Status of progress of transmission project;

1. 2x315 MVA, 400/132 kV S/S at Surajmaninagar

Land Acquired	:95%
Civil work completed	:47%
Equipment supplied	:99.75%
Equipment erection	: 4%
Scheduled COD	:Jul'20

Constraints/Approval if any:

2. 2x315 MVA, 400/132 kV S/S at P.K. Bari

• Land Acquired	:95%
• Civil work completed	:55%
• Equipment supplied	:99.75%
• Equipment erection	:2.12%
• Scheduled COD	:Jul'20

Constraints/Approval if any:

3. Surajmaninagar - P. K. Bari 400 kV D/C line

Length	: 154.212 ckm
Locations	: 208 nos
Foundation completed	: 112 nos
Tower erected	: 87 nos
Stringing completed	: 20 ckm
Scheduled COD	: Jul'20

Constraints where Project Authority requires intervention:Nil.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	: 79 nos.
Length	: 30.41 Km (36.632 KM forest affected stretch)
Forest area (ha)	: 139.931 ha
Forest proposals submitted on	: Submitted online on 09-Jan-18
Current status	: Stage-I & tree cutting permission received

Power line crossing

Total no. of crossings	:	4	nos.
Proposal submitted	:	4	nos.
Approval obtained	:	4	nos.

Railway crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.

Approval obtained : 1 nos.

National Highway Crossing

Total no. of crossings : 1 nos.

Proposal submitted : 1 nos.

Approval obtained : 1 nos.

River Crossings

Total no. of crossings : 0 nos.

PTCC approval

Proposal submitted to Defence on – 17-Apr-18

Proposal submitted to BSNL on – 28-Apr-18

Proposal submitted to Railways on - 19-Apr-18

Current status: PTCC Approval received.

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - Civil Aviation Submitted and NOC from Defence Received

Current Status: Civil Aviation Approval Awaited

4. AGTPP (NEEPCO) – P.K. Bari (TSECL) 132 kV D/c line

Detailed Survey is completed.

Length : 166.85 ckm

Locations : 239 nos.

Foundation completed : 139 nos

Tower erected : 114 nos

Stringing completed : 25 ckm

Scheduled COD : Mar'20

Constraints where Project Authority requires intervention: nil

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations: 20nos.

Length: 6.5km (7.65 KM forest affected stretch)

Forest area affected (ha) : 17.569 ha

Forest proposals submitted on 10-01.18

Current status: Stage-I received on 12 OCT'18, Final Tree cutting permission received

Power line crossing

Total no. of crossings : 4 nos.

Proposal submitted : 4 nos.

Approval obtained : 4 nos.

Railway crossing

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos.

Approval obtained : 0 nos.

National Highway Crossing

Total no. of crossings : 0 nos.

Proposal submitted	:	0	nos.
Approval obtained	:	0	nos.

River Crossings

Total no. of crossings	:	0	nos.
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PTCC approval

Proposal submitted to Defence on - 17-Apr-18

Proposal submitted to BSNL on - submitted

Proposal submitted to Railways on - 19-Apr-18

Current status: PTCC clearance received on 20 Sep'18.

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - submitted

Current Status: Civil Aviation Submitted and NOC from Defence received.

5. Biswanath Chariyalli (PG) – Itanagar 132kV D/c (Zebra) line

Detailed Survey Completed

Length	:	133.64 ckm
Locations	:	202 nos
Foundation completed	:	86 nos
Tower erected	:	44 nos
Stringing completed	:	0
Scheduled COD	:	Mar'20

Constraints where Project Authority requires intervention:

1. Due to Non-grant of NOC, re-routing of line has been proposed by AAI. and proposal for the same has been submitted . AAI has not issued NOC certificate for 8 tower locations

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	:	68nos.
Length	:	21.631km
Forest area affected (ha)	:	48.147
Forest proposals submitted on	:	31.07.2017(online submission date) Revised on 06.03.18
Current status	:	Assam state forest Stage-I received, Tree Cutting permission awaited. Arunachal Pradesh state forest file is at MoEF.

Power line crossing

Total no. of crossings	:	2	nos.
Proposal submitted	:	2	nos.
Approval obtained	:	2	nos.

Railway crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

National Highway Crossing

Total no. of crossings	:	2	nos.
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Proposal submitted	:	2	nos.
Approval obtained	:	2	nos.

River Crossings

Total no. of crossings	:	0	nos.
Proposal submitted	:	0	nos.
Approval obtained	:	0	nos.

PTCC approval

Proposal submitted to Defence on - submitted
 Proposal submitted to BSNL on - submitted
 Proposal submitted to Railways on - submitted
 Current status: Submitted to PTCC Coordinator, Assam

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - submitted
 Current Status: NOC from Defence received and NOC from Civil Aviation is awaited

6. Silchar (PG) – Misa (PG) 400kV D/c (Q) line

Detailed Survey Completed

Length	:	356.56 ckm
Locations	:	487 nos
Foundation completed	:	377 nos
Tower erected	:	289 nos
Stringing completed	:	78 Ckm
Scheduled COD	:	Nov'20

Constraints where Project Authority requires intervention:

1. PGCIL bays at Silchar and Misa end has to be completed so as to match with the transmission line schedule.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	:	62nos.
Length	:	24.24km
Forest area (ha)	:	108.162
Forest proposals submitted on:	4-Aug-17 (online submission date)	
Current status	:	Stage-1 & tree cutting permission received

Power line crossing

Total no. of crossings	:	19	nos.
Proposal submitted	:	19	nos.
Approval obtained	:	17	nos.

Railway crossing

Total no. of crossings	:	4	nos.
Proposal submitted	:	4	nos.
Approval obtained	:	4	nos.

National Highway Crossing

Total no. of crossings	:	4	nos.
Proposal submitted	:	4	nos.
Approval obtained	:	4	nos.

River Crossings

Total no. of crossings	:	0	nos.
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PTCC approval

Proposal submitted to Defence on - Submitted

Proposal submitted to BSNL on - Submitted

Proposal submitted to Railways on - Submitted

Current status: Received

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - Submitted

Current Status: NOC for Defense received

7. LILO of one circuit of Biswanath Chariyalli (PG)) – Itanagar 132kV D/C (Zebra) line at Gohpur (AEGCL)

Detailed survey Completed.

Length	:	17.028 ckm
Locations	:	30 nos.
Foundation completed	:	2 nos.
Tower erected	:	0
Stringing completed	:	0
Scheduled COD	:	Mar'20

Constraints where Project Authority requires intervention:nil

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	:	18 nos.
Length	:	5.1km
Forest area (ha)	:	23.782
Forest proposals submitted on -	:	31.07.2017(online submission date)
Current status:	:	Stage-I received, Tree Cutting Permission awaited.

Power line crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

Railway crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

National Highway Crossing

Total no. of crossings	:	0	nos.
Proposal submitted	:	0	nos.
Approval obtained	:	0	nos.

River Crossings

Total no. of crossings	:	0	nos.
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PTCC approval

Proposal submitted to Defence on - Submitted

Proposal submitted to BSNL on - submitted

Proposal submitted to Railways on - Submitted

Current status: Submitted to PTCC Coordinator, Assam

Defence/Civil Aviation Proposal submitted to Defence/Civil Aviation on - submitted

Current Status: Received

8. Line bays

a) 2 no. 400 kV line bays at Palatana GBPP switchyard for termination of Palatana - Surajmaninagar 400kV D/c line

Land Acquired:	Space will be provided by OTPC
Civil work completed:	0
Equipment supplied:	0
Equipment erection:	0
Scheduled COD	Jul'20

Constraints/Approval if any:

1. The progress update is awaited from OTPC

b. 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at AGTPP (NEEPCO) Switchyard

Land Acquired:	Space will be provided by NEEPCO
Civil work completed:	92%
Equipment supplied:	100%
Equipment erection:	97%
Scheduled COD	Mar'20

c. 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at P.K. Bari (TSECL) S/s

Land Acquired:	Space will be provided by TSECL
Civil work completed:	92%
Equipment supplied:	100%
Equipment erection:	90%
Scheduled COD	Mar'20

d. 2 nos. 132kV line bays for termination of Biswanath Chariyalli (PG) – Itanagar 132kV D/c (Zebra) line at Itanagar S/s (Ar. Pradesh)

Land Acquired:	Space wil be provided by DoP, AP
Civil work completed:	78%
Equipment supplied:	99.71%
Equipment erection:	46%
Scheduled COD	Mar'20

(28) Name of transmission project - Additional 400kV Feed to Goa and Additional System for Power Evacuation from Generation Projects pooled at Raigarh (Tamnar) Pool

Background

Scope of transmission project

1. LILO of one ckt. of Narendra (existing) - Narendra (New) 400kV D/c quad line at Xeldem
2. Xeldem - Mapusa 400kV D/c (quad) line
3. Establishment of 2x500MVA, 400/220kV substation at Xeldem
4. Dharamjaygarh Pool section B - Raigarh (Tamnar) Pool 765kV D/c line

General Details

Special Purpose Vehicle	:	Goa-Tamnar Transmission Project Limited
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. Crs)	:	1531
Levelised Tariff(Rs. Crs)	:	164.775
Request for Qualification	:	01.02.2017
Request for Proposal	:	01.05.2017
Letter of Intent	:	30.11.2017
Transmission Service Agreement (TSA)	:	28.06.2017
SPV acquisition	:	14.03.2018
Transmission License by CERC	:	13.07.2018
Tariff adoption by CERC	:	13.07.2018
Contract Performance Guarantee	:	05.01.2018
Clearance u/s 164	:	29.11.2018
Execution plan submitted to CEA	:	10.07.2018
NIT issued on	:	
EPC contract awarded on	:	29-12-2017
Scheduled Date of Completion	:	Nov'21

Status of progress of transmission project

1. LILO of one ckt of Narendra (Existing) - Narendra (New) 400kV D/C Quad line at Xeldem

Length:	188.32 CKm
Locations:	233 nos.
Foundation completed:	2 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	14 Nov'21

Status of statutory approvals:

Forest area

Details of Tr. Line Falling under Forest:-

Locations : 91 nos. ; Length :36.77 Kms

Forest area (Ha)	:	183 Ha
Forest proposals submitted on	:	Karnataka :12 Oct'18,Goa : 24 Aug '18
Current status	:	Goa State Forest : at DFO Karnataka Forest : at DFO

Wildlife area

Details of Tr. Line Falling under Wildlife:-

Locations	:	23 nos.	; Length : 9.031 Km
Wildlife area (Ha)	:	42 Ha	
Wildlife proposals submitted on	:	Wild Life Goa :25 Aug'18 Wild Life Karnataka : 13 Oct'18	
Current status	:	at DFO Level	

Power line crossing

Total no. of crossings	:	5 nos.
Proposal submitted	:	5 nos.
Approval obtained	:	5 nos.

Railway crossing

Total no. of crossings	:	1nos.
Proposal submitted	:	1nos.
Approval obtained	:	1nos.

National Highway / SH Crossing

Total no. of crossings	:	4nos.
Proposal submitted	:	4nos.
Approval obtained	:	2nos.

River Crossings

Total no. of crossings	:	0nos.
Proposal submitted	:	0nos.
Approval obtained	:	0nos

PTCC approval

Proposal submitted to Defence	:	Yes
Proposal submitted to BSNL	:	Yes
Proposal submitted to Railways	:	Yes
Current status	:	at CEA PTCC Delhi office

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation : Yes proposal submitted
Current Status: approved

2. Xeldem - Mapusa 400kV D/C Quad Line

Length:	109.6 CKm
Locations:	148 nos.
Foundation completed:	6 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm

Scheduled COD: 14 May'21

Status of statutory approvals:

Forest area

Details of Tr. Line Falling under Forest:-

Locations	:	40 nos.	; Length : 15.162 Km
Forest area (Ha)	:		
Forest proposals submitted on	:	01 July'18	
Current status	:	at Nodal officer	

Wildlife area

Details of Tr. Line Falling under Wildlife:-N/A

Locations	:	nos.	; Length : mtrs
Wildlife area (Ha)	:		
Wildlife proposals submitted on	:		
Current status	:		

Power line crossing

Total no. of crossings	:	5	nos.
Proposal submitted	:	5	nos.
Approval obtained	:	5	nos.

Railway crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

National Highway / SH Crossing

Total no. of crossings	:	1	nos.
Proposal submitted	:	1	nos.
Approval obtained	:	1	nos.

River Crossings

Total no. of crossings	:	5	nos.
Proposal submitted	:	5	nos.
Approval obtained	:	5	nos.

PTCC approval

Proposal submitted to Defence on	:	1	
Proposal submitted to BSNL on	:	1	
Proposal submitted to Railways on	:	1	
Current status	:	approved	

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on : Yes proposal submitted
Current Status: approved

3. Dharamjaygarh Pool Section B - Raigarh (Tamnar) Pool 765kV D/C Line

Length: 137 CKm

Locations:	182nos.
Foundation completed:	2 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	14 July '21

Status of statutory approvals:

Forest area

Details of Tr. Line Falling under Forest:-

Locations	:	65 nos.	; Length : 20.45	mtrs
Forest area (Ha)	:	137.014		
Forest proposals submitted on	:	10 Aug'18		
Current status	:	at CCF level		

Wildlife area

Details of Tr. Line Falling under Wildlife:- N/A

Locations	:	nos.	; Length :	mtrs
Wildlife area (Ha)	:			
Wildlife proposals submitted on	:			
Current status	:			

Power line crossing

Total no. of crossings	:	9 nos.
Proposal submitted	:	9nos.
Approval obtained	:	9 nos.

Railway crossing

Total no. of crossings	:	2 nos.
Proposal submitted	:	2 nos.
Approval obtained	:	0 nos.

National Highway / SH Crossing

Total no. of crossings	:	0 nos.
Proposal submitted	:	0 nos.
Approval obtained	:	nos.

River Crossings

Total no. of crossings	:	0 nos.
Proposal submitted	:	0nos.
Approval obtained	:	0nos

PTCC approval

Proposal submitted to Defence	:	Yes
Proposal submitted to BSNL	:	yes
Proposal submitted to Railways	:	Yes
Current status	:	Approval Recieved

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation	on	:	Proposal Submitted
Current Status:	approved		

4. Xeldem (existing) – Xeldem (new) 220kV D/C line

Length:	40 CKm
Locations:	66 nos.
Foundation completed:	0 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	14 May'21

Status of statutory approvals:

Forest area

Details of Tr. Line Falling under Forest:-

Locations	:19 nos.	; Length : 8.8 Kms
Forest area (Ha)	: 28.24 Ha	
Forest proposals submitted on	: 02 Aug'18	
Current status	: at DFO level	

Wildlife area

Details of Tr. Line Falling under Wildlife:-N/A

Locations	: nos.	; Length : mtrs
Wildlife area (Ha)	:	
Wildlife proposals submitted on	:	
Current status	:	

Power line crossing

Total no. of crossings	:	3 nos.
Proposal submitted	:	3 nos.
Approval obtained	:	3 nos.

Railway crossing

Total no. of crossings	:	1nos.
Proposal submitted	:	1 nos.
Approval obtained	:	0nos.

National Highway / SH Crossing

Total no. of crossings	:	1nos.
Proposal submitted	:	1nos.
Approval obtained	:	1nos.

River Crossings

Total no. of crossings	:	1nos.
Proposal submitted	:	1nos.
Approval obtained	:	1nos

PTCC approval

Proposal submitted to Defence	:Yes
Proposal submitted to BSNL	:Yes
Proposal submitted to Railways	:Yes

Current status : at DFO Level

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on : Proposal Submitted

Current Status: approved

5. 2x500 MVA, 400/220 kV S/s at Xeldem (Goa)

Land Acquired:	100%.
Civil work completed:	0%
Equipment supplied:	0 %
Equipment erection:	0%
Scheduled COD	14 May'21

(29) Name of transmission project – Establish Transmission System for 400 kV Udupi (UPCL) – Kasargode D/C Line

Background - Udupi– Kasargode 400kV (Quad) D/c line was planned for improving reliability of power supply & stability in Northern area of Kerala and relieving congestion between S1 (Andhra Pradesh, Telangana & Karnataka) – S2 (Tamil Nadu & Kerala) corridor.

Scope of transmission project

1. Mangalore (Udupi PCL) – Kasargode 400kV (Quad) D/c line
2. Establishment of 2x500MVA, 400/220 kV GIS substation at Kasargode
3. 2 nos. of 400kV line bays and Bus Bar Extension Works at UPCL switchyard

General Detail

Special Purpose Vehicle (SPV)	:	Udupi Kasargode Transmission Limited.
Bid Process Coordinator (BPC)	:	REC Transmission Projects Co. Ltd
Estimated Cost (Rs. Crs)	:	754.87
Levellised Tariff (Rs. Crs)	:	84.744
Request for Qualification	:	
Request for Proposal	:	31.12.2018
Letter of Intent	:	31.07.2019
Transmission Service Agreement (TSA)	:	28.02.2019
SPV acquisition	:	12.09.2019
Transmission License by CERC	:	Applied in CERC
Tariff adoption by CERC	:	Applied in CERC
Contract Performance Guarantee	:	
Clearance u/s 164	:	
Execution plan submitted to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	12.11.2022 (38 months from Effective Date)

Remark: SPV has been acquired on 12.09.2019

**(30) Name of transmission project – Western Region
Strengthening Scheme-XIX (WRSS-XIX) and North Eastern Region
Strengthening Scheme-IX (NERSS-IX)**

Background -

Scope of transmission project

General Detail

Special Purpose Vehicle (SPV)	:	Sterlite Grid 13 Limited(A Subsidiary of Sterlite Power Trans. Limited)/PFC
Bid Process Coordinator (BPC)	:	PFCCL
Estimated Cost (Rs. Crs)	:	
Levellers Tariff (Rs. Crs)	:	
Request for Qualification	:	
Request for Proposal	:	
Letter of Intent	:	
Transmission Service Agreement (TSA)	:	
SPV acquisition	:	
Transmission License by CERC	:	
Tariff adoption by CERC	:	
Contract Performance Guarantee	:	
Clearance u/s 164	:	
Execution plan submitted to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	

**(31) Name of transmission project – WRSS – 21 Part – B –
Transmission System Strengthening for Relieving Over Loadings
Observed in Gujarat Intra-State System Due to Re-injections in
Bhuj PS**

Background -

Scope of transmission project

General Detail

Special Purpose Vehicle (SPV)	:	Sterlite Grid 18 Limited(A Subsidiary of Sterlite Power Trans. Limited)/PFC
Bid Process Coordinator (BPC)	:	PFFCL
Estimated Cost (Rs. Crs)	:	
Levellised Tariff (Rs. Crs)	:	
Request for Qualification	:	
Request for Proposal	:	
Letter of Intent	:	
Transmission Service Agreement (TSA)	:	
SPV acquisition	:	
Transmission License by CERC	:	
Tariff adoption by CERC	:	
Contract Performance Guarantee	:	
Clearance u/s 164	:	
Execution plan submitted to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	

(32) Name of transmission project - Eastern Region System Strengthening Scheme-VI(ERSS-VI)

Background

Future demand projection given by Bihar indicates a power demand of about 5600 MW by the year 2016-17. Out of this 2100 MW power demand is in northern part and 3500 MW power demand is in southern part of the state. Regarding power availability, Bihar would have additional share of 2500 MW from Central generation project. Northern part of Bihar has only 2 nos. s/s (Purnea and Muzaffarpur) with total capacity of 1260 MVA as against projected demand of 2100 MW during 2016-17. Keeping in view the load growth requirement by 2016-17, this ISTS scheme has been proposed.

Scope of transmission project

1. Muzaffarpur(PG)- Darbhanga 400 kV D/C line with triple snowbird conductor
2. LILO of Barh –Gorakhpur 400 kV 2xD/C line at Motihari.
3. 2x500 MVA, 400/220 kV Darbhanga GIS with space for future extension
4. 2x500 MVA, 400/132 kV Motihari GIS with space for future extension

General Detail

Special Purpose Vehicle (SPV)	:	Darbhanga Motihari Trans. Company Ltd (A subsidiary of Essel Infraprojects Ltd)
Bid Process Coordinator	:	PFCCCL
Estimated Cost (Rs. crs)	:	540
Levellised Tariff (Rs. Crs)	:	117.4
Request for Qualification	:	08.02.2013
Request for Proposal	:	27.05.2013
Letter of Intent	:	17.10.2013
Transmission Service Agreement (TSA)	:	06.08.2013
SPV acquisition	:	10.12.2013
Transmission License by CERC	:	30.05.2014
Tariff adoption by CERC	:	20.05.2014
Contract Performance Guarantee	:	05.12.2013
Clearance u/s 164	:	04.09.2014
Execution plan submitted to CEA	:	16.04.2014
NIT issued on	:	
EPC contract awarded on	:	04.03.2014
Scheduled Date of Completion	:	(Darbhanga Element – Jun 16, Motihari- Aug 16)
Actual Date of completion	:	August, 2017

Status of progress of transmission project

1. Muzaffarpur (PG) - Darbhanga 400 kV D/c line with triple snowbird conductor

- Length: 125.6 ckm
- Locations: 178

Transmission Line successfully Charged and Presently in Commercial Operation from **Apr 2017**.

2. LILO of Barh –Gorakhpur 400 kV 2xD/c line at Motihari

- Length: 151.558 ckm
- Locations: 210 nos.

Transmission Line successfully Charged and Presently in Commercial Operation from **Aug 2017**.

3. 2x500 MVA, 400/220 kV Darbhanga GIS with space for future extension

GIS Sub-station successfully charged and presently in commercial operation from **Apr 2017**.

4. 2x200 MVA, 400/132 kV Motihari GIS with space for future extension.

400 kV GIS Substation charged and presently in commercial operation from **31st July 2017**.

Transmission Project commissioned on August 2017.

(33) Name of transmission project - Northern Region System Strengthening Scheme(NRSS) - XXXI (Part-B)

Background

A 2x315 MVA 400/220kV substation of PGCIL is existing at Amritsar and connected to Jalandhar through a 400 kV S/C line. To meet growing power demand at Amritsar a 500MVA 400/220 kV ICT is under implementation. To augment supply of power to Amritsar S/s 400kV connectivity to Parbati Pooling station and Makhu (PSTCL substation) is under implementation. However, the power supply to Amritsar area would be mainly through Jalandhar 400kV substation as during winters the generation of hydro projects would reduce to very low level as well as in case of low generation at Talwandi Saboo TPS, Makhu S/s may also draw power from Amritsar. Hence there is a necessity that power supply arrangement to Amritsar S/s is augmented. A HVDC station at Kurukshetra is being established for supply of power from pit head generating station of Chhattisgarh. Accordingly, for augmenting power supply to Amritsar S/s, this transmission scheme has been proposed under NRSS-XXXI – Part-B.

Scope of transmission project

1. Kurukshetra – Malerkotla 400 kV D/C line
2. Malerkotla – Amritsar 400 kV D/C line.

General Details

Special Purpose Vehicle (SPV)	:	NRSS XXXI (B) Transmission Limited. (A subsidiary of Essel Infra projects Ltd.)
Bid Process Coordinator (BPC)	:	RECTPCL
Estimated Cost (Rs. Crs)	:	370
Levelised Tariff(Rs. Crs)	:	88.65
Request for Qualification	:	31.07.2013
Request for Proposal	:	09.12.2013
Letter of Intent	:	26.02.2014
Transmission Service Agreement (TSA)	:	02.01.2014
SPV acquisition	:	12.05.2014
Transmission License by CERC	:	25.08.2014
Tariff adoption by CERC	:	07.08.2014
Contract Performance Guarantee	:	18.03.2014
Clearance u/s 164	:	15.10.2014
Execution plan submitted to CEA	:	01.08.2014
NIT issued on	:	
EPC contract awarded on	:	17.09.2014
Scheduled Date of Completion	:	Sep 2016
Actual Date of Completion	:	April, 2017

Status of progress of transmission project

1. Kurukshetra – Malerkotla 400 kV D/C line

- Length: 278.4 ckm

Under Commercial Operation from **Jan 2017**

2. Malerkotla – Amritsar 400 kV D/C line.

- Length: 151.558 ckm
- Locations: 210 nos.

Under Commercial operation from **Apr 2017**.

Transmission Project commissioned on April 2017.

(34) Name of transmission project - Development of Additional Inter regional AC link for import into Southern region i.e Warora-Warangal and Chilakaluripeta – Hyderabad – Kurnool 765 kV link

Background

To facilitate import of 16000 MW power to Southern region by 2018-19 based on the pessimistic scenario of non-availability / delay in commissioning of some of the generation projects in Southern region, this 765 kV additional transmission link has been proposed in case of contingencies including total outage of an entire inter-regional link and other critical regional lines for reliability.

Scope of transmission project

1. Establishment of 765/400 kV substations at Warangal (New) with 2X1500 MVA transformers and 2X240 MVAR bus reactors.

765 kV bay requirement (in Warangal)

Line bays: 06 No.
Transformer bays: 02 No.
Space for future line bays: 06 No.

400 kV bay requirement (in Warangal)

Line bays: 02 No.
Transformer bays: 02 No.
Space for future line bays: 08 No.

2. Warora (Pool) – Warangal (New) 765 kV D/C line with 240 MVAR switchable line reactor at both ends
3. Warangal (New) – Hyderabad 765 kV D/C line with 240 MVAR switchable line reactor at Warangal end of each circuit.
4. Warangal (New) – Warangal (existing) 400 kV (quad) D/C line.
5. Hyderabad- Kurnool 765 kV D/C line with 240 MVAR switchable line reactor at Kurnool end of each circuit.
6. Warangal (New) – Chilakaluripeta 765 kV D/C line with 240 MVAR switchable line reactor at both ends of each circuit.
7. 240 MVAR Switchable Line Reactors with Bays at Warora (Pool) end in each circuit of Warora (Pool)- Rajnandgaon 765kV D/c line with NGR (700 Ohm)

General Detail

Special Purpose Vehicle (SPV)	:	Warora Kurnool Transmission Ltd. (A subsidiary of Essel Infraproj. Ltd)
Bid Process Coordinator (BPC)	:	PFCCL
Estimated Cost (Rs. crs)	:	5200
Levellised Tariff (Rs. Crs)	:	383.4
Request for Qualification	:	11.09.2015
Request for Proposal	:	30.11.2015
Letter of Intent	:	29.02.2016
Transmission Service Agreement (TSA)	:	06.01.2016
SPV acquisition	:	06.07.2016
Transmission License by CERC	:	29.09.2016
Tariff adoption by CERC	:	30.08.2016

Contract Performance Guarantee	:	01.07.2016
Clearance u/s 164	:	Gazette publication on 10.07.2017
Execution plan submitted to CEA	:	02.11.2016
NIT issued on	:	
EPC contract awarded on	:	30.08.2016
Scheduled Date of Completion	:	Nov-2019

Status of progress of transmission project

1. Establishment of 765/400 kV substations at Warangal (New) with 2X1500 MVA transformers and 2X240 MVAR bus reactors.

Land Acquired	:	100%.
Civil work completed	:	47%
Equipment supplied	:	60% substation material 10 no. of reactors
Equipment erection	:	Structure erection & earthing work is in progress
Scheduled COD	:	Nov'19

Constraints/Approval if any:nil

2. Warora (Pool) – Warangal (New) 765 kV D/C line with 240 MVAR switchable line reactor at both ends

Length	:	645.742 ckm
Locations	:	827 nos.
Foundation completed:	:	774 nos.
Tower erected:	:	425 nos.
Stringing completed	:	58.6 ckm
Scheduled COD	:	Nov'19

Constarints where Project Authority requires intervention:

- **RoW issue:** The work execution has been affected in 765 kV D/C Warora (Pool) – Warangal (New) Transmission line, under state of Maharashtra due to farmer agitation demanding higher compensation for the construction of transmission line at their fields.
- **Court Case :** The Office of Tehsildar, Rajura, Distt. - Chandrapur directed WKTL to stop the transmission tower execution work at tower loc. no. 89/8 of 765 kV D/C Warora (Pool) – Warangal (New) Transmission line immediately in terms of stay order, dated 17/10/2018 passed by the Hon'ble High Court Mumbai, Nagpur Bench in the Writ Petition no. 6980/2018 filed by land owner.
- Farmers in the section AP 89-AP 98 of 765 kV D/C Warora-Warangal Line (Maharashtra Section) have filed a writ petition (Civil) No 2269/2019 in the Nagpur Bench of Bombay High court against the compensation amount finalized by the District Magistrate Chandrapur. The hearing of the case is scheduled on 31/12/2019. Though, the Court has not passed any order till date in this case, however farmers are reluctant to continue execution work on those respective locations.

Other issues:

- **Work affected in 765 kV D/C Warora – Warangal Transmission line due to Western Coal Fields (WCL) strict objection for traversing WKTL towers through WCL Penganga OC mine area:**

16 nos. tower location of transmission lines are coming in WCL Penganga OC mine area and WCL has requested for diversion of same. Out of these 16 locations, 14 no. of foundations and 06 no. tower ereactions have been completed.

- **Work affected in 765 kV D/C Warora – Warangal Transmission line due to Singrenni Collieries Company Limited (SCCL) strict objection for traversing towers through Prof. Jayashankar Open Cast Project area:**

04 nos. tower location of transmission lines are coming in Prof. Jayashankar Open Cast Project and SCCL has requested for diversion of same. A meeting was held in CEA in this regard with officers of SCCL and Ministry of Coal, but the issue could not be resolved. This issue was also discussed during the review meeting called by the Joint Secretary, Ministry of Power (GoI) on 04.01.2019 in presence of the Representative of SCCL.

A meeting was held in CEA to resolve the issue of coal block area with officers of WCL and Ministry of Coal, but the issue could not be resolved. This issue was discussed during the review meeting called by the Joint Secretary, Ministry of Power (GoI) in presence of the Representatives of WCL. Matter was also discussed during the meeting held on 11.04.2019 by Joint Secretary (Ministry of Coal) and JS (MOC) directed WCL & SCCL to come up with their issued notifications under section 4 of Coal Bearing Areas (Acquisition and Development) Act, 1957 prior to commencement of their mining operations latest by 16.04.2019. In case of non-availability of such notifications prior to WKTL transmission line route alignment approval u/s 164 of Electricity Act -2003, the original alignment prevails.

A meeting was taken by Chief Engineer (CEA) on 30.05.2019, WKTL informed that project is adversely affected due to the objections raised by WCL and SCCL since November, 2018. In absence of clear direction from MoP & MoC, the progress of work of 765 kV D/C Warora-Warangal line got severely affected. It was also informed that it will take minimum 13 working months after resolution of issue still pending with MoC. The Lead LTTC (TANGEDCO) was also present in this meeting and raised his concern over diversion of approved route of transmission line at this advanced stage, as this may have implication on transmission tariff of the project and completion timeline. However, Lead LTTC assured to extend all support required for completion of this project.

Matter was also discussed in meeting taken by Chief Engineer (Trans.) in MoP on 03.06.2019 and a committee was constituted under Chairmanship of Chief

Engineer (CEA) with representatives from MoC, WCL, CMPDI, SCCL, lead & alternate lead LTTC and WKTL to examine the issue along with relevant notifications/guidelines and submit its options for resolution of the matter. 1st Meeting of committee was held on 19.07.2019. Site visits were conducted by the WKTL, WCL, CMPDI, CEA & SCCL teams to explore other options available. 2nd meeting of the committee was held on 19.08.2019. subsequently a meeting was taken by Addl. Secretary, MoP on 19.08.2019. MoM from MoP is awaited to take up the matter further.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	: 22	
Length	: 10.057 Kms	
Forest area affected (ha)	: 19.793 ha (2.954 Kms) in Maharastra + 47.592 ha (7.103 Kms) in Telangana	
Forest proposals submitted on	: Maha – 4th Aug 17, Telangana – 23 Aug 17	
Current status	: Maharashtra – Stage I received on 05.02.2018	
	: Telangana - Stage – I received on 13 th Dec 2018 and communicated by PCCF Office to respective DFO on 24.12.2018.	

Wildlife Clearanace

Details of Tr. Line Falling under Wildlife:-

Locations	: 01 No.	
Length	: 0.465 Kms	
Forest area affected (ha)	: 3.1142 ha (0.465 Kms) in Telangana	
Forest proposals submitted on	: Telangana – 26th Feb 18	
Current status	: Proposal forwarded by State Government to Member Secretary (NBWL) on 20.11.2018. Proposal forwarded to NTCA for their recommendation and MoEF&CC asked State Govt. to submit SBWL MoM	

Power line crossing

Total no. of crossings	: 27 nos.	
Proposal submitted	: 27 nos.	Date:
Approval obtained	: 20 nos.	Date:

Railway crossing

Total no. of crossings	: 5 nos.	
Proposal submitted	: 5 nos.	Date:
Approval obtained	: 4 nos.	Date:

National Highway Crossing

Total no. of crossings	: 04 nos.	
Proposal submitted	: 04 nos.	Date:
Approval obtained	: 04 nos.	Date:

State Highway Crossing

Total no. of crossings	:	05 nos.	
Proposal submitted	:	05 nos.	Date:
Approval obtained	:	00 nos.	Date:

River Crossings

Total no. of crossings	:	1 no.	(Major)
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

PTCC approval

Proposal submitted to Defence on :
 Proposal submitted to BSNL on :
 Proposal submitted to Railways on :
 Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on : Civil & Defence proposal submitted

Current Status: Approval awaited

3. Warangal (New) – Hyderabad 765 kV D/C line with 240 MVAR switchable line reactor at Warangal end of each circuit.

Length	:	265.218 ckm
Locations	:	344 nos.
Foundation completed	:	312 nos.
Tower erected	:	247 nos.
Stringing completed	:	
Scheduled COD	:	Nov'19

Constraints where Project Authority requires intervention:

- **RoW issue:**

In the stretch of AP 10 - AP 11, AP 34 - AP 35, AP 37- AP 38, AP 41- AP 42. AP 46/0, AP 54/2, AP 17/3 and AP 21/6 Further at location nos. 47/2 & 47/3, locals have removed the stubs by using JCB.

- **Court Case:**

- Land Owner of location no. 2/6 of 765 kV D/C Warangal – Hyderabad Line, has approached Hon'ble High Court of Telangana and High Court has granted the stay on work. Further on hearing held on 03rd June 2019, the Hon'ble Court adjourned and next date of hearing is yet to be scheduled in this matter.
- Land owner for the stretch between the location no. 30 to 31 of 765 kV D/C Warangal – Hyderabad has approached the District Court (Nalgonda) to accord permanent injunction. On the hearing held on 12.07.2019, the Court scheduled next date of hearing on 30.12.2019 in this matter. In such situation, the work is at stand still at this location effectively from 20th Mar 2018.

Status of statutory approvals:

Forest : Nil

Details of Tr. Line Falling under Forest:- Locations: nos. Length:
 Forest area(ha) : Nil
 Forest proposals submitted on
 Current status:

Power line crossing

Total no. of crossings	:	15 nos.	
Proposal submitted	:	15 nos.	Date:
Approval obtained	:	10 nos.	Date:

Railway crossing

Total no. of crossings	:	01 nos.	
Proposal submitted	:	01 nos.	Date:
Approval obtained	:	0 nos.	Date:

National Highway Crossing

Total no. of crossings	:	01 nos.	
Proposal submitted	:	01 nos.	Date:
Approval obtained	:	01 nos.	Date:

State Highway Crossing

Total no. of crossings	:	02 nos.	
Proposal submitted	:	02 nos.	Date:
Approval obtained	:	-- nos.	Date:

River Crossings

Total no. of crossings	:	Nil
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PTCC approval

Proposal submitted to Defence on
 Proposal submitted to BSNL on
 Proposal submitted to Railways on
 Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation : Defence & Civil aviation proposal submitted
 Current Status: Approved.

4. Warangal (New) – Warangal (existing) 400 kV (quad) D/C line

- Length : 94.94 ckm
- Locations : 130 nos.
- Foundation completed: 09 no's
- Tower erected :
- Stringing completed :
- Scheduled COD : Nov'19

Constraints where Project Authority requires intervention: nil

Status of statutory approvals:

Forest - Nil

Details of Tr. Line Falling under Forest:- Locations: nos. Length:
 Forest area affected (ha) : Nil
 Forest proposals submitted on
 Current status:

Power line crossing

Total no. of crossings	:	05 nos.	
Proposal submitted	:	05 nos.	Date:
Approval obtained	:	nos.	Date:

Railway crossing

Total no. of crossings	:	01 no.	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

National Highway Crossing

Total no. of crossings	:	02 no.	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

River Crossings

Total no. of crossings	:	Nil
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PTCC approval

Proposal submitted to Defence on
 Proposal submitted to BSNL on
 Proposal submitted to Railways on
 Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on.....
 Current Status:

5. Hyderabad- Kurnool 765 kV D/C line with 240 MVAR switchable line reactor at Kurnool end of each circuit

Length	:	331.58 ckm
Locations	:	422 nos.
Foundation completed	:	339 nos.
Tower erected	:	183 nos.
Stringing completed	:	
Scheduled COD	:	Nov'19

Constraints where Project Authority requires intervention:

Work hampered due to severe RoW issue in the stretch of AP 27 – AP 29, AP 60A– AP 60B and AP 66 – AP 67.

Telangana State Industrial Infrastructure Corporation Ltd. (TSIICL) initiated the process of land acquisition around Hyderabad (Maheshwaram) PGCIL Sub-Station. Objection was raised for WKTL's 765 kV Warangal-Hyderabad and 765 kV Hyderabad – Kurnool Line. Matter resolved for 765 kV D/C Warangal-Hyderabad Line. However, for 765 kV D/C Hyderabad – Kurnool discussions are in progress.

Status of statutory approvals:**Forest - Nil**

Details of Tr. Line Falling under Forest:- Locations: nos. Length:

Forest area affected (ha) : Nil

Forest proposals submitted on

Current status:

Power line crossing

Total no. of crossings	:	21 nos.	
Proposal submitted	:	21 nos.	Date:
Approval obtained	:	18 nos.	Date:

Railway crossing

Total no. of crossings	:	Nil	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

National Highway Crossing

Total no. of crossings	:	01 nos.	
Proposal submitted	:	01 nos.	Date:
Approval obtained	:	nos.	Date:

State Highway Crossing

Total no. of crossings	:	03 nos.	
Proposal submitted	:	03 nos.	Date:
Approval obtained	:	-- nos.	Date:

River Crossings

Total no. of crossings	:	01 nos.	(Major)
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

PTCC approval

Proposal submitted to Defence on

Proposal submitted to BSNL on

Proposal submitted to Railways on

Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation: Defence & civil aviation proposal submitted

Current Status: Civil aviation approval obtained

6. Warangal (New) – Chilakaluripeta 765 kV D/C line with 240 MVAR switchable line reactor at both ends of each circuit

Length: 394.33 ckm

Locations: 565 nos.

Foundation completed: 446 nos.

Tower erected: 341 nos.

Stringing completed:
Scheduled COD: Nov'19

Constarints where Project Authority requires intervention:nil

Severe RoW issue existing in the stretch of AP 10 – AP 11, AP 14- AP 15, AP 25 – AP 28, AP 52- AP 53, AP 55 – AP 56, AP 76 – AP 78, AP 84- AP 85 & AP 89 – AP 90.

Court Case:

- 04 no. of tower locations of 765 kV D/C Warangal (New) – Chilakaluripeta Transmission line has been traversing though the proposed land area of M/s Emami Cement Ltd., out of which the 04 no. of foundations and 03 no's of erections are already completed. M/s Emami Cement Ltd. moved to High Court of Hyderabad for seeking order to remove WKTL transmission towers along with direction to re-route the transmission line. At present this matter is under consideration of Hon'ble High Court, Hyderabad.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations	:	07nos.	
Length:Forest area affected (ha)	:	18.442 ha (2.75 Kms) in Andhra pradesh	
Forest proposals submitted on	:	23.08.2017	
Current status	:	Stage –I forest approval granted on 28.11.18.	
		Stage I communicated by State Govt. to PCCF office on 24.12.2018.	

Power line crossing

Total no. of crossings	:	29 nos.	
Proposal submitted	:	29 nos.	Date:
Approval obtained	:	24 nos.	Date:

Railway crossing

Total no. of crossings	:	03 nos.	
Proposal submitted	:	03 nos.	Date:
Approval obtained	:	02 nos.	Date:

National Highway Crossing

Total no. of crossings	:	01 no.	
Proposal submitted	:	01 nos.	Date:
Approval obtained	:	01 nos.	Date:

State Highway Crossing

Total no. of crossings	:	03 no.	
Proposal submitted	:	03 nos.	Date:
Approval obtained	:	-- nos.	Date:

River Crossings

Total no. of crossings	:	01 no.	(Major)
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

PTCC approval

Proposal submitted to Defence on	:	
Proposal submitted to BSNL on	:	
Proposal submitted to Railways on	:	

Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on: Defence & civil aviation Proposal submitted

Current Status

: Civil aviation approval obtained.

7. 240 MVAR Switchable Line Reactors with Bays at Warora (Pool) end in each circuit of Warora (Pool)- Rajnandgaon 765kV D/c line with NGR (700 Ohm)

- Land Acquired : NA
- Civil work completed : 100%.
- Equipment supplied : 100%
- Equipment erection : 100%
- Scheduled COD : Nov'18
- Actual COD : Mar'19

Under commercial operation w.e.f. 29.03.2019.

(35) Name of transmission project - System strengthening in northern region (NRSS XXXVI) along with LILO of Sikar-Neemrana 400 kV D/C line at Babai (RRVNL)

Background

400 kV AC link between Rishikesh and Koteshwar shall improve reliability. It shall improve the power supply to Uttarakhand and also obviate the power transfer constraint on 400 kV Roorkee -Muzaffarnagar line during low hydro generation condition. This link would provide additional outlet from Tehri/ Koteshwar generation complex and independent feed for providing reliable and quality power supply to Rishikesh area.

Babai 400/220 kV substation of RRVNL is under construction and the substation is associated with power evacuation system of Suratgarh Super Critical TPS (2x660MW) and shall be connected to Suratgarh through 400kV D/c line. The 400 kV Sikar - Neemrana D/C line is crossing Babai S/s at a distance of approx. 1 Km. The proposal of LILO of one ckt of Sikar-Neemrana 400kV line at Babai would be helpful for enhancing the reliability of power supply. The proposed LILO would increase the flexibility in this area.

Scope of Transmission project

1. Koteshwar Pooling Station - Rishikesh 400kV D/C (HTLS) line – 83.152 ckm.
2. 2 Nos. of bays at 400 kV Rishikesh S/S
3. LILO of one ckt of 400 kV D/c Sikar (PG)-Neemrana (PG) line at Babai- 2.922 ckm.
4. Babai (RRVNL) – Bhiwani (PG) D/C line – 248.61 ckm.
5. 4 Nos. of bays at 400 kV Babai (RRVNL) substation

General Details

Special Purpose Vehicle (SPV)	:	NRSS XXXVI Trans.Ltd (ESSEL)
Bid Process Coordinator (BPC)	:	RECTPCL
Estimated Cost (Rs. Crs.)	:	401
Levellised Tariff (Rs. Crs)	:	48.6
Request for Qualification	:	25.08.2015
Request for Proposal	:	12.11.2015
Date of Letter of Intent	:	29.03.2016
Transmission Service Agreement (TSA)	:	13.01.2016
SPV acquisition	:	22.08.2016
Transmission License by CERC	:	07.12.2016
Tariff adoption by CERC	:	14.12.2016
Contract Performance Guarantee	:	11.08.2016
Clearance u/s 164	:	01.11.2017
Execution plan submitted to CEA	:	20.12.2016
NIT issued on		
EPC awarded on	:	20.01.2017
Scheduled Date of Completion	:	Dec 2019

Status of progress of transmission project

1. Koteswar Pooling Station - Rishikesh 400kV D/C (HTLS) line

The route alignment & detailed survey is completed.

Tower Package is awarded. Check survey is under progress.

Length	: 81 CKm
Locations	: 106 nos
Foundation completed	: 26 nos
Tower erected	:
Stringing completed	:
Scheduled COD	: Dec'19

Constraints where Project Authority requires intervention:

- **NOC from Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh is pending:**

IDPL conveyed it's no objection on 03.04.2019 stating that Uttarakhand Government is planning to construct Convention Centre along with Hill Culture, Yoga and Wellness Centre on the said land. Accordingly, IDPL requested to take no objection certificate also from Uttarakhand Government. Accordingly, the detailed proposal of NoC was submitted to Tourism Deptt. of Uttarakhand on 27.05.2019. The same has been forwarded by GoU to the consultant M/s E & Y on 05th July 2019.

WKTL has submitted the Forest proposal on 04th April 2019 for Tehri & Narendranagar Forest Division. They have also sought consent from DFO (Dehradun) for the submission of forest proposal in light of available IDPL NoC. CEA on 26.06.19 has also requested Govt. of Uttarakhand to issue NOC at the earliest.

On 3rd August 2019, CEO- Uttarakhand Tourism Development Board has written a letter to share all the details of the project to their consultant M/s EY LLP. The same was shared with the agency on 11th September.

M/s NRSS XXXVI Trans.Ltd requested CEO- Uttarakhand Tourism Development Board vide letter dated 13th September to convene a meeting along with the consultant so that the matter shall be resolved.

- **Route diversion of 400 kV D/C Rishikesh- Koteswar Line at the instruction of DFO (Tehri) letter dated 21st Dec 2018:**

DFO Tehri through letter dated 21st Dec 2018 informed that Central Government plantation Project under "Namami Gangey Scheme" is coming under NRSS XXXVI line route and NRSS XXXVI Tr. Ltd have submitted the revised route avoiding

“*Namami Gangey Scheme Plantation*” to forest authorities on 13.03.19, Post verification and approval, WKTL submitted the forest proposal of Tehri Garhwal forest division to DFO Tehri Garhwal on 4th April 2019 with a request for identification of double degraded forest land for preparation of compensatory afforestation scheme for said transmission line under reference to MoEF & CC letter F.N. 11-68/2014-FC (pt) dated 11th July 2014 for processing of forest diversion proposal from DFO.

Severe RoW issues:

Severe RoW issues are existing at loc. No. 1/0, 2/0, 3/0, 4/0, 5/0, 10/0, 13/0, 22/0,23/0, 48/0, 48/1 and 49/0 .

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- Locations: nos. Length: 22.2 Km.

Forest area affected (ha) : 96.60 ha

Forest proposals submitted on : Forest proposal of Tehri & Narendranagar Forest Division was submitted on 04th Apr 2019. Forest proposal of Dehradun division is yet to be submitted.

Current status: only due to specific conditions imposed by Forest Deptt., also which are beyond the Forest Conservation Amendment (Rules), 2014, the Forest diversion proposal of 400 kV D/C Rishikesh – Koteshwar line was not accepted. However, Post receipt of IDPL NoC dated 03.04.2019, the forest proposal of Tehri & Narendranagar is submitted on 4th Apr 2019 & under processing. The consent of DFO (Dehradun) for forest proposal submission is awaited.

Power line crossing

Total no. of crossings	:	09 nos.	
Proposal submitted	:	09 nos.	Date:
Approval obtained	:	09 nos.	Date:

Railway crossing

Total no. of crossings	:	01 no.	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

National Highway Crossing

Total no. of crossings	:	04 nos.	
Proposal submitted	:	04 nos.	Date:
Approval obtained	:	nos.	Date:

State Highway Crossing

Total no. of crossings	:	00 nos.	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

River Crossings

Total no. of crossings	:	Nil	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

PTCC approval

Proposal submitted to Defence on :
 Proposal submitted to BSNL on :
 Proposal submitted to Railways on :
 Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on :
 Current Status:

2. 2 Nos. 400 kV bays at Rishikesh S/S

Land Acquired : NA
 Civil work completed :
 Equipment supplied :
 Equipment erection :
 Scheduled COD : Dec'19

Constarints where Project Authority requires intervention:nil.

3. LILO of one ckt of 400 kV D/c Sikar (PG) – Neemrana (PG) line at Babai

Length: 2.922 CKm
 Locations: 06 nos.
Deemed COD Oct'17

Deemed COD of the Element is declared on 30th Oct 2017 due to non-readiness of RVPN System. Element charged on 16 Feb 2018 after readiness of RVPN System.

4. Babai (RRVPNL) – Bhiwani (PG) D/C line

Length : 221 CKm
 Locations : 304 nos.
 Foundation completed: : 273 nos.
 Tower erected: : 248 nos
 Stringing completed: : 74 CKM
 Scheduled COD: : Jun'19

Constraints where Project Authority requires intervention:

Severe RoW issues:

Severe RoW issues are existing at loc. No. 17/0, 18/0 of Tehsil Khetri and 52/3, 62/1, 75/0-89/0 of Tehsil Dadri & Bhiwani.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- 3.37 Km

Locations: 07 nos. (Rajsthan)

Length:

Forest area(ha) : 12.90 Ha (2.80 Kms) Rajsthan + 3.46 Ha (0.57 Kms) Haryana

Forest proposals submitted on : 15-05-2017 for Haryana and on 11.08.2017 for Rajasthan.

Current status: Haryana Proposal- Stage I approval received on 27 Mar 2018.

Rajasthan Proposal - Stage I approval received on 6th Jul 2018.

Wildlife Clearance

Details of Tr. Line Falling under Wildlife :-

Locations:

Length:

Wildlife area(ha) : 7.452 Ha (2.80 Kms) Khetri Bansyal Conversion Reserve

Wildlife proposals submitted on : 16-02-2018

Current status: Proposal recommended by NBWL and currently recommendations forwarded to State Govt. (Rajasthan) and approval received on 14.02.2019..

Power line crossing

Total no. of crossings	:	20 nos.	
Proposal submitted	:	20 nos.	Date:
Approval obtained	:	20 nos.	Date:

Railway crossing

Total no. of crossings	:	01 no.	
Proposal submitted	:	01 nos.	Date:
Approval obtained	:	01 nos.	Date:

National Highway Crossing

Total no. of crossings	:	01 nos.	
Proposal submitted	:	01 nos.	Date:
Approval obtained	:	01 nos.	Date:

State Highway Crossing

Total no. of crossings	:	05 nos.	
Proposal submitted	:	05 nos.	Date:
Approval obtained	:	05 nos.	Date:

Canal Crossings (Minor)

Total no. of crossings	:	14 nos.	
Proposal submitted	:	14 nos.	Date:
Approval obtained	:	14 nos.	Date:

PTCC approval

Proposal submitted to Defence on

Proposal submitted to BSNL on

Proposal submitted to Railways on

Current status:

Defence/Civil Aviation

Proposal submitted : 13.03.2018

Current Status : Civil Aviation approval received on 31.05.18
Approval from Defence received on 06.06.18

5. 2 Nos. 400 kV bays at Babai (RRVPNL) substation for LILO Line

Land Acquired	: 100%
Civil work completed	: 100%
Equipment supplied	: 100%
Equipment erection	: 100%
Scheduled COD	: Dec'16
Deemed COD	: 30 Oct'17

Under commercial operation.

6. 2 Nos. 400 kV bays at Babai (RRVPNL) substation for Bhiwani Line

Land Acquired:	100%
Civil work completed:	100%
Equipment supplied:	100%
Equipment erection:	90%
Scheduled COD	Jun'19

Constraints/Approval if any:

Shut down required to complete work of 02 no. of bays at 400 kV Babai (RRVPNL) S/s for 400 kV D/C Babai- Bhiwani transmission Line. In principle approval for shut down has been granted in 162nd OCC meeting, and shut down was scheduled from 03/09/2019-11/09/2019 and 17/09/2019 to 20/09/2019.

Eventhough the shutdown was accorded 03/09/2019-11/09/2019 and 17/09/2019 to 20/09/2019, the same could not be attended because of inability of vendor to remobilize the manpower after demobilization.

(36) Name of Transmission Project - Additional system strengthening for Sipat STPS

Background

To enhance redundancy in Sipat STPS power evacuation system, this transmission scheme has been evolved.

Scope of transmission project

1. Sipat – Bilaspur Pooling Station 765 kV 3rd S/C line
2. Bilaspur Pooling Station - Rajanandgaon 765 kV D/C line

General Detail

Special Purpose Vehicle (SPV)	:	Sipat Transmission Ltd (A subsidiary of Adani transmission Limited)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	1097
Levellised Tariff (Rs. Crs)	:	79.21
Request for Qualification	:	01.01.2015
Request for Proposal	:	07.04.2015
Letter of Intent	:	28.07.2015
Transmission Service Agreement (TSA)	:	24.06.2015
SPV acquisition	:	23.11.2015
Transmission License by CERC	:	07.03.2016
Tariff adoption by CERC	:	28.01.2016
Contract Performance Guarantee	:	30.10.2015
Clearance u/s 164	:	03.08.2016
Execution plan submitted to CEA	:	21.03.2016
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	22.03.2019
Actual Date of Completion	:	May'18 (works completed), Mar'19 (Commissioned)

Status of progress of transmission project

1. Sipat STPS - Bilaspur 765 kV S/C (Q) line

Length : 24.22 ckm
Locations : 73 nos

Transmission line commissioned in Aug'18.

2. Bilaspur - Rajnandgaon 765 kV D/C (hexa) line

Length : 324.07 ckm
Locations : 428 nos

Transmission line commissioned in Mar'19.

3. 765 kV Bay at Sipat s/s

Commissioned Aug'18

Project commissioned.

(37) Name of transmission project - Additional system strengthening for Chhattisgarh (B)

Background

The transmission corridor covered under present project has been evolved to provide reliable evacuation of power from various IPPs coming up in Chhattisgarh.

Scope of transmission project

1. Raipur(pool) – Rajnandgaon 765 kV D/C line
2. Rajnandgaon – Pooling station near warora 765 kV D/C line
3. Establishment of pooling station near Rajnandgaon

765 kV

- Line bays 6 nos
- Bus reactor 3x110 MVar
- Bus reactor bay 1 no.
- Line reactors 7x110 MVar(1 unit spare, switchable for warora line)
- Space for 765kV line bays 4 nos
- Space for 765 kV ICT bays 3 nos

400 kV

- Space for 400 kV ICT bays 3 nos
- Space for 400 kV line bays 4 nos

General Details

Special Purpose Vehicle(SPV)	:	Raipur- Rajnandgaon Warora Trans. Ltd (A subsidiary of Adani transmission Limited)
Bid Process Coordinator(BPC)	:	Power Finance Corporation
Estimated Cost (Rs. Crs)	:	2260
Levellised Tariff (Rs. Crs)	:	177.928
Request for Qualification	:	01.01.2015
Request for Proposal	:	13.04.2015
Letter of Intent	:	28.07.2015
Transmission Service Agreement(TSA)	:	24.06.2015
SPV acquisition	:	23.11.2015
Transmission License by CERC	:	29.02.2016
Tariff adoption by CERC	:	29.01.2016
Contract Performance Guarantee	:	30.10.2015
Clearance u/s 164	:	15.06.2016
Execution plan submitted to CEA	:	21.03.2016
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	22.11.2018
Actual Date of Completion	:	Mar'19

Status of progress of transmission project

1. Raipur - Rajnandgaon 765 kV D/C (hexa) line

- Length: 79.56 ckm
- Locations: 104 nos

Transmission line commissioned in Mar'19.

2. Rajnandgaon - Warora 765 kV D/C (hexa) line

- Length: 532 ckm
- Locations: 688 nos

Transmission line commissioned in Mar'19.

3. 765 kV Rajnandgaon switching station

Commissioned in Mar'19.

(38) Name of transmission project - System strengthening for IPPs in Chhattisgarh and other generation projects in western region

Background

The immediate evacuation of Vindhyachal STPP- IV & V consists of Vindhyachal-IV - Vindhyachal Pool station 400 kV D/C (Quad) line. NTPC requested to provide additional outlet from Vindhyachal-IV generation project in order to increase the reliability of power evacuation system for Vindhyachal STPP-IV & V project. With 765 kV and 400 kV interconnection there would be more flexibility in operation as well as utilization of the 765/400 kV transformation capacity.

Scope of transmission project

1. 400 kV interconnection at Gwalior 765/400 kV s/s
 - (i) Gwalior-Morena 400 kV D/C (Q) line
 - (ii) 2x315 MVA, 400/220 kV substation at Morena
2. Additional evacuation line from Vindhyachal-IV & V STPP (3x500 MW)
 - (i) Vindhyachal STPS - IV & V – Vindhyachal pool 400 kV D/C (Q) line
 - (ii) 400 kV bays (2 nos.) at Vindhyachal STPP switchyard
3. Additional system strengthening scheme for Chhattisgarh IPP's (Part-A)
 - (i) Sasan UMPP – Vindhyachal Pooling Station 765 kV S/C (Q) line
 - (ii) Raigarh (Kotra) – Champa (Pool) 765 kV S/C (Q) line
 - (iii) Champa (Pool) – Dharamjaygarh 765 kV S/C (Q) line
 - (iv) LILO of one ckt of Aurangabad – Padghe 765 kV D/C (hexa) line at Pune
 - (v) 765 kV bays at Sasan UMPP

General Detail

Special Purpose Vehicle (SPV)	:	Chhattisgarh-WR Transmission Ltd (A subsidiary of Adani Transmission Limited)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	1285
Levellised Tariff (Rs. Crs)	:	132.402
Request for Qualification	:	29.12.2014
Request for Proposal	:	13.04.2015
Letter of Intent	:	28.07.2015
Transmission Service Agreement(TSA)	:	24.06.2015
SPV acquisition	:	23.11.2015
Transmission License by CERC	:	29.02.2016
Tariff adoption by CERC	:	28.01.2016
Contract Performance Guarantee	:	30.10.2015
Clearance u/s 164	:	25.10.2016
Execution plan to CEA	:	21.03.2016
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	22.03.2019
Actual Date of Completion	:	Aug'19 (commissioned)

Status of progress of transmission project

1. 400 kV interconnection at Gwalior 765/400 kV s/s

(i) Gwalior - Morena 400 kV D/C (Q) line

Length: 95.6 ckm

Locations: 145 nos

Transmission line commissioned in **May'18**.

(ii) 2x315 MVA, 400/220 kV Morena substation

Substation commissioned in **May'18**.

2. Additional evacuation line from Vindhyachal-IV & V STPP (3x500 MW)

(i) Vindhyachal STPS - IV & V – Vindhyachal pool 400 kV D/C (Q) line

Length: 54.62 ckm

Locations: 87 nos

Line commissioned in **Mar'18**.

(ii) 400 kV bays (2 nos.) at Vindhyachal STPP switchyard

Commissioned in **Mar'18**.

3. Additional system strengthening scheme for Chhattisgarh IPP's (Part-A)

(i) Sasan UMPP – Vindhyachal Pooling Station 765 kV S/C (Q) line

Length: 5.892 ckm

Locations: 22 nos

Line commissioned in **Apr'18**.

(ii) Raigarh (Kotra) – Champa (Pool) 765 kV S/C (Q) line

Length: 97 ckm

Locations: 261 nos

Line commissioned in Aug'18.

(iii) Champa (Pool) – Dharamjaygarh 765 kV S/C (Q) line

- Length: 51.1 ckm

- Locations: 150 nos

Commissioned Jul'18.

(iv) LILO of one ckt of Aurangabad – Padghe 765 kV D/C (hexa) line at Pune

- Length: 129 ckm

- Locations: 180 nos

Commissioned Aug'19.

(v) 765 kV bays at Sasan UMPP

Bays Commissioned in Apr'18.

(39) Name of transmission project - Immediate evacuation for North Karanpura(3x660MW) generation project of NTPC(ERSS-XIX)

Background

NTPC Ltd. has planned to establish a 1980MW (3x660MW) thermal power project at North Karanpura in the state of Jharkhand. Accordingly, Immediate evacuation system for the same was finalized with following transmission system: (i) North Karanpura – Gaya 400kV D/c (Quad) (ii) North Karanpura – Jharkhand Pool (Chandwa) 400kV D/c (Quad) Further, under the 24x7 power for all scheme, Jharkhand has projected a requirement of about 1000MW in Dhanbad region. In view of the same it is proposed to establishment 400/220kV, 2x500 MVA sub-station at Dhanbad along with LILO of both circuits of Ranchi – Maithon-RB 400kV D/c line at Dhanbad. The same was agreed to be implemented as ISTS scheme to be built under TBCB. For drawl of power from Dhanbad, JUSNL would construct 2 no. 220kV D/c lines, one each to Govindpur and Jainamore 220 kV sub-stations.

Scope of transmission project:

1. North Karanpura – Gaya 400kV D/c line with quad moose conductor.
 2. North Karanpura – Chandwa (Jharkhand) Pooling Station 400kV D/c line with quad moose conductor.
 3. LILO of both circuits of Ranchi – Maithon-RB 400kV D/c line at Dhanbad
 4. Creation of 400/220 kV sub-station at Dhanbad(ERSS-XIX)
- (i) Establishment of 400/220 kV, 2x500 MVA sub-station at Dhanbad

400 kV

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 no.
- Line bays: 4 no.
- 400 kV bus reactor bays: 2 no.
- Bus reactor: 2x125 MVAR
- Space for future bays: 4 no
- Space for future 400/220 kV, 500 MVA ICT along with associated bay

220 kV

- ICTs bays: 2 no.
- Line bays: 4 no.
- Space for future bays: 4 no.

General Details:

Special Purpose Vehicle (SPV)	:	North Karanpura Transco Ltd. (A subsidiary of M/s Adani Transmission Limited)
Bid Process Coordinator (BPC)	:	RECTPCL
Estimated Cost (Rs. crs)	:	471 crore
Levellised Tariff (Rs. Crs)	:	55.99978
Request for Qualification	:	30.11.2015
Request for Proposal	:	03.02.2016
Letter of Intent	:	24.05.2016
Transmission Service Agreement (TSA)	:	06.07.2016
SPV acquisition	:	08.07.2016
Transmission License by CERC	:	29.09.2016
Tariff adoption by CERC	:	06.09.2016

Contract Performance Guarantee	:	03.06.2016
Clearance u/s 164	:	Newspaper publication for REC route was done on 15.10.2016. Re-publication on route near Barki River was done on 30.10.2017.
Execution plan submitted to CEA	:	Original-03.11.2016. Revised Execution plan discussed in meeting with CEA on 23.04.2019.
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	30.09.2019
Revised Scheduled Date of Completion	:	As per CERC directive, it is being finalized by CEA and in consultation with NTPC.

Status of progress of transmission project:

1. North Karanpura – Chandwa (Jharkhand) Pooling Station 400kV D/c line (including Multi-circuit portion)

- Length (as per revised route): 102 Ckm
- Locations (as per revised route): 112 nos
- Route alignment completed: 102 Ckm
- Detailed survey completed: 102 Ckm
- Foundation completed: 28 nos (revised route)
- Tower erected: 14 nos (revised route)
- Stringing completed:
- Revised schedule completion date: 14 months from the date of NOC from CCL/MoC (considering receipt of forest approval within 200 days)

Constraints where Project Authority requires intervention:

- a) Approval under Section 164 on fast track basis as special case.
- b) CEA has also requested PCCF, Ranchi on 22.07.19 & 10.10.2019 for early clearance as a special case.

Status of statutory approvals:

Forest (including multi-circuit portion)

Details of Tr. Line Falling under Forest:- Locations: 31 nos and Length: 12 Kms

Forest area affected (ha) : 55.6243 Ha

Forest proposals submitted on: 17.06.2019

Current status:

Remarks: Proposal on revised route has been submitted within the timeline committed to CEA.

Power line crossing

Total no. of crossings	:	3	nos.
Proposal submitted	:	3	nos.
Approval obtained	:	0	nos.

Railway crossing

Total no. of crossings	:	1	no.
Proposal submitted	:	1	no.
Approval obtained	:	0	no.

National Highway Crossing

Total no. of crossings	:	2	nos.
Proposal submitted	:	2	nos.
Approval obtained	:	0	nos.

River Crossings

Total no. of crossings	:	Nil
Proposal submitted	:	Nil
Approval obtained	:	Nil

PTCC approval Submitted.

Proposal submitted to BSNL in
 Proposal submitted to Railways in
 Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation
 Current Status:

2. North Karanpura – Gaya 400kV D/C line(only Double Circuit portion)

- Length (as per revised route): 196 Ckm
- Locations (as per revised route): 289 nos
- Route alignment completed: 196 Ckm
- Detailed survey completed: 190 Ckm
- Foundation completed: 30 nos (on revised route)
- Tower erected: 12 nos (on revised route)
- Stringing completed: Nil
- Revised schedule completion date: 23 months from the date of NOC from CCL/MoC (considering receipt of forest approval within 300 days)

Constraints where Project Authority requires intervention:

- a) Approval under Section 164 on fast track basis as special case.

Status of statutory approvals:**Forest**

Details of Tr. Line Falling under Forest:- Jharkhand(JH) - Locations: 136 nos. and Length: 42 kms and Bihar(BH) – Location: 1 no. and Length: 1.2 Kms
 Forest area affected (ha) : 193.526 Ha. in JH portion & 5.437 Ha. in BH portion.

Forest proposals submitted on: uploaded 20.07.2019 for JH portion & 01.08.2019 for BH portion

Current status: Proposal on revised route has been submitted within the timeline committed to CEA.

Power line crossing

Total no. of crossings :	9 nos.	
Proposal submitted :	4 nos.	Date:
Approval obtained :	0 nos.	Date:

Railway crossing

Total no. of crossings :	1 no.	
Proposal submitted :	1 nos.	Date:
Approval obtained :	0 nos.	Date:

National Highway Crossing

Total no. of crossings :	3 nos.	
Proposal submitted :	0 nos.	Date:
Approval obtained :	0 nos.	Date:

River Crossings

Total no. of crossings :	nos.	
Proposal submitted :	nos.	Date:
Approval obtained :	nos.	Date:

PTCC approval

Proposal submitted to BSNL
Proposal submitted to Railways
Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation
Current Status:

3. Establishment of 400/220 kV, 2x500 MVA sub-station at Dhanbad

- Land acquired: completed
- Civil works completed : 0%
- Equipment supplied : 0%
- Equipment erected : 0%
- Schedule completion : 07.05.2019
- Revised schedule completion date: 18 months from date of NOC from CCL/MoC

Constraints where Project Authority requires intervention:

4. LILO of both circuits of Ranchi – Maithon-RB 400kV D/c line at Dhanbad

- Length: 2.4 Ckm

- Locations: 4 nos.
- Foundation completed:
- Tower erected:
- Stringing completed:
- Schedule completion date: 07.05.2019
- Revised schedule completion date: 18 months from date of NOC from CCL/MoC

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations: nos.

Length:

Forest area affected (ha) :

Forest proposals submitted on

Current status:

Power line crossing

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

Railway crossing

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

National Highway Crossing

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

River Crossings

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

PTCC approval

Proposal submitted to Defence on

Proposal submitted to BSNL on

Proposal submitted to Railways on

Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on.....

Current Status:

Constraints where Project Authority requires intervention:

- CCL & CMPDI disallowed construction on BPC route and suggested a route which involved multi-circuit towers and required piles foundations.
- TSP has requested for TSA termination on 13.04.2018 under article 4.4.2 read with article 11 and article 13.5 of TSA due to continuation of force majeure events.
- A meeting was held in Ministry of Coal in June, 2018 and all stakeholders agreed “in principle” to the routes suggested by CCL and CMPDI. It was advised that implementing agency may choose either of two route options suggested by CCL/CMPDI. During the hearing held on 26.07.2018, NKTL submitted that they would need time to conduct survey to evaluate the feasibility of proposed routes. The proposed NKSTPP-Gaya route avoids CCL command area but beyond the CCL boundary the coal block of M/s Usha Martin is located and the NKSTPP-Gaya line was passing through coal block of Usha Martin and NOC for which got denied by Usha Martin.
- TSA termination notice withdrawn on 10.12.2018, which was allowed by CERC. However, still NoC is awaited from CCL/MoC for construction of the lines over coal bearing area.
- MoC had filed an affidavit requesting CERC to amend the Transmission License condition by mentioning that implementing agency shall shift the line within 24 months from the notice and failing which the agency will be liable to pay the price of coal to CCL.
- In response to MoC’s affidavit, NKTL had filed an affidavit on 25.02.2019 undertaking to re-route/divert/shift the transmission lines in future, in accordance with law and the orders passed by CERC, based on the alternate route provided by MoC and CCL.
- CERC vide its order dated 20.03.2019 has disposed off the matter with the decision that MoC will issue NOC within a week of issue of order and CEA will decide the compressed time schedule to complete the project. Alternate route will be provided by MoC, when requirement of shifting arises.
- A letter has been received from CCL by M/s NKTL on 18.04.2019 for finalisation of MoU. Although MoU is yet to be signed with CCL, the project execution has been commenced in the interest of completing the project at an early date.
- After concurrence from NTPC and NKTL, CEA had decided that NK-C line shall be completed within 14 months from date of the NOC. This timeline of 14 months is subject to grant of forest clearance within 200 days from the date of application. Also for the NK-G line, it shall be completed within 23 months from date of NOC. This timeline is subject to grant of forest clearance within 300 days from the date of application. In response to submission of NKTL during meeting on 04.07.2019, CEA vide its letter dated 22.07.2019, 10.10.2019 & 14.10.2019, has requested Principal Chief Conservator of Forest to process the forest clearance proposal of NKTL at the earliest as a special case to enable NKTL to meet the power evacuation requirement of NTPC in compressed timeline.

(40) Name of transmission project- Transmission System for Ultra Mega Solar Park in Fatehgarh, Distt. Jaisalmer Rajasthan

Background

Government of India has taken an initiative for development of Solar Power Parks in various parts of the country. As part of above initiative, Solar Power parks are being developed by various developers near Bhadla & Jaisalmer in Rajasthan.

MNRE has authorised M/s. Adani Renewable Energy Park Rajasthan Ltd. (AREPRL) (JVC of Govt. of Rajasthan and AREPL) as solar park developer for 1500 MW capacity at Fatehgarh, Distt. Jaisalmer, Rajasthan. Out of above generation capacity, M/s. AREPRL has applied for Connectivity & Long Term Access in ISTS for 1000 MW.

To evacuate power from the Fatehgarh UMSP (1000 MW), it was finalized to establish 400 KV Pooling Station at Fatehgarh along with 765 KV Fatehgarh Pool – Bhadla (PG) D/C line (to be operated at 400 KV). Also, in order to address reactive power management aspect including during low / no solar generation periods, 1x125 MVAR bus reactor (at 400 KV bus) at Fatehgarh Pooling Station is finalized.

Scope of transmission project

1. Establishment of 400 KV pooling station at Fatehgarh
2. 765 kV Fatehgarh Pooling sub-station - Bhadla (PG) D/C line (to be operated at 400 kV).
3. 2 nos of 400 kV line bays at Fatehgarh Pooling substation
4. 1x125 MVAR Bus reactor at 400kV Fatehgarh Pooling sub-station along with associated bay
5. Space for future 220 kV (12 Nos.) line bays.
6. Space for future 400 kV (8 Nos.) line bays along with line reactors at Fatehgarh Pooling station.
7. Space for future 220/400 kV transformers (5 nos.) along with associated transformer bays at each level.
8. Space for future 400 KV bus reactors (2 nos.) along with associated bays.

General Details

Special Purpose Vehicle	: Fatehgarh-Bhadla Transmission Limited
Bid Process Coordinator (BPC)	: Power Finance Corporation
Estimated Cost (Rs. Crs)	: 575
Levelling Tariff (Rs. Crs)	: 38.015
Request for Qualification	: 30.12.2016
Request for Proposal	: 30.04.2017
Letter of Intent	: 21.02.2018
Transmission Service Agreement (TSA)	: 10.01.2018
SPV acquisition	: 14.03.2018
Transmission License by CERC	: 27.08.2018 (Order date)
Tariff adoption by CERC	: 27.08.2018
Contract Performance Guarantee	: 12.03.2018
Clearance u/s 164	: 26.10.2018 Proposal for

Execution plan submitted to CEA : 09.07.2018
NIT issued on :
EPC contract awarded on :
Scheduled Date of Completion : **30.09.2019**

Status of progress of transmission project:

(i) 765 kV Fatehgarh Pooling sub-station - Bhadla (PG) D/C line (to be operated at 400 kV)

- Length: 304 ckm
- Locations: 388 nos
- Foundation completed: 246 nos (as per revised route)
Earlier casted 24 nos will be scraped
due to re-routing on account of GIB arc
- Tower erected: 131 nos (on revised route)
- Stringing completed: 8.8 ckm
- Schedule completion 30.09.2019

Constraints where Project Authority requires intervention:

- a)** Forest proposal: Proposal is not recommended as the proposed area is in habitat of critical endangered bird, Great Indian Bustard (GIB). Received letter from DNP, Jaisalmer to divert the transmission line outside the GIB arc. Route alignment on the revised route completed and the revised line length works out to 152 Kms. On the basis of above, FBTL has served Change in law notice on 26.03.2019 and Petition filed in CERC on 25.04.2019. During hearing date 21.08.2019, CERC had admitted the petition and hearing was conducted on 29.10.2019 and matter is now reserved for order.
- b)** Defence NOC : Proposal submitted on 15.07.2019, NOC is awaited from Defence authority. FBTL has requested to Air Head Quarter, Delhi vide letter dated 15.10.2019 to expedite approval.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- Length:

Forest area affected (ha) : 1.33 Ha (on revised route)

Forest proposals submitted on 27.06.2019 (for revised route)

Current status: Line was not allowed to pass on original route factoring the habitant of GIB, even with provision of bird deflectors/diverters and hence had to be re-routed based on the letter received from DNP, Jaisalmer. Forest proposal for revised route have been uploaded.

Power line crossing (on revised route)

Total no. of crossings	:	10	nos.
Proposal submitted	:	10	nos.
Approval obtained	:	6	nos.

Railway crossing (on revised route)

Total no. of crossings	:	1	no.
Proposal submitted	:	1	no.
Approval obtained	:	0	no.

National Highway Crossing (on revised route)

Total no. of crossings	:	2	nos.
Proposal submitted	:	2	nos.
Approval obtained	:	1	no.

PTCC approval (on revised route)

Proposal submitted to BSNL in	:	
Proposal submitted to Railways in	:	
Current status:	:	under process

Defence/Civil Aviation (on revised route)

Proposal submitted to Defence/Civil Aviation : submitted
Current Status:

(ii) Establishment of 400 KV Pooling Station At Fategarh

- Land acquisition: Sub-lease agreement has been signed between FBTL & Beneficiary.
- Engineering: 98%
- Equipment supplied: 0%
- Constrcution: 40%
- Schedule completion: 30.09.2019

Constraints where Project Authority requires intervention:

- a) Beneficiary, i.e. Adani Renewable Energy Park Rajasthan Limited ("AREPRL") has filed a petition in CERC on 02.01.2019 seeking extension of SCOD on account of Force Majeure.

(iii) 2 nos of 400 kV line bays at Fatehgarh Pooling substation

- Schedule completion: 30.09.2019
- Anticipated completion: Mar'20

(iv) 1x125 MVAR Bus reactor at 400kV Fatehgarh Pooling sub-station along with associated bay

- Schedule completion: 30.09.2019
- Anticipated completion: Mar'20

(41) Name of transmission project- Transmission System Associated with LTA applications from Rajasthan SEZ Part-D

Background

Government of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. Towards this, solar generation potential of about 3.55 GW in Bhadla complex, 3.5 GW in Fatehgarh complex and 1.85 GW in Bikaner has been envisaged. For integration and evacuation of power from generation projects in the above areas, a high capacity 765 kV and 400 kV transmission system interconnecting Bhadla, Fatehgarh, Bikaner, Sikar & Khetri along with establishment of 765/400 kV new substation at Bhadla-II, Fatehgarh-II & Khetri have been planned.

The subject transmission scheme involves implementation of Bikaner – Khetri 765 kV D/C line which shall help in transfer of power from RE sources in above complexes for onward dispersal of power to various beneficiaries.

The proposal has been technically agreed in the 2nd meeting of Northern Region Standing committee on Transmission (NRSCT) held on 13.11.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementing through TBCB route with a commissioning schedule as Decemeber, 2020.

Scope of transmission project:

1. Bikaner (PG) – Khetri S/S 765 kV D/C line.
2. 765 kV Bays at Bikaner (PG) & Khetri for Bikaner (PG) – Khetri S/S 765 kV D/C line (765 kV line bays: 4 nos).
3. 1x240 MVar switchable line reactor for each circuit at each end of Bikaner – Khetri 765 kV D/C line along with reactor bays (1x240 MVar Line reactor – 4nos, 765 kV Reactor bay – 4 nos). 1x80 MVar, 765 kV, 1-ph Reactor (spare unit) (For 2x240 MVar line reactor on Bikaner – Khetri 765 kV D/C line at Bikaner end).

General Detail

Special Purpose Vehicle (SPV)	:	Bikaner-Khetri Transmission Limited (A subsidiary of Adani Transmission Limited)
Bid Process Coordinator (BPC)	:	PFC Consulting Limited
Estimated Cost (Rs. crs)	:	1630.58
Levellised Tariff (Rs. Crs)	:	100.051
Request for Qualification	:	17.01.2019
Request for Proposal	:	18.03.2019
Letter of Intent	:	31.07.2019
Transmission Service Agreement(TSA)	:	23.04.2019
SPV acquisition	:	19.09.2019
Transmission License by CERC	:	application filled on 21.09.2019
Tariff adoption by CERC	:	application filled on 21.09.2019

Contract Performance Guarantee	:	
Clearance u/s 164	:	
Execution plan to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	31.12.2020

- There has been delay of 59 days in SPV acquisition for reasons not attributable to Adani Transmission Limited. Accordingly, a notice had been submitted to LTTC on 15.10.2019 to extend the SCOD for the delayed timeframe.

(42) Name of transmission project- Transmission System for Western Region Strengthening Scheme – 21 (WRSS – 21) Part – A – Transmission System Strengthening for Relieving Over Loadings Observed in Gujarat Intra-State System Due to Re-injections in Bhuj PS

Background

Government of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. This includes wind potential of about 6 GW in Bhuj complex, 2 GW in Lakadia and 1.5 GW in Dwarka. For integration and evacuation of power from generation projects in the above areas, a high 765 kV and 400 kV transmission system interconnecting Bhuj, Lakadia, Banaskantha, Vadodara & Dwarka along with establishment of 765/440/220 kV new substations at Bhuj-II & Lakadia and 400/220 kV new substation at Jam Khambhaliya (Dwarka) have been planned.

The subject transmission scheme involves establishment of 765/400 kV Lakadia Pooling station along with LILO of Bhachau – EPGL 400 kV D/C (triple) line at Lakadia PS and Bhuj PS – Lakadia PS 765 kV D/C line which helps in transfer of power from RE sources in the Kutch area of Gujarat (Bhuj complex) to Lakadia for onward dispersal of power to their respective beneficiaries.

The proposal has been agreed in the 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 05.09.2018. The same was agreed in the 3rd ECT meeting on 21.12.2018 for implementing through TBCB route with a commissioning schedule as Decemeber, 2020.

Scope of transmission project:

1. Establishment of 2x1500 MVA, 765/400 kV Lakadia PS with 765 kV (1x330 MVAR) & 420 kV (1x125 MVAR) bus reactor
 - 2x1500 MVA, 765/400 kV
 - 400 kV ICT bay – 2
 - 765 kV ICT bay – 2
 - 400 kV line bay – 4
 - 765 kV line bay – 2
 - 1x330 MVA, 765 kV,
 - 1x125 MVA, 420 kV
 - 765 kV Reactor bay – 1
 - 420 kV Reactor bay – 1
 - Future provisions, Space for:
 - (i) 765/400 kV ICTs along with bays: 2 nos
 - (ii) 400/220 kV ICTs along with bays: 8 nos
 - (iii) 765 kV line bays: 4 nos
 - (iv) 400 kV line bays: 6 nos
 - (v) 220 kV line bays: 16 nos

- (vi) 765 kV bus reactor along with bays: 1 no
- (vii) 400 kV bus reactor along with bays: 1 no
- 2. LILO of Bhachau – EPGL line 400 kV D/C (triple) line at Lakadia PS.
- 3. Bhuj PS – Lakadia PS 765 kV D/C line.
- 4. 2 nos of 765 kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765 D/C line.

General Detail

Special Purpose Vehicle (SPV)	:	WRSS XXI(A) Transco Limited (A subsidiary of Adani Transmission Limited)
Bid Process Coordinator (BPC)	:	REC Transmission Projects Co. Ltd.
Estimated Cost (Rs. crs)	:	1089.89
Levellised Tariff (Rs. Crs)	:	95.129
Request for Qualification	:	12.01.2019
Request for Proposal	:	13.03.2019
Letter of Intent	:	31.07.2019
Transmission Service Agreement(TSA)	:	23.04.2019
SPV acquisition	:	14.10.2019
Transmission License by CERC	:	application filled on 17.10.2019
Tariff adoption by CERC	:	application filled on 17.10.2019
Contract Performance Guarantee	:	
Clearance u/s 164	:	public notice published on 24.10.2019
Execution plan to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	T/L EPC 31.10.2019
Scheduled Date of Completion	:	31.12.2020

- There has been delay of 91 days in SPV acquisition for reasons not attributable to Adani Transmission Limited. Accordingly, a notice had been submitted to LTTC on 15.10.2019 to extend the SCOD for the delayed timeframe.

(43) Name of transmission project- Transmission System for Transmission System Associated with RE Generations at Bhuj-II, Dwarka & Lakadia

Background

Govt. of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. This includes wind potential of about 6GW in Bhuj complex, 2GW in Lakadia and 1.5GW in Dwarka. For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhuj, Lakadia, Banaskantha, Vadodara & Dwarka along with establishment of 765/400/220kV new substations at Bhuj-II & Lakadia and 400/220kV new substation at Jam Khambhaliya (Dwarka) have been planned.

The subject transmission scheme involves implementation of Lakadia – Banaskantha 765kV D/c line which is required for transfer of power from RE sources in the Bhuj, Lakadia & Dwarka complexes of Gujarat to Banaskantha for onward dispersal of power to their respective beneficiaries.

The proposal has been agreed in the 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 5.9.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementation through TCB route with a commissioning schedule of June 2021 or as per the progress of connectivity/LTA applications of RE projects from WEZ in Gujarat.

Scope of transmission project:

1. Lakadia PS – Banaskantha PS 765kV D/c line.
2. 765kV Bays at Lakadia and Banaskantha sub-stations for Lakadia PS – Banaskantha PS 765kV D/c line.
3. 2x240MVar switchable Line reactor along with bays at Banaskantha end of Lakadia PS – Banaskantha PS 765kV D/c line and 1x80 MVar, 765 kV, 1 ph switchable line reactor (Spare unit) at Banaskantha end.

General Detail

Special Purpose Vehicle (SPV)	:	Lakadia Banaskantha Transco Limited (A subsidiary of Adani Transmission Limited)
Bid Process Coordinator (BPC)	:	REC Transmission Projects Co. Ltd.
Estimated Cost (Rs. crs)	:	INR 1052 Cr
Request for Qualification	:	12.01.2019
Request for Proposal	:	13.03.2019
Letter of Intent	:	28.10.2019
Transmission Service Agreement(TSA)	:	23.10.2019
SPV acquisition	:	yet to be acquired

Transmission License by CERC	:	
Tariff adoption by CERC	:	
Contract Performance Guarantee	:	
Clearance u/s 164	:	
Execution plan to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	30.06.2021

(44) Name of transmission project- Transmission System for Jam Khambaliya Pooling Station and Interconnection of Jam Khambaliya Pooling Station for Providing Connectivity to RE Projects (1500 MW) in Dwarka (Gujarat) and Installation of 400/220 kV ICT along with Associated Bays at CGPL Switchyard

Background

Connectivity System for RE projects (1500 MW) in Dwarka (Gujarat)

Govt. of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. This includes wind potential of about 6GW in Bhuj complex, 2GW in Lakadia and 1.5GW in Dwarka. For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhuj, Lakadia, Banaskantha, Vadodara & Dwarka along with establishment of 765/400/220kV new substations at Bhuj-II & Lakadia and 400/220kV new substation at Jam Khambhaliya (Dwarka) have been planned.

The subject transmission scheme involves establishment of 400/220kV Jam Khambhaliya Pooling station along with extension of Essar–Lakadia/ Bhachau 400kV D/c (triple snowbird) line upto Jam Khambhaliya PS for providing connectivity to RE projects in Dwarka (Gujarat). This could be utilized for injection of power (~1500 MW) from wind or solar projects in the area.

The proposal has been agreed in the 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 5.9.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementation through TBCB route with a commissioning schedule of June, 2020.

Installation of 400/220 kV ICT along with associated bays at M/s CGPL Switchyard

Over the years, the National Grid has become robust; however, the systems have also become more complex and the uncertainties have increased a lot, particularly in terms of weather and natural calamities. This leads to low probability high impact incidents impacting pockets of the grid often leading to prolonged power supply outages. Therefore, Resilience of the grid becomes important. A resilient system recognizes the fact that there can be failures in the system but has well proven systems for quick revival.

The same principle also applies to large power plants like the Ultra Mega Power Projects (UMPPs) and other large power stations. In view of the above, the 500 MVA, 400/220 kV ICT at CGPL Mundra was agreed by the members during the 1st WRSCT meeting held on 05.09.2018 from the viewpoint of having a resilient system in place. The scheme would provide the startup power to CGPL through Nanikhakhar-CGPL 220 kV S/C line (existing). The line would normally be kept open from CGPL end. The scheme was discussed in the 2nd NCT meeting held on 04.12.2018 & 3rd ECT meeting held on 21.12.2018 wherein it was agreed to implement the same through TBCB route.

Scope of transmission project:**A) Jam Khambhaliya Pooling Station for providing connectivity to RE projects (1500 MW) in Dwarka (Gujarat)**

1. Establishment of 4x500 MVA, 400/220 kV Jam Khambhaliya PS (GIS).
2. 1x125 MVar, 420 kV Bus reactor at Jam Khambhaliya PS along with reactor bay.

B) Interconnection of Jam Khambhaliya Pooling station for providing connectivity to RE projects (1500 MW) in Dwarka (Gujarat)

1. Extension of Essar-Lakadia/Bhachau 400 kV D/C (triple snowbird) line upto Jam Khambhaliya PS.
2. 2 nos of 400 kV line Bays at Jam Khambhaliya PS for termination of Jam Khambhaliya PS – Lakadia 400 kV D/C (triple) line.
3. 63 MVar switchable line reactor at both ends of Lakadia – Jam Khambhaliya 400 kV D/C line along with 500 Ohms NGR on both circuits & at both ends of Lakadia – Jam Khambhaliya 400 kV D/C line.

C) Installation of 400/220 kV ICT along with associated bays at M/s. CGPL Switchyard

1. 1x500 MVA, 400/220 ICT at CGPL Mundra switchyard

General Detail

Special Purpose Vehicle (SPV)	:	Jam Khambhaliya Transco Limited (A subsidiary of Adani Transmission Limited)
Bid Process Coordinator (BPC)	:	REC Transmission Projects Co. Ltd.
Estimated Cost (Rs. crs)	:	INR 394 Cr
Request for Qualification	:	12.01.2019
Request for Proposal	:	13.03.2019
Letter of Intent	:	28.10.2019
Transmission Service Agreement(TSA)	:	23.10.2019
SPV acquisition	:	yet to be acquired
Transmission License by CERC	:	
Tariff adoption by CERC	:	
Contract Performance Guarantee	:	
Clearance u/s 164	:	
Execution plan to CEA	:	
NIT issued on	:	
EPC contract awarded on	:	
Scheduled Date of Completion	:	31.03.2021

(45) Name of transmission project - Transmission System required for evacuation of power from Kudgi TPS (3x800 MW) Phase-I of NTPC

Background

NTPC Limited is establishing coal based Kudgi STPP (3x800 MW) generation project at village Kudgi, Bijapur District in the State of Karnataka. NTPC Limited has been granted LTA for 2392.49 MW as per the LTA application and details of drawl of power is given as under:

Karnataka Discoms	1196.24 MW	KSEB	119.18 MW
TANGEDCO	300.10 MW	AP Discoms	418.10 MW

Transmission scheme is planned for the evacuation and supply of power from the Kudgi TPS to the beneficiaries of the generation project. This transmission scheme shall facilitate immediate evacuation as well as supply of power to its beneficiaries with reliability and security. Beyond Madhugiri & Bidadi dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under Inter-State Transmission System.

Scope of transmission project

1. Kudgi TPS - Narendra (New) 400 kV 2 x D/C Quad lines
2. Narendra (New) - Madhugiri 765 kV D/C line (initially operated at 400 kV level)
3. Madhugiri - Bidadi 400 kV D/C (quad) line

General Details

Special Purpose Vehicle (SPV)	:	Kudgi Transmission Ltd. (L&T Infra)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. crs)	:	1240
Levelised Tariff (Rs. Crs)	:	179.58652
Request for Qualification	:	
Request for Proposal	:	12.03.2013
Letter of Intent	:	31.07.2013
Transmission Service Agreement (TSA)	:	14.05.2013
SPV acquisition	:	30.08.2013
Transmission License by CERC	:	07.01.2014
Tariff adoption by CERC	:	08.01.2014
Contract Performance Guarantee	:	22.08.2013
Clearance u/s 164	:	24.04.2014
Execution plan submitted to CEA	:	Submitted
NIT issued on	:	
EPC contract awarded on	:	21.02.2014
Scheduled Date of Completion	:	28.2.2015/29.12.2015
Actual Date of completion	:	September, 2016

Status of progress of transmission project

1. Kudgi TPS – Narendra 400 kV 2xD/C line (I&II) - Line 1&2 completed on 27.03.2015 and commissioned in Nov-15 & Jun-16 respectively
2. Narendra (New) – Madhugiri 765 kV D/C line (758 ckm) - Line Commissioned on 23.09.2016 at 400kV

3. Madhugiri (Tumkur) – Bidadi 400 kV D/C line(186 ckm)- Commissioned on 24.8.16

Transmission Project Commissioned on Sep-16.

(46) Name of transmission project - Transmission System for Patran 400kV S/S

Background

Patiala and Sangrur district of Punjab has a lot of agriculture load. A partial Grid Disturbance had taken place on 20th July 2011 and analysis of Grid disturbance had also indicated the requirement of a 400/220 kV Substation in this area. In the vicinity there are 5 nos of 220 kV grid stations, namely Mansa, Rajla, Sangrur, Sunam & Patran, having total transformation capacity of about 1180 MVA. In addition, 3 nos of 220 kV new substations are also coming up in the area, at Pasiana, Bangan & Kakarla. Accordingly, to meet the growing load a 400/220 kV substation at Patran has been proposed. The 400/220 kV S/s at Patran would be connected to the grid by LILO of Patial-Kaithal 400 kV D/C. To avoid unbalanced loading, LILO of both circuits is proposed. From these substations, 220 kV lines can be drawn to new Patran, Mansa, Pasiana etc. S/s. Looking into load growth potential it is expected that 800-900 MW load would be there in the vicinity. In view of the above 2x500 MVA transformers have been proposed. Considering the fact that the location of the substation is in a very fertile area of the Punjab where the acquisition of land is going to be a challenging task. Accordingly, it is proposed to develop this substation as Gas Insulated substation.

Scope of transmission project

1. LILO of both circuits of Patiala-Kaithal 400kV D/C line at Patran (Triple snow Bird)
2. 2x500 MVA, 400/220 kV substation at Patran

400 kV

- Line bays 4 nos
- Transformer bays 2 nos
- Space provision for 6 bays

220 kV

- Line bays 6 nos
- Transformer bays 2 nos
- Space provision for 6 bays

General Details

Special Purpose Vehicle(SPV)	:	Patran Transmission Company Ltd. (A subsidiary of Techno Electric and Engineering Company Ltd)
Bid Process Coordinator(BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	200
Levellised Tariff (Rs. Crs)	:	27.4
Request for Qualification	:	11.03.2013
Request for Proposal	:	10.09.2013
Letter of Intent	:	17.09.2013
Transmission Service Agreement(TSA)	:	12.05.2014
SPV acquisition	:	13.11.2013
Transmission License by CERC	:	14.07.2014
Tariff adoption by CERC	:	05.08.2014
Contract Performance Guarantee	:	04.09.2013

Clearance u/s 164	:	29.02.2016
Execution plan submitted to CEA	:	05.08.2014
NIT issued on	:	No NIT issued by PTCL
EPC contract awarded on	:	01.02.2014
Scheduled Date of Completion	:	11.11.2016
Actual Date of Commissioning	:	17.06.2016
Trial run completed (monitored by POSOCO)	:	18.06.2016
Actual COD	:	21.06.2016

Status of progress of transmission project;

1. LILO of both circuits of Patiala-Kaithal 400kV D/C at Patran (Triple snow Bird Conductor)

Length: 200 meter
Locations: 2

Line Completed on Jun-16

2. 2x500 MVA, 400/220 kV Patran substation

Transmission project completed in June 2016 and commissioned in May 2017. 220 KV downstream transmission lines from Patran S/S competed and commissioned by PSTCL in May 2017.

Transmission Project Commissioned on May 2017.

(47) Name of transmission project - Transmission System Associated with Krishnapattnam UMPP- Synchronous interconnection between SR and WR (Part-B)

Background

For evacuation of power from Krishnapattnam UMPP (4000 MW) and export of power from various IPPs coming up in SR to their target beneficiaries in WR and NR, synchronous integration of the Southern Region with the rest of Indian grid had been planned through two number of 765 KV S/C lines between Sholapur and Raichur. With this interconnection a synchronously connected all India Grid would come into existence. Out of the two 765 KV Raichur- Sholapur lines planned, the Raichur- Sholapur 765 KV line-1 is covered under the scheme "Synchronous interconnection between Southern Region and Western Region" which is to be implemented through tariff based competitive bidding route.

Scope of transmission project

1. Raichur-Sholapur 765 KV Single Circuit Line-1

General Details

Special Purpose Vehicle (SPV)	:	Raichur Solapur Trans. Company Limited. (A Consortium of Patel, Simplex infra and BS Transcomm)
Bid Process Coordinator (BPC)	:	Rural Electrification Corporation
Estimated Cost (Rs. crs)	:	440
Levelised Tariff(Rs. Crs)	:	29.39569
SPV acquisition	:	7.1.2011
Scheduled Date of Completion	:	7.1. 2014
Actual Date of Completion	:	30.6.2014

Status of progress of transmission project

1. Raichur-Sholapur 765 kV S/C line-1 – 208 ckm

Transmission Project commissioned on 30.06.2014 .

(48) Name of transmission project -Transmission system strengthening in Indian system for transfer of power from new HEP's in Bhutan

Background

Punatsangchhu-I (1200MW), Punatsangchhu-II (990MW), Mangdechhu(720MW) and Wangchhu (570MW) Hydro Generation Projects in Bhutan are at various stages of development. Power from these generation projects would be transferred to India after meeting small local demand in Bhutan. Power from these generation projects is proposed to be brought to Alipurduar sub-station in West Bengal (India). This transmission scheme has been planned for power transfer from Alipurduar onwards to ER and towards NR, it shall be done through + 800 kV, 6000MW Bishwanath Chariyal (Assam) – Alipurduar (West Bengal) – Agra (Uttar Pradesh) HVDC bipole link.

Scope of transmission project

Transmission Lines:

1. Alipurduar - Siliguri 400 kV D/C line (2nd) with Quad moose conductor
2. Kishanganj - Darbhanga 400kV D/C line with Quad moose conductor

400 kV Bay Requirements:

1. 400 kV line bays at Darbhanga: 2 nos.
2. 80 MVAR switchable line reactors (400 Ohm NGR) in each circuit at Darbhanga end of Kishanganj - Darbhanga 400kV D/C (quad) line

General Details

Special Purpose Vehicle(SPV)	: Alipurduar Transmission Ltd. (A subsidiary of Kalpataru Power Transmission Ltd.)
Bid Process Coordinator(BPC)	: Rural Electrification Corporation
Estimated Cost (Rs. Crs)	: 1272
Levellised Tariff (Rs. Crs)	: 129.424
Request for Qualification	: 16.04.2015
Request for Proposal	: 08.07.2015
Letter of Intent	: 29.10.2015
Transmission Service Agreement(TSA)	: 22.09.2015
SPV acquisition	: 06.01.2016
Transmission License by CERC	: 21.03.2016
Tariff adoption by CERC	: 22.03.2016
Contract Performance Guarantee	: 04.01.2016
Clearance u/s 164 in Gazette	: 20.10.2016
Execution plan submitted to CEA	: 05.05.2016
NIT issued on	: N.A.
EPC awarded on	: 19.01.2016
Scheduled Date of Completion	: 05.03.2019

Status of progress of transmission project

1. Alipurduar (PG) – Siliguri (PG) 400 KV D/C line

Length:	232 ckm
Locations:	321 nos
Foundation completed	321 (9 Nos Pile Locations Completed)
Tower erected	321 nos.

Stringing completed 200.22 Ckm
Schedule Target date: Mar-19

Constraints where Project Authority requires intervention:

- Severe ROW issues being faced on every location demanding high compensations. (majorly of political nature). Work is being done after clearing locations upon rigorous negotiations with landowners.
- Matter has also been highlighted at DM/SDM/BDO level for early resolution.
- CEA officer held a meeting with District Magistrates of Alipurduar & Jalpaiguri District in Nov, 2018 and requested their support for resolution of ROW issues.
- Few land owners have also filed a case in the court of law, and at 1 location i.e. 108/2, till now 3 nos of court hearings have also been over and next hearing is yet to be announced **(In this (loc no. 108/2), court case almost 4 months have already elapsed in court proceedings till date and further anticipated 5-6 months' time in getting resolution)**. At other locations, court hearing is yet to be started.

ATL has submitted request letters to Lead LTTC informing about the prevalent ROW issues at balance locations for foundation, erection & stringing activities with latest letter no. ATL/SLG/WO-292-WB/A-S/642/2019-20, dated 17th Aug'19 and it has been requested for their intervention in resolution of ROW issues through state/local administration support, for completion of works at the earliest.

Status of statutory approvals:

Social Forest

Details of Tr. Line Falling under Forest:- Locations: **NA** Length: **NA**

Forest area affected (ha) : **NA**

Forest proposals submitted on **11-Jan-19**

Current status: **Social Forest Proposal Submitted, Site inspection is completed by the PWD in one area but pending in the other two.**

Power line crossing

Total no. of crossings : 21 nos.

Proposal submitted : 21 nos.

Approval obtained : 21 Nos.

Date: 17-Apr-17, 17-May-17, 4-July-17, 5-Aug-17, 17th Oct'2017

Date: 1 nos- 16th Feb'17, 3 nos approval on 16th June17

2 nos approval on 7th Oct'17

1 Nos approval on 11th Nov'17

3 nos on 16th Jan'18 & 2 nos on 25th Jan'18, 1- 13 th Apr'18 & 2 nos- 29th Jun18

1 nos approval in Dec'18.

9/0 - 9A/0 – 0.118 KM - Final stage of approval recieved on 1st Jun'19 from PGCIL.

Railway crossing

Total no. of crossings : 2 nos.
 Proposal submitted : 2 nos. Date:13-Sept-17
 Approval obtained : 2 nos. Date: 1 no on 22nd Jan'18, 27th Dec'17

National Highway Crossing

Total no. of crossings : 3 nos.
 Proposal submitted : 3 nos. Date:25th May'17,3rd June'17
 Approval obtained : 0 nos. Date:

River Crossings

Total no. of crossings : NA nos.
 Proposal submitted : NA nos. Date:
 Approval obtained : NA nos. Date:
 Current Status: The NOC is recieved.

PTCC approval –

Proposal submitted to Defence on : 16th May'18
 Proposal submitted to BSNL on: 16th May'18
 Proposal submitted to Railways on : 16th May'18
 Current status: NOC from Defence for WB section is received. PTCC Telecommunication clearance recieved on 4-Apr-19

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on: 23rd Jun'18 (Online)
 Current Status: NOC Cleared from Shillong.

The clearance/approval from following Govt. Authorities is awaited:

Sr. No	Description	Submission Date	Approval Status
1	Pending NH Crossing Permission (for 3 crossings) 59/0-60/0 - 0.225KM 89/0-90/0- 0.241KM 114/0-115/0-0.245KM Total = 0.711KM	22-May-17	Awaited
2	Social Forest/Trees in Govt. Land	11-Jan-19	Awaited

2. Kishanganj (PG) – Darbhanga (DMTCL) 400 KV D/C line

Length : 209 ckm
 Locations : 545 nos.
 The Line Commissioned & the Schedule Commercial Operations Date declared on 6th Mar'19

3. 2 nos 400 kV line bays at Darbhanga and 80 MVAR switchable line reactors

Land acquired : 100% (Land provided by DMTCL)
 Civil works completed : 100%
 Equipment supplied : 100%
 Equipment erected : 100%
 Schedule COD : Mar '19

(49) Name of transmission project - North Eastern Region Strengthening Scheme (NERSS-VI)

Background

The expansion of 400 kV network in NER is planned through new 400 kV line and up gradation of existing 400 kV lines presently charged at 132 kV to its rated voltage of 400 kV. A 400 kV ring is being established in Assam and Meghalaya connecting Silchar – Misa – Balipara – Bongaigaon – Azara/Byrnihat - Silchar substations. Another 400 kV ring is being established interconnecting Assam and Tripura through Silchar – Palatana – Surajmaninagar – P. K. Bari – Silchar corridor.

The extension of 400 kV system to the states of Manipur and Nagaland by interconnecting them with Assam has been planned through a 400 kV ring connecting Silchar- Imphal – New Kohima – New Mariani – Misa – Silchar along with new 400 kV substation at New Mariani and charging the New Mariani – Misa line at its rated voltage of 400 kV. Additionally, the Silchar- Imphal – New Kohima- New Mariani – Misa corridor would be an alternate for Silchar – Misa line.

The present scheme will form the Imphal – New Kohima – New Mariani section of Silchar- Imphal – New Kohima – New Mariani – Misa – Silchar 400 kV ring along with establishment of new 400/200 kV substation at New Kohima. This would require up gradation of the New Mariani S/s of POWERGRID to 400 KV and LILO of the Kathalguri – Misa D/C line at New Mariani S/s along with charging of Misa – New Mariani section at rated voltage of 400 KV (under the scope of POWERGRID). The New Mariani – Kathalguri section would be kept charged at 220 KV.

The subject scheme has been approved in the 5th Standing Committee Meeting on Power System Planning of North Eastern Region held on 08-08-2015 at Imphal, 15th NERPC/TCC meeting held on 21-08-2015 at Guwahati and 35th Empowered Committee meeting on Transmission held on 14-09-2015 at New Delhi.

Scope of transmission project

1. Establishment of 400/220 kV, 7x167 MVA s/s at new Kohima

400 kV

ICTs: 400/220 kV, 7x167 MVA

ICTs bays: 2 nos.

Line bays: 4 nos.

Bus Reactor: 2x125 MVAR

400 kV bus reactor bays: 2 nos.

Space for future bays: 4 nos. (along with space for switchable line reactor)

220 kV

ICTs bays: 2 nos.

Line bays: 4 nos.

Space for future bays: 4 nos.

Space for 400/220 kV 500 MVA ICT along with associated bays

2. Imphal-New Kohima 400 kV D/C line (Twin Moose ACSR)

3. New Kohima -New Mariani 400 kV D/c line (Twin Moose ACSR)

General Details

Special Purpose Vehicle	: Kohima-Mairani Trans. Ltd(Kalpataru)
Bid Process Coordinator (BPC)	: Power Finance Corporation
Estimated Cost (Rs. Crs)	: 1044
Levellised Tariff (Rs. Crs)	: 202.74
Request for Qualification	: 15.02.2016
Request for Proposal	: 25.11.2016
Letter of Intent	: 17.01.2017
Transmission Service Agreement (TSA)	: 02.09.2016
SPV acquisition	: 31.03.2017
Transmission License by CERC	: 10.07.2017
Tariff adoption by CERC	: 06.07.2017
Contract Performance Guarantee	: 07.03.2017
Clearance u/s 164	: Obtained in Feb'18
Execution plan submitted to CEA	: 29.07.2017
NIT issued on	: 14.01.2016
EPC contract awarded on	: 28.06.2017
Scheduled Date of Completion	: Jul'20

Status of progress of transmission project

1. Establishment of 400/220 kV, 7x167 MVA s/s at new Kohima
 - Land acquired : Completed
 - Civil works completed : 83%
 - Equipment supplied : 50%.
 - Equipment erected : 70%
 - Schedule COD : Jul'20

Constarints where Project Authority requires intervention: NA

2. Imphal-New Kohima 400 kV D/C line

Length	: 134 Km
Locations	: 317 Nos
Foundation completed:	: 245 nos
Tower erected:	: 163 nos
Stringing completed	: 23.233 km
Schedule COD	: Jul'20

Constraints where Project Authority requires intervention:

Project Hindering factors:

- 1) Non seasonal rainfall & frequent bands / restrictions at local level resutling in non-continuity of work at site.
- 2) Blockage of national highway due to rainfall / landslides resutling in delay in delivery of material at site.
- 3) ROW Issues as follows:

Sl. No.	Loc. No.	ROW issue		
		issue	Issue from Date	Current Status
MANIPUR (Line-A)				
1	4/0	Paddy Issue	15.04.19	After harvesting work will be started
2	5/0	Paddy & Hut Issue		Under discussion with two Landowner
3	13/0	landowner issue	15.04.19	Under discussion with Landowner (Out of 04 only 02 Landowners agreed)
4	49/4	landowner issue	01.02.19	Under discussion with DC, SDC along with KPTL. Meeting done on 18.10.2019. matter likely to be resolved
5	49/5	landowner issue	01.02.19	Under discussion with DC, SDC along with KPTL. Meeting done on 18.10.2019. matter likely to be resolved
6	58/0	Local Club issue/ hold the work	25.04.19	Meeting done on 18.10.19 with D A for clearances (Landowners and District Authority has given permission to work)
7	58/1			
8	58/2			
9	58/3			
10	58/4			
11	58/5			
12	59/0			
13	59/1	landowner influence with local club	25.04.19	waiting for result of 58/0- 58/5
14	61/0	Paddy issue	20.04.19	after harvesting work will be started
15	61/2	landowner issue	01.04.19	under discussion
16	73/0	Paddy issue	01.04.19	Land value finalization is balance / Demanding Shifting of Line on 11.07.19/ after harvesting work may be started
17	73A/0	landowner issue	19.07.19	03 agreed and 01 not agreed -under discussion
18	74/0	landowner issue	15.09.19	Actual Landowner sold the land to other person- verification to be done by DC office (U/P)
19	77/0	Local issue	11.07.19	Land value finalization under Process / Landowners demanding Shifting of Line on 11.07.19.
20	78/0	Local issue	11.07.19	
21	81/0	Paddy issue	11.07.19	Land value finalization under process at DC Senapati office/ Village Chairman Issue
22	82/0	Paddy issue	11.07.19	
23	83/0	Paddy issue	11.07.19	
24	84A/0	Paddy issue	11.07.19	

25	85/0	Paddy issue	11.07.19	
26	122/0	Village Boarder dispute issue	17.09.19	Under discussion with District Administrative
27	123/0			
28	124/0			
29	134/0	Village Headman/ landowner issue for shifting of tower	01.10.19	SDO meeting done on last week of sept-19 but issues was not resolved
30	134A/0			
NAGALAND (Line-A)				
1	182/0	Residential Area/ Local issue	15.03.19	Under discussion, may be resolved DC
2	192/0	Landowner issue	20.03.19	Under discussion, may be resolved by DC
3	197/0	Line Shifting by Community / Land owner	10.02.19	Under discussion with landowners & DC
4	198/0			
5	199/0			
6	207/0	Landowner issue	14.10.19	Under discussion with landowner

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations: 91 nos. Approx. ,

Length: 41.647 KM

Forest area affected (ha) : 191.62

Forest proposals submitted on 14.08.2017 (online) & 28.08.20017 (Hard copy).

Status: Stage 1 approval received on 24.01.2019 (Forest payment Paid).

Current Status : Working permission has granted on 07.03.2019

Power line crossing

Total no. of crossings : 10 nos
Proposal submitted : 10 nos. Date:28.03.19 (latest submission date)
Approval obtained : 02 nos. Date: 29.04.19 & 17.10.19
Status : 09 case under process at Concerned Authority.

Railway crossing

Total no. of crossings : 0 nos.
Proposal submitted : nos. Date:
Approval obtained : nos. Date:

National Highway Crossing

Total no. of crossings : 8 nos
Proposal submitted : 8 nos. Date:10.04.2019 (latest submission date)
Approval obtained : 1+2=3 nos. Date: 22.11.18 & 27.04.19
Status : 05 are cases under process at Concerned Authority.

River Crossings

Total no. of crossings : 0 nos.
 Proposal submitted : nos. Date:
 Approval obtained : nos. Date:

PTCC approval

Proposal submitted to Defence on 10.06.2019

Proposal submitted to BSNL on 10.06.2019

Proposal submitted to Railways on 10.06.2019

Current Status: Under process at concerned Offices (joint verification of line will be commenced soon)

Defence/Civil Aviation

Defence Proposal submitted on 13.02.2019

Current Status: NOC granted vide letter dtd-31.07.2019

Civil Aviation Proposal submitted on 13.02.2019

Current Status: under process at AAI office.

3. New Kohima -New Mariani 400 kV D/c line

Length: 120 Km
 Locations: 285 Nos.
 Foundation completed: 236 nos.
 Tower erected: 179 Nos.
 Stringing completed: 40.204 km
 Schedule COD: Jul'20

Constraints where Project Authority requires intervention:**Hindering factors of project:**

- 1) Non seasonal rainfall & frequent bands / restrictions at local level resulting in non-continuity of work on site
- 2) ROW issues as follows:

NAGALAND ((Line-B)				
Sr NO	Loc No	Issue	Issue from Date	Current Status
1	40/0	Border issues by landowner	05.10.19	Inter district Border issue raised by landowner and under discussion with DC office
2	41/0			
3	42/0			
4	43/0			
5	43A/0			
6	44/0			
7	7/0	Local Issues	07.10.19	Work stop by local person and discussion U/P with DC office & Landowners

8	8/0			
9	9/0			
10	32/0	Landowner issues	15.09.19	04 out of 01 landowner not allowing to work due to ownership issue of land.
ASSAM ((Line-B))				
1	103/2	Landowner Issues	01.01.19	Discussion U/P with Landowners (demanded for high compensation or Line divert)
2	105/0	Landowner Issues		
3	105/1	Landowner Issues		
4	112/3	Tea Garden Landowner Issues	01.04.19	Discussion is under process with Tea Garden owner along with DC Golaghat
5	112/4			
6	112/5			
7	112/6			
8	112/7			
9	113/0			
10	122/1	Landowner Issues	15.04.19	Discussion is under process with Landowner along with DC Jorhat
11	142/1	Landowner Issues	01.09.19	Discussion U/P with Landowners (demanded for high compensation or Line divert)
12	143/0	Landowner Issues		
13	144/0	Landowner Issues		
14	145/0	Landowner Issues		
15	146/0	Landowner Issues		

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations: 11 nos. Approx ,

Length: 4.3 Km

Forest area affected (ha) : 19.976

Forest proposals submitted on 09.08.2017

Status: The forest proposal has been forwarded on 26.11.2018 by Nodal office Guwahati to Additional Secretary Ministry of Forest Government of Assam for further processing.

Current Status:- Working Permission from Nodal officer is awaiting.

Power line crossing

Total no. of crossings	: 1	nos	
Proposal submitted	: 1	nos.	Date: 03/12/2018
Approval obtained	:	nos.	Date:
Status	: Under Process		

Railway crossing

Total no. of crossings	: 0	nos.	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

State Highway Crossing

Total no. of crossings	: 5	nos (Approval Not required)	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

River Crossings

Total no. of crossings	: 5	nos. (Approval Not required)	
Proposal submitted	:	nos.	Date:
Approval obtained	:	nos.	Date:

PTCC approval

Proposal submitted to Defence on 10.06.2019
Proposal submitted to BSNL on 10.06.2019
Proposal submitted to Railways on 10.06.2019

Current Status: Under process at concerned Offices.

Defence/Civil Aviation Proposals

Defence Proposal submitted on 13.02.2019

Current Status: NOC granted vide letter dtd-31.07.2019.

Civil Aviation Proposal submitted on 13.02.2019

Current Status: under process at AAI office.

(50) Name of transmission project - System strengthening in NR for import of power from North Karanpura and other projects outside NR and system strengthening in WR for import of power from North Karanpura and other projects outside Western Region and also for projects within Western Region

Background

Transmission system for power evacuation from North Karanpurahas been evolved in a comprehensive manner along-with evacuation system for Maithon RB and other generation projects of DVC viz. Koderma, BokaroExtn, Mejia Extn, Durgapur and Raghunathpur and Maithon RB. The comprehensive system consists of common and generation specific transmission schemes. Corresponding to injection of power from North Karanpura and the other generation projects in ER, both NR and WR would require system strengthening. Out of the comprehensive plan of system strengthening, the elements identified for commissioning matching with North Karanpura have been covered under this scheme.

Scope of transmission project

1. Lucknow – Bareilly 765 kV D/C line
2. Bareilly – Meerut 765 kV D/C line
3. Agra – Gurgaon(ITP) 400 kV D/C line
4. Gurgaon(ITP) – Gurgaon (PG) 400 kV D/C line
5. Gurgaon (ITP) 400/220 kV GIS Substation
6. Sipat/Korba pooling station – Seoni 400 kV D/C line

General Details

Special Purpose Vehicle (SPV)	: North Karanpura Transmission Company Ltd. (A subsidiary of RPTL)
Bid Process Coordinator (BPC)	: Rural Electrification Corporation
Estimated Cost (Rs. Crs)	: 2700
Levelised Tariff(Rs. Crs)	: 258
Request for Qualification	: 06.10.2008
Request for Proposal	: 08.05.2009
Letter of Intent	: 18.12.2009
Transmission Service Agreement (TSA)	: 10.09.2009
SPV acquisition	: 20.05.2010
Transmission License by CERC	: 22.12.2010
Tariff adoption by CERC	: Matter was in CERC for revision of tariff
Contract Performance Guarantee	: 17.05.2010
Clearance u/s 164	: 12.08.2013
Execution plan submitted to CEA	: 13.10.2010 and 28.10.2010
NIT issued on	:
EPC awarded on	: 27.10.2010
Scheduled Date of Completion	: 20.11.2013
Anticipated Date of Completion	: Matter with APTEL

Status of progress of transmission project:

The Company had approached Central Electricity Regulatory Commission (CERC) for allowing tariff revision and Force Majeure due to delay in grant of clearance u/s 164 of

Electricity Act (EA). CERC notified an unfavorable order dated 09.05.2013, which was later challenged by NKTCL in Appellate Tribunal for Electricity (ATE). ATE allowed the appeal filed by company and set aside the unfavorable CERC order.

Pursuant to the ATE Order dated 02.12.2013, written requests were sent to the beneficiaries seeking following main reliefs to mitigate effect of Force Majeure in line with the prayers allowed in appeal:

- a) Re-fixation of implementation time of the Project as was originally envisaged considering zero date as issuance of section 68 approval from MoP.
- b) Tariff Increase to the tune of 160%.

Concerned utilities in Tamilnadu, Gujarat and Maharashtra have appealed against the order of ATE in the Supreme Court of India. First hearing was held on March 07, 2014 in case of Gujarat and April 21, 2014 in case of Maharashtra. The Tamilnadu petition has been merged with Gujarat. The matter is going in the Registrar court and notices are being served on all the beneficiaries. Once the servicing is complete the matter will be argued in Supreme Court. All the petitions filed by beneficiaries have been clubbed together by SC. The petition has been admitted and next hearing is awaited.

Further, on March 04, 2014, CERC reopened Power Grid Corporation of India Limited's (PGCIL) petition nos. 19 and 20 seeking revocation of license of the company and transferring the project to them on cost plus model and at the risk and cost of Reliance Power Transmission Limited (the Holding Company). CERC notified an order dated 02 Sep 2015, against the said petition for revocation of transmission license. NKTCL filed Appeal No. 200 of 2015 & IA-337 of 2015 in ATE challenging the above mentioned CERC order. ATE rejected the IA meant for stay but allowed the appeal. NKTCL filed a Civil Appeal number 9291 of 2015, in SC against ATE's order. Supreme Court has given a stay order directing no coercive action to be taken by CERC.

SC on 12th August has disposed of the appeal and directed ATE to decide on the appeal. An Interim Application (IA Nos. 479 & 480 of 2018) was filed in ATE. APTEL in its hearing dated 01st Feb 19 disposed off the case directing to go back to CERC for a fresh treatment - including (but not limited to) the aspect of the very necessity of NK and TT transmission system. A petition has been filed with a stay application in CERC for redressal of grievances. The case is ongoing in CERC. Next Hearing date awaited..

(51) Name of transmission project - Augmentation Talcher-II Transmission System

Background

Talcher-II (4x500 MW) generation project of NTPC is located in Orissa. All the units of the generation project are already in operation. Earlier total power from this project was allocated to the states of Southern Region. Subsequently in April 2007 power allocation of Talcher-II has been revised.

For power evacuation from this project to the Southern Region a +/- 500kV 200MW HVDC bi-polar line from Talcher in Eastern Region to Kolar in Southern Region and 400 kV lines beyond Kolar is in operation however, under contingency of outage of one pole of HVDC line, there is constraint in evacuation of power from Talcher-II to Southern Region. An outage of one pole also causes jerk in Eastern-Western-Northern Region, which are operating in synchronism and result in overloading on some of the transmission lines in Eastern and Western Regions. The Talcher- Behrampur– Gazuwaka 400 kV D/C line with series compensation and switching station at Behrampur and the Talcher - Rourkela 400 kV D/C Quad line have been evolved to augment the Talcher-II Transmission System so as to provide a backup system to meet the contingency outage of one pole and increase the reliability of the system. With this system, it would be possible to schedule the power flow on Talcher - Kolar HVDC and Gazuwaka HVDC back to back in such a manner that the reliable evacuation of power from Talcher-II would be ensured.

Scope of transmission project

1. Talcher II- Rourkela 400 kV D/C Quad line
2. Talcher II – Behrampur 400 kV D/C line
3. Behrampur- Gazuwaka 400 kV D/C line
4. 2x315 MVA, 400/220 kV Behrampur substation

General Details

Special Purpose Vehicle (SPV)	:	Talcher-II Transmission Company Ltd. (A subsidiary of RPTL)
Bid Process Coordinator	:	Rural Electrification Corporation
Estimated Cost (Rs. crs)	:	1400
Levelised Tariff(Rs. Crs)	:	144
Request for Qualification	:	06.10.2008
Request for Proposal	:	08.05.2009
Letter of Intent	:	18.12.2009
Transmission Service Agreement (TSA)	:	10.09.2009
SPV acquisition	:	27.04.2010
Transmission License by CERC	:	08.11.2010
Tariff adoption by CERC	:	Matter in CERC for revision of tariff
Contract Performance Guarantee	:	22.04.2010
Clearance u/s 164	:	12.08.2013
Execution plan submitted to CEA	:	13.10.2010 and 28.10.2010
Scheduled Date of Completion	:	27.10.2012
Anticipated Date of Completion	:	Matter with APTEL

Status of progress of transmission project

1. Talcher II – Rourkela 400 kV D/C (Q) line

- 2. Talcher II – Behrampur 400 kV D/C line**
- 3. Behrampur – Gazuwaka 400 kV D/C line**
- 4. 2x315 MVA, 400/220 kV Behrampur substation**

The Company had approached Central Electricity Regulatory Commission (CERC) for allowing tariff revision and Force Majeure due to delay in grant of clearance u/s 164 of Electricity Act (EA). CERC notified an unfavorable order dated 09.05.2013, which was later challenged by TTCL in Appellate Tribunal for Electricity (ATE). ATE allowed the appeal filed by company and set aside the unfavorable CERC order.

Pursuant to the ATE order dated 02.12.2013, written requests were sent to the beneficiaries seeking following main reliefs to mitigate effect of Force Majeure in line with the prayers allowed in appeal:

- a) Re-fixation of implementation time of the Projects as was originally envisaged considering zero date as issuance of section 68 approval from MoP.
- b) Tariff Increase to the tune of 90%.

Concerned utilities in Tamil Nadu have appealed against the order of ATE in the Supreme Court of India (SC). First hearing was held on August 1, 2014. The matter is still pending before Supreme Court. All the petitions filed by beneficiaries have been clubbed together by SC. The petition has been admitted and next hearing is awaited.

Further, on March 04, 2014, CERC has reopened Power Grid Corporation of India Limited's (PGCIL) petition nos. 19 and 20 seeking revocation of license of the company and transferring the project to them on cost plus model and at the risk and cost of Reliance Power Transmission Limited (the Holding Company).

CERC notified an order dated 02 Sep 2015, against the said petition for revocation of transmission license. TTCL filed Appeal No. 201 of 2015 & IA-338 of 2015 in ATE challenging the above mentioned CERC order. ATE rejected the IA meant for stay but allowed the appeal. TTCL filed a Civil Appeal number 13370 of 2015, in SC against ATE's order. Supreme Court has given a stay order directing no coercive action to be taken by CERC.

SC on 12th August has disposed of the appeal and directed ATE to decide on the appeal. An Interim Application (IA Nos. 479 & 480 of 2018) was filed in ATE. APTEL in its hearing dated 01st Feb 19 disposed off the case directing to go back to CERC for a fresh treatment - including (but not limited to) the aspect of the very necessity of NK and TT transmission system. A petition has been filed with a stay application in CERC for redressal of grievances. The case is ongoing in CERC. Next Hearing date awaited.

(52) Name of transmission project - Transmission system associated with DGEN TPS (1200 MW) of Torrent Power Ltd.

Background

This transmission scheme has been proposed for evacuation of power from DGEN TPS (1200MW) of Torrent Power Limited. DGEN Transmission Company Limited awarded through TBCB route shall implement the project.

Scope of transmission project

1. DGEN TPS – Vadodara 400 kV D/C line
2. Navsari - Bhesatan 220 kV D/C line

General Detail

Special Purpose Vehicle (SPV)	:	DGEN Transmission Company Ltd. (A subsidiary of M/s Instalaciones Inabensa, S.A. Spain)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost (Rs. crs)	:	275
Levelling Tariff (Rs. Crs)	:	58.401
Request for Qualification	:	30.10.2012
Request for Proposal	:	25.03.2014
Letter of Intent	:	19.05.2014
Transmission Service Agreement(TSA)	:	30.04.2014
SPV acquisition	:	17.03.2015
Transmission License by CERC	:	24.06.2015
Tariff adoption by CERC	:	10.06.2015
Contract Performance Guarantee	:	13.03.2015
Clearance u/s 164	:	22.04.2016
Execution plan submitted to CEA	:	10.07.2015
NIT issued on	:	-
EPC contract awarded on	:	30.06.2015
Scheduled Date of Completion	:	16.05.2018
Anticipated Date of Completion	:	DTCL requested to scrap project

Status of Progress of transmission project

- Project authority had not started construction activity as per execution plan. Matter was taken up with the project authority and notice served in August/Sept 2016 but project authority did not respond.
- Member(PS), CEA took a meeting on 26.04.2017 to review the progress of Tr. project wherein project authority informed to close the project due to financial constraints in parent company. CEA vide letter dated 14.06.2017 informed CERC to take appropriate action.