



**Monthly progress Report of  
Transmission Projects awarded  
through  
Tariff Based Competitive Bidding  
(TBCB) Route  
(Under Construction Projects)  
(As on 31.07.2021)**

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

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<b>Total Transmission Projects</b>	<b>:</b>	<b>59</b>
<b>Transmission Projects Commissioned/Ready for commissioning</b>	<b>:</b>	<b>33</b>
<b>Transmission Projects Under Construction</b>	<b>:</b>	<b>22</b>
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# 1. Eastern Region Strengthening Scheme-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).
- Jeerat (New) – Subhasgram 400kV D/c line (ACSR Quad Moose)
- Jeerat (New) – Jeerat (WBSETCL) 400kV D/c line (ACSR Quad Moose)
- LILO of both circuits of Chandithala – Kharagpur 400kV D/c line at Medinipur.
- LILO of Jeerat (WBSETCL) – Subhasgram (PG) 400kV S/c section at Rajarhat (POWERGRID) [Line deleted from scope]

### Substation:

- (1) **Establishment of 765/400kV, 2x1500MVA substation at Medinipur**

#### 765kV

- ICTs: 7x500 MVA, 765/400kV (1 spare unit)
- ICT bays: 2 no.
- Line bays: 4 no.
- Bus reactor: 7x110 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 Details:**

Special Purpose Vehicle (SPV)	:	Powergrid Medinipur-Jeerat Transmission Limited (A subsidiary of POWERGRID)
Bid Process Coordinator (BPC)	:	Power Finance Corporation
Estimated Cost	:	₹ 3994 Cr
Levellised Tariff	:	₹ 498.652 Cr
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/ Dec'20*
Anticipated Date of Completion	:	Oct-2021

### **Status of progress of transmission project:**

#### **1. Ranchi – Medinipur 765kV D/C line**

- Length : 269 Km
- Locations : 718 nos.
- Scheduled COD July'2020/ Dec'2020\*

**Line commissioned w.e.f. 09.02.2021.**

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

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

- Length: 169 Km
  - Locations: 461 nos.
  - Foundation completed 461 nos.
  - Towers erected 461 nos.
  - Stringing completed 169 Km
- Scheduled COD July'2020/ Dec'2020\*  
Anticipated COD Aug''2021

Work completed, Commissioning matching with completion of Jeerat substation.

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

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

- Length: 107 Km
  - Locations: 312 nos.
  - Foundation 261nos .
  - Tower erection 222 nos.
  - Stringing 33kms
- Scheduled COD July'2020/ Dec'2020\*
  - Anticipated COD Oct'2021

### Status of statutory approvals:

**Forest:** Nil

#### Power line crossing (66kV and above)

Total no. of crossings	:	11	nos.
Proposal submitted	:	11	nos. Date: 3 nos. each in Jul & Nov'18
Approval obtained	:	10	nos. Date: 3 nos each in Sep & Nov'18

#### Railway crossing

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

#### National Highway Crossing

Totalno. of crossings	:	01	nos.
Proposal submitted	:	01	nos.
Approval obtained	:	01	(at final stage)

**River Crossings** : NIL

### **Constraints being faced during execution:**

1. Work has been affected due to COVID-19 pandemic.
2. Work affected by Cyclone Amphan in May'20.
3. Work affected due to state assembly election in Apr'21.
4. Work also affected due to 2nd wave of COVID-19 in Apr'21.

### **Constarints where Project Authority requires intervention:**

1. **PTCC approval** :Submitted.
2. **Defence/Civil Aviation** :Online Proposal submitted.
3. Severe RoW being faced. Administration support required for clearance of fronts. Letter written to Chief Secretary, Govt of West Bengal seeking help in resolution of RoW.
4. In a meeting held on 28.06.2021, Member(PS), CEA reviewed this project

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

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

- Length: 25.58 Km
  - Locations: 81 nos.
  - Foundation completed: 81 nos.
  - Tower Erection 81 nos.
  - Stringing 25.58 Km
- Scheduled COD : July'2020/ Dec'2020\*  
Anticipated COD : Aug'2021

Physical work of the line completed. Commissioning matching with the Completion of Jeerat Substation.

#### **Status of statutory approvals:**

**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** NIL

**National Highway Crossing** NIL

**River Crossings** NIL

**PTCC approval:** Proposal submitted on 02.06.18. Approval received.

**Defence/Civil Aviation:** Proposal submitted on 11.09.18. Approved with comments.

**Constraints being faced during execution:**

1. Work has been affected due to COVID-19 pandemic.
2. Work affected by Cyclone Amphan in May'20.

**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 : Jul' 20

**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 : 74 Km
- Locations : 199 Nos.
- Scheduled COD : July' 2020/ Dec'2020\*
- Actual COD : Feb' 2021

**Line commissioned w.e.f. 09.02.2021.**

**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 : 99 %
- Equipment supplied : 100 %
- Equipment erection : 100 %
- Scheduled COD : July'2020/ Dec'2020\*
- Anticipated COD : Aug''2021

As per transmission service agreement dated 17.11.2016 Medinipur substation is commissioned w.e.f. 09.02.2021. However, bays related to Medinipur -Jeerat line shall be commissioned with completion of line.

**Constraints being faced during execution:**

1. Work has been affected due to COVID-19 pandemic.
2. Work affected by Cyclone Amphan in May'20.
3. Work was stalled from Nov'19 to Dec'19 due to agitation by local tribals. Restarted slowly from 10.12.19.
4. Work affected due to political unrest since Dec'19.

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



(Award placed on 29.09.2017 to M/s BHEL)

Land acquired	:	100 %
Civil work completed	:	98 %
Equipment supplied	:	98 %
Equipment erection	:	95 %
Scheduled COD	:	July'2020/ Dec'2020*
Anticipated COD	:	Oct'2021

**Constraints being faced during execution:**

1. Work affected due to COVID-19.
2. Work affected by Cyclone Amphan in May'20

**9. Extension of 400 kV Substation at Jeerat (WBSETCL)**

(Work being executed by WBSETCL.)

Civil work completed	:	99 %
Equipment supplied	:	99 %
Equipment erection	:	99 %
Scheduled COD	:	July'2020/ Dec'2020*
Anticipated COD	:	Aug'2021

**Constraints being faced during execution:**

1. Work affected due to COVID-19.
2. Work affected by Cyclone Amphan in May'20..

## 2. Eastern Region Strengthening Scheme-XXI

### Background:

Demand of Bihar has touched 3717 MW 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 400/132 kV 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.	<p>Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Sitamarhi (New)</p> <p><b>400 kV</b></p> <ul style="list-style-type: none"><li>• ICTs: 400/220 kV, 2x500 MVA</li><li>• ICTs bays: 2 nos.</li><li>• Line bays with space for switchable line reactor: 4 nos. [2 nos. for Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor and 2 nos. for Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor]</li><li>• Bus reactor: 420kV, 2x125 MVAR</li><li>• Bus reactor bay: 2 nos.</li><li>• Space for future line bays (including space for switchable line reactor): 6 nos.</li><li>• Space for future ICT bays: 2 nos.</li></ul>
	<p><b>220 kV</b></p> <ul style="list-style-type: none"><li>• ICTs: 220/132 kV, 2x200 MVA</li><li>• ICTs bays: 4 no.</li><li>• 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]</li><li>• Space for future line bays: 4 nos.</li><li>• Space for future ICT bays: 4 nos.</li></ul>

	<p><b>132 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs bays: 2 no.</li> <li>• 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]</li> <li>• Space for future line bays: 4 nos.</li> <li>• Space for future ICT bays: 2 nos.</li> <li>• Space for future 400/220 kV, 2x500 MVA ICTs</li> <li>• Space for future 220/132 kV, 2x200 MVA ICTs</li> </ul>
2.	Establishment of 400/220/132 kV, 3x500 MVA + 3x200 MVA S/s at Chandauti (New)
	<p><b>400 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs: 400/220 kV, 3x500 MVA</li> <li>• ICTs bays: 3 no.</li> <li>• 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)]</li> <li>• Bus reactor: 420kV, 2x125 MVAR</li> <li>• Bus reactor bay: 2 nos.</li> <li>• Space for future line bays (including space for switchable line reactor): 6 no.</li> <li>• Space for future ICT bays: 2 nos.</li> </ul>
	<p><b>220 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs: 220/132 kV, 3x200 MVA</li> <li>• ICTs bays: 6 nos.</li> <li>• Line bays: 4 nos. [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]</li> <li>• Space for future line bays: 4 nos.</li> <li>• Space for future ICT bays: 4 nos.</li> </ul>
	<p><b>132 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs bays: 3 nos.</li> <li>• Line bays: 4 nos. [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)]</li> <li>• Space for future line bays: 4 no.</li> <li>• Space for future ICT bays: 2 no.</li> <li>• Space for future 400/220 kV, 2x500 MVA ICTs</li> <li>• Space for future 220/132 kV, 2x200 MVA ICTs</li> </ul>
3.	Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Saharsa (New)

	<p><b>400 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs: 400/220 kV, 2x500 MVA</li> <li>• ICTs bays: 2 no.</li> <li>• 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)]</li> <li>• Bus reactor: 420kV, 2x125 MVAR</li> <li>• Bus reactor bay: 2 no.</li> <li>• Space for future line bays (including space for switchable line reactor): 6 no.</li> <li>• Space for future ICT bays: 2 no.</li> </ul>
	<p><b>220 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs: 220/132 kV, 2x200 MVA</li> <li>• ICTs bays: 4 no.</li> <li>• Line bays: 4 no. [2 no. for Saharsa (New) – Begusarai and 2 no. for Saharsa (New) – Khagaria (New) 220kV D/c lines]</li> <li>• Space for future line bays: 4 no.</li> <li>• Space for future ICT bays: 4 no.</li> </ul>
	<p><b>132 kV</b></p> <ul style="list-style-type: none"> <li>• ICTs bays: 2 no.</li> <li>• Line bays: 2 no. [2 no. for Saharsa (New) – Saharsa 132kV D/c line]</li> <li>• Space for future line bays: 6 no.</li> <li>• Space for future ICT bays: 2 no.</li> <li>• Space for future 400/220 kV, 2x500 MVA ICTs Space for future 220/132 kV, 2x200 MVA ICTs</li> </ul>
4.	<p><b>Substation extension at Darbhanga S/s</b></p> <ul style="list-style-type: none"> <li>• 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]</li> </ul>
5.	<p><b>Substation extension at Motihari S/s</b></p> <p><b>400kV</b></p> <ul style="list-style-type: none"> <li>• ICTs: 400/132 kV, 315 MVA (3rd)</li> <li>• ICT bays: 1 no.</li> <li>• Line bays with space for switchable line reactor: 2 no.[2 no. for Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor]</li> </ul> <p><b>132kV</b></p> <p>ICT bays: 1 no.</p>

**General Detail:**

Special Purpose Vehicle (SPV)	:	ERSS XXI Transmission Limited
Bid Process Coordinator (BPC)	:	REC TPCL
Estimated Cost	:	₹ 1321 Cr
Levellised Tariff	:	₹ 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 :	24.04.2018
Tariff adoption by CERC :	25.04.2018
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/ Aug'2021*/Nov'21**
Anticipated Date of Completion :	Sept'21

## **Status of progress of transmission project:**

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

(Award placed on 24.01.2018 to M/s TATA)

- Locations: 221 Nos.
- Length 80 Km
- Scheduled COD : Jan'21/ Jun'21\*

**Line commissioned w.e.f. 12.04.2021.**

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

Award placed on 24.01.2018 to M/s. TATA

- Length: 85.6 Km
- Locations: 230 Nos.
- Scheduled COD : Jan'21/ Jun'21\*

**Line Charged on 03.04.2021.**

### **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: 2.9 Km
- Locations: 9 Nos.
- Scheduled COD : Mar'21/ Aug'21\*

**Commissioned on 11.03.2021.**

### **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: 74.9Km
- Locations: 211 Nos.

- Foundation completed: 211 Nos.
- Tower Erected: 211 Nos.
- Stringing: 74.7 Km
- Scheduled COD : Mar'21/ Aug'21\*/Nov'21\*\*
- Anticipated COD : Sept'21

Commissioning matching with completion of Saharsa substation.

**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

Scheduled COD : Jan'21/ Jun'21\*

**Commissioned on 12.04.2021.**

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

- Scheduled COD : Mar'21/ Aug'21\*

**Commissioned on 11.03.2021.**

**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 : 96.25%  
 Civil work completed : 94 %  
 Equipment supplied : 95 %  
 Equipment erection : 87 %

Scheduled COD : Mar'21/ Aug'21\*/Nov'21\*\*

Anticipated COD : Sept'21

**Constraints being faced during execution:**

1. Work affected due to COVID-19.

**8. Substation extension at Darbhanga S/s**

- Scheduled COD : Jan'21/ Jun'21\*

**Commissioned on 12.04.2021.**

**9. Substation extension at Motihari S/s**

- Awarded on 27.02.2018 to M/s KEC

Scheduled COD : Jan'21/ Jun'21\*

Anticipated COD : **Commissioned w.e.f. 23.04.21.**

### **3. 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 2<sup>nd</sup> 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 TANSMISON SYSTEM LTD
Bid Process Coordinator (BPC)	:	REC Transmission Projects Company Ltd.
Estimated Cost	:	₹ 1365 Cr
Levellised Tariff	:	₹ 122.042Cr.
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	:	Notice Published in Newspaper on 07.11.2019 & 14.11.2019
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/ May'2021*/ Aug'21**

### **Status of progress of transmission project:-**

1. Khetri– Jhatikara 765kV D/c line  
(Award placed in Sep'19 to M/s. TRANSRAIL)

Length:	146.022km
Locations:	395 nos.
Foundation completed	393 nos.
Towers erected	393 nos.
Stringing completed	142km
Scheduled COD	Dec'20/ May'21*/Aug'21**
Anticipated COD	Aug'21

### **Status of statutory approvals:**

#### **River Crossings**

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

**Defence/Civil Aviation** : Both proposals submitted on 15.05.2020.  
Defence NOC given.

#### **Power line crossing**

Total no. of crossings	:	33	nos.
Proposal submitted	:	33	nos.
Approval obtained	:	33	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.

### **Forest:**

Haryana portion (6.65 Hec): Online proposal submitted on 15.01.2020. Electronically transferred on 01.06.20 to DFO Gurgaon, Jhajjar (South Gurgaon), Rewari and Mahendergarh. Query raised by DFO (Mahendragarh) on 18.06.20. Replied on 11.07.20. Query raised by DFO (Rewari) on 22.07.20 and again on 07.08.20. Replied on 27.08.20. Query raised by DFO (Mahendergarh) on 27.08.2020 . Replied on 29.08.2020. Again query raised by DFO (Mahendergarh) on 12.09.2020 . Replied on 24.09.2020. Proposal for Gurgaon, Rewari and Mahendragarh with CF.CF has asked DFO Gurgaon to identify common land for Compensatory Afforestation. Land identified by DFO Gurgaon and proposal forwarded to CF. Proposal forwarded to NO on 29.01.2021. Stage- I received on 25.02.21. Stage II clearance received.

Rajasthan (1.547Hec): Online proposal submitted on 20.05.20. Hard Copy of proposal submitted. Proposal with DFO (Jhunjhunu) at present. Query raised by DFO (Jhunjhunu Territorial) on 20.08.2020. Replied on 21.08.2020. Query raised by Nodal officer on 09.09.20. Replied on 18.09.20. Proposal sent to State Govt on 30.09.20. Case forwarded by State to RO MoEF, Lucknow on 26.11.2020. Stage-I clearance received on 05.01.2021. Compliance submitted to Forest Department. Working clearance received on 08.04.2021.

Delhi (4.88Hec) : Proposal for felling of trees (9nos.) as per DPTA submitted on 18.11.19. Site visit of DFO held on 03.01.20. DFO informed to submit proposal under FCA. Now proposal under FCA submitted. Queries regarding land for FCA received on 29.06.20. Letter sent to DDA on 02.07.20, 21.07.20 and 07.08.20 for providing land. DDA issued letter for land on 13.11.2020. The land provided is not emcumbrance free. New land identified. By DDA. Allotment letter issued by DDA on 08.01.2021. Map being uploaded online by Forest department. Site visit held on 24.02.2021. Proposal forwarded to CF by DFO on 10th of April'21. Proposal recommended by Delhi Forest on 24.05.2021. Stage-I clearance received on 18.06.2021. Working permission received on 16.07.2021

### **Constraints where Project Authority requires intervention:**

1. PTCC approval : Submitted on 26.05.2020. Hard Copy of the proposal submitted in July'20.

**Constraints being faced during execution:**

1. Work affected due to COVID-19.

**2. Khetri– Sikar (PG) 400kV D/c line**

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

Length:	78.610 Km
Locations:	207 nos.
Foundation completed	207 nos.
Towers erected	207 nos.
Stringing completed	76.9 km
Scheduled COD	Dec'20/ May'21*/Aug'21**
Anticipated COD	Aug'21

**Status of statutory approvals:**

**Power line crossing**

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

**National Highway Crossing**

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

**Defence/Civil Aviation** : Aviation proposal submitted on 22.05.2020, Defense proposal submitted on 15.05.2020. NOC received for defence and aviation.

**Railway crossing**

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

**Forest (1.3706 ha)**

: Submission of online proposal done on 22.05.2020. Hard Copy of proposal submitted. Proposal with DFO (Jhunjhunu) at present. Query raised by DFO (Jhunjhunu Territorial) on 10.08.2020. Replied on 13.08.2020. Query raised by DFO (Jhunjhunu Territorial) on 20.08.2020. Replied on 24.08.2020. Query raised by DFO (Mahendergarh) on 12.09.2020. Replied on 24.09.2020. Proposal sent to State Govt on 30.09.20. Case forwarded by State to ROMoEF, Lucknow on 26.11.2020. Stage-I clearance received on 05.01.2021. Working permission received on 08.04.2021.

**Constraints being faced during execution:**

1. Work has been affected due to COVID-19 pandemic.

**Constraints where Project Authority requires intervention:**

**1.PTCC approval** : Proposal submitted on 15.05.2020. Hard Copy of the proposal submitted in July'20. Final approval awaited.

**Status of progress of Substation and Bay Extensions project:-**

NOA to Execution Agency for New 765kV Khetri Substation, Bay Extension at 765kV Jhatikara and 400kV Sikar Substation award placed on 24.10.2019.

Khetri land Forest clearance: Online Proposal submitted on 22.11.2019. Stage-I approval completed on 20.2.20 in REC meeting. Land allotment letter received on 3.06.2020. Letter for forest clearance received on 10.06.2020.

Civil and Equipment erection works are under progress at Khetri, Sikar and Jhatikara substations.

## 4. 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	:	₹ 676 Cr.
Levellised Tariff	:	₹ 71.558 Cr.
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	:	4.03.2020
Tariff adoption by CERC	:	5.03.2020
Clearance u/s 164	:	Newspaper Notice Published on 30.11.2019. To be published again due to error in village list. Again published in Newspapers on 01.10.2020. Issued on 8 <sup>th</sup> March'21 and published on 1 <sup>st</sup> April'21.
Execution plan submitted to CEA :	:	Submitted on 13.03.20
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs except L/R Package issued
Scheduled Date of Completion	:	Dec'2020/ May'2021* /Aug'21**

**Status of progress of transmission project:-**

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

Length:	187.346 km
Locations:	508 nos.
Foundation completed	508 nos.
Towers erected	508 nos.
Stringing completed	187.346 km
Scheduled COD	Dec'20/ May'21*/Aug'21**
Anticipated COD	Aug'21

**Constraints where Project Authority requires intervention:**

**Status of progress of Bay Extensions project:-**

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

Civil work and Equipment erection is under progress in Fatehgarh and Bhadla S/s.

**Constraints being faced during execution:**

1. Work has been affected due to COVID-19 pandemic.

## **5. Transmission System for providing connectivity to RE Projects at Bhuj-II (2000 MW ) in Gujarat**

### **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 installation of 3.5 GW, 4.5 GW & 20 GW of solar/wind capacity in WR under Phase-I (Dec'20/Mar'21), Phase-II (Dec'21) & Phase-III (Beyond Dec'21) respectively.

For integration and evacuation of power from envisaged wind potential in Bhuj (2GW)/Dwarka (1.5GW) areas under Phase-I and Lakadia (2GW) under Phase-II, 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 Bhuj-II PS along with reconfiguration of Bhuj-PS – Lakadia PS 765kV D/C line so as to the establish Bhuj II – Lakadia 765 kV D/C line as well as Bhuj- Bhuj II 765kV D/C line. This would help in providing a strong ISTS Grid connectivity to various RE projects envisaged in the vicinity of the proposed Bhuj-II Pooling station.

The proposed Transmission System was discussed and agreed in the 1<sup>st</sup> meeting of Western Region Standing Committee on Transmission (WRSCOT) held on 5.9.2018. Further in the 2<sup>nd</sup> WRSCOT meeting held on 21.05.2019, 1x240 MVAR, 765 kV switchable line reactor in each circuit at Bhuj-II PS end of Bhuj II – Lakadia 765 kV D/c line was also agreed due to shift in location of Bhuj-II PS.

The Transmission System has also been agreed in 38<sup>th</sup> WRPC meeting held on 28.06.2019. Hon'ble Commission i.e CERC has also granted Regulatory Approval for the same vide order dated 10.10.2019 in petition No. 197/MP/2019.

### **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 2x1500 MVA (765/400kV), 4x500 MVA (400/220kV) Bhuj-II PS (GIS) with 765kV (1x330 MVAR) and 420kV (1x125 MVAR) bus reactor  
(2x1500MVA (765/400kV), 4x500MVA (400/220kV)), 1x500 MVA (765/400kV), 1-ph ICT (spare unit);

400 kV ICT bay-6nos.; 765 kV ICT bay-2nos.; 220 kV ICT bay-4 nos.; 765 kV line bay-4 nos.; 220 kV line bay -7nos.; 1x330 MVAR, 765 kV; 1x125 MVAR, 420 kV; 765 kV reactor Bays -1 no.; 400 kV reactor Bays -1 no.; 1x110 MVAR, 765 kV, 1-ph Reactor (spare unit).

Space for Future provisions:

765/400 kV ICTs along with bays: 2 nos.; 400/220 kV ICTs along with bays: 5 nos.; 765 kV line bays: 4 nos.; 400 kV line bays: 6 nos.; 220 kV line bays: 9 nos.; 765 kV bus reactor along with bays: 1 no.; 400 kV bus reactor along with bays: 1 no

2. 1x240MVAR switchable Line reactor for each circuit at Bhuj-II PS end of Bhuj-II-lakadia 765 kV D/c line (2x240 MVAR, 765 kV with 400-ohm NGR; 765 kV Reactor Bays-2 no.; 1x80 MVAR, 765 kV, 1ph switchable line Reactor (spare unit) at Bhuj-II end).

### **General Details**

Special Purpose Vehicle (SPV) <b>(Formerly as Bhuj-II Transmission Ltd)</b>	: <b>POWERGRID BHUJ TRANSMISSION LIMITED</b>
Bid Process Coordinator (BPC)	: PFC Consulting Ltd.
Estimated Cost	: ₹ 645 Cr.
Levellised Tariff	: ₹ 123.76 Cr.
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	: 03.03.2020
Tariff adoption by CERC	: 05.03.2020
Clearance u/s 164	: Notification(Dt 24 <sup>th</sup> Jul'20) published in Gazette of India on 21 <sup>th</sup> August 2020.
Execution plan submitted to CEA	: Submitted on 20.05.2020.
NIT issued on	: NIT for all Pkges issued.
EPC awarded on	: All Package awarded
Scheduled Date of Completion	: Dec'2020/ May'2021*/Aug'21**

### **Status of progress of transmission project:-**

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  
Award placed to M/s Transrail Lighting Limited**

Awarded to M/s Transrail Lighting limited

Length:	106 km
Locations:	284 nos.
Foundation completed:	209 nos.
Towers erected :	167 nos.
Stringing completed:	20 km
Scheduled COD	Dec'20/ May'21*/Aug'21**
Anticipated COD	Aug'21

## Status of statutory approvals:

- 1.Forest** : Area-99.24 Ha; Proposal submitted on 17.01.2020. RFO inspection done on 26.02.20. Revised proposal after re-routing submitted on 28.05.2020 (95.66Ha). Proposal forwarded to Nodal officer after inspection of CCF held on 08th July'20. Stage-I proposal cleared from 49th REC held on 22-09-2020. RMoEF issued Stage-I clearance on 30th Sep'20. Working permission also received on 27th Oct'20.
- 2.Defence/Civil Aviation** : Proposal is being prepared (On hold because of pending survey due to RoW by Villagers).

## Constraints being faced during execution:

1. Work has been affected due to COVID-19 pandemic.
2. For finalization of land compensation rate for affected locations/ RoW, Joint hearing by local administration with Villagers & PGTL/PGCIL held and office order issued by local administration in this regard on 17th Jan'21. But villagers are not ready to accept the land compensation rate and also they are not allowing to do the work.
3. Land compensation rate order for 6 nos location in 2 villages still pending. Verification of land record by administration is slow and affected works progress.
4. Due to severe RoW in 17.5 km line length, survey & other associated work is on hold. For resolution of RoW the effort was attempted by the POWERGRID officials on 28.12.2020 and 08th Mar'21 with the help of local administration & Police protection. But unfortunately it was unsuccessful due to heavy agitation by local villagers. Serious intervention of higher authority is required for early resolution of RoW. This issue is also raised in PMG review.

## Constraints where Project Authority requires intervention:

1. Power line crossing  
Total no. of crossings : 14 nos.(7 nos. Loop IN & 7 nos. Loop Out)  
Proposal submitted : 12 nos. (Submission of 02 nos proposal is pending because of pending survey towards Bhuj-II Substation end).  
Approval obtained : 12 nos. obtained till Jan'21.
2. PTCC approval : Proposal submitted.
3. Severe ROW being faced. Support of local administration is required to settle land compensation assessment expeditiously.
4. In a meeting held on 28.06.2021, Member(PS), CEA reviewed this project and it was decided to send a DO letter to GoG



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

Awarded to M/s KEC & M/s NHVS

Land acquired	:	Land handed over to agency
Civil work	:	Cutting levelling, Boundary wall Equipment, Transformer and Reactor Foundation, GIS building, Control room building, FFPH etc. are in progress
Equipment supplied	:	GIS and other On Shore supplies are in progress.
Equipment erection commenced.	:	765 kV, 400kV & 220kV GIS Hall Erection
Scheduled COD	:	Dec'20/ May'21*/Aug'21**
Anticipated COD	:	Aug'21

1. Major Engineering activities completed.
2. Equipment foundation, building works and supply is under progress.

### Constraints being faced during execution:

1. Work has been affected due to COVID-19 pandemic.
2. Off Shore and On-Shore supplies are expected to be delayed from their original schedule. **Supply of 765kV Transformer and Bus Reactors from M/s BHEL are** currently affected as the bushings and CRGO are to be imported from China.
3. Supply of 765 kV, 400 kV & 220 kV GIS is also affecting because of procurement of GIS component from NHVS, China and partially from Indian Vendors under Make in India.

## 6. Transmission system associated with LTA applications from Rajasthan SEZ Part-A, Phase-II

**SPV Name: Ramgarh New Transmission Limited**

### **Background**

Government of India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW from Solar and 60 GW from Wind. This includes solar generation potential of about 20 GW in Rajasthan. Transmission system for evacuation of 8.9 GW under phase-I has already been taken up for implementation. Transmission system strengthening scheme for evacuation of power from solar energy zones in Rajasthan (11.1 GW – 3 GW through intra state) under Phase II, inter-alia includes evacuation of 1.05GW in Bhadla complex, 2.2GW in Fatehgarh complex, 1.9GW in Ramgarh and 2.95 GW in Bikaner.

For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhadla-II, Fatehgarh-II, Sikar &Khetri along with establishment of 765/400kV new substation at Sikar-II &Narela and 400/220kV new substation at Bikaner-II & Ramgarh-II have been planned.

The subject transmission scheme involves establishment of 400/220kV Ramgarh-II S/s & implementation of Ramgarh-II PS – Fatehgarh- II PS 400kV D/c & Ramgarh –II PS– Jaisalmer-II (RVPN) 400kV D/c lines which shall facilitate in transfer of power from RE sources in Ramgarh complex for onward dispersal of power to various beneficiaries.

### **Scope of Transmission Project-**

#### **Transmission Line**

Ramgarh II – Fatehgarh II 400kV D/C line ( Twin HTLS)

Ramgarh II – Jaisalmer-II (RVPNL) 400kV D/C line (Twin HTLS)

#### **Substation**

Establishment of 400/220kV , 4X 500 MVA substation at Ramgarh –II (Fatehgarh –III) with 2x 125 MVA Bus reactors

02 No 400kV line bays at Fatehgarh II & Jaisalmer-II

#### **General Details**

Special Purpose Vehicle (SPV)	:	Ramgarh New Transmission Limited
Bid Process Coordinator (BPC)	:	REC Ltd.
Estimated Cost	:	₹ 353.85 Cr.
Levellised Tariff	:	₹ 39.053 Cr.
Request for Proposal	:	11.05.20
Letter of Intent	:	29.01.21
Transmission Service Agreement (TSA)	:	11.11.20
SPV acquisition	:	09.03.21
Transmission License by CERC	:	Applied on 15.03.21.

Tariff adoption by CERC	:	Applied on 15.03.21.
Clearance u/s 164	:	Village list published in Newspaper on
23.05.2021 and in Gazette on 12.06.2021.		
Execution plan submitted to CEA :		To be submitted.
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs issued
Scheduled Date of Completion	:	Sep'22/Dec'22**

**Status of progress of transmission project:-**

**Ramgarh II – Fatehgarh II 400kV D/C line ( Twin HTLS)**

Award placed to M/s KPTL

Length:	44 km
Locations:	114nos.
Foundation completed	34 nos.
Towers erected	06 Nos
Stringing completed	-
Scheduled COD	Sep'22/Dec'22**
Anticipated COD	Sep'22

**Ramgarh II – Jaisalmer-II (RVPNL) 400kV D/C line (Twin HTLS)**

Award placed to M/s KPTL

Length:	50 km
Locations:	128 nos.
Foundation completed	29nos.
Towers erected	01 No
Stringing completed	-
Scheduled COD	Sep'22/Dec'22**
Anticipated COD	Sep'22

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

**Status of progress of Substation/ Extension:-**

NOA for 400/220 kV Ramgarh Substation (New), 400 kV Bay Extensions both at Fatehgarh-II (PG) Substation and Jaisalmer-II Substation (RVPNL) is placed to M/s KPTL.

Land for Ramgarh Substation yet to be acquired.

Engineering at Fatehgarh and Jaisalmer S/s under progress..

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

## 7. Transmission system associated with LTA applications from Rajasthan SEZ Part-F, Phase-II

**SPV Name: Bikaner-II Bhiwadi Transco Limited**

### **Background**

Government of India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW from Solar and 60 GW from Wind. This includes solar generation potential of about 20 GW in Rajasthan. Transmission system for evacuation of 8.9 GW under phase-I has already been taken up for implementation. Transmission system strengthening scheme for evacuation of power from solar energy zones in Rajasthan (11.1 GW – 3 GW through intra state) under Phase II, inter-alia includes evacuation of 1.05GW in Bhadla complex, 2.2GW in Fatehgarh complex, 1.9GW in Ramgarh and 2.95 GW in Bikaner.

For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhadla-II, Fatehgarh-II, Sikar &Khetri along with establishment of 765/400kV new substation at Sikar-II &Narela and 400/220kV new substation at Bikaner-II & Ramgarh-II have been planned.

The subject transmission scheme involves establishment of 400/220kV Bikaner-II S/s & implementation of Bikaner-II – Khetri 400kV D/c &Khetri - Bhiwadi 400kV D/c lines.

### **Scope of Transmission Project-**

#### **Transmission Line**

Bikaner II- Khetri 400kV D/C line (Twin HTLS)

Khetri - Bhiwadi 400kV D/C line (Twin HTLS)

#### **Substation**

Establishment of 400/220kV Bikaner II Pooling Station with  $\pm$  300 MVAR, 2x125 MVAR MSC, 1x125 MVAR MSR & 2x125MVAR,420kV Bus Reactor , 4x80MVAR,420kV Line Reactors.

Construction of 4 nos. of 400kV line bays at Khetri for Bikaner II – Khetri 400kV 2xD/c line & Construction of 2 nos. of 400kV line bays at Khetri for Khetri - Bhiwadi 400kV D/c line alongwith 4x80MVAR,420kV Line Reactors

Construction of 2 nos. of 400 kV (GIS) line bays at Bhiwadi for Khetri- Bhiwadi 400kV D/c line

#### **General Details**

Special Purpose Vehicle (SPV)	:	Bikaner-II Bhiwadi Transco Limited
Bid Process Coordinator (BPC)	:	PFC Consulting Ltd.
Estimated Cost	:	₹ 1340.81 Cr.
Levellised Tariff	:	₹ 140.486Cr.
Request for Proposal	:	06.03.20
Letter of Intent	:	16.02.21
Transmission Service Agreement (TSA)	:	16.10.20

SPV acquisition	:	25.03.21
Transmission License by CERC	:	Applied on 5.04.21.
Tariff adoption by CERC	:	Applied on 5.04.21
Clearance u/s 164	:	Village list Published in Newspaper on 26.06.2021 .
Execution plan submitted to CEA :		To be submitted.
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs issued
Scheduled Date of Completion	:	Sep'22/Dec'22**

### **Status of progress of transmission project:-**

#### **Bikaner II- Khetri 400kV D/C line (Twin HTLS)**

Award placed to M/s KEC &KPTL

Length:	272 km
Locations:	703nos.
Foundation completed	125 nos.
Towers erected	-
Stringing completed	-
Scheduled COD	Sep'22/Dec'22**
Anticipated COD	Sep'22

#### **Khetri - Bhiwadi 400kV D/C line (Twin HTLS)**

Award placed to M/s TLL

Length:	124km
Locations:	325nos.
Foundation completed	-
Towers erected	-
Stringing completed	-
Scheduled COD	Sep'22/Dec'22**
Anticipated COD	Sep'22

### **Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

### **Status of progress of Substation/ Extension:-**

NOA for 400/220 kV Bikaner II Pooling station (New), 400 kV Bay Extensions both at Khetri Substation and Bhiwadi GIS Substation is placed to M/s KEC.

Land for Bikaner Substation yet to be acquired.Engineering at Khetri and Bhiwadi S/s under progress..

### **Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

## 8. Transmission system associated with LTA applications from Rajasthan SEZ Part-B, Phase-II

**SPV Name: Fatehgarh Bhadla Transco Limited**

### **Background**

Government of India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW from Solar and 60 GW from Wind. This includes solar generation potential of about 20 GW in Rajasthan. Transmission system for evacuation of 8.9 GW under phase-I has already been taken up for implementation. Transmission system strengthening scheme for evacuation of power from solar energy zones in Rajasthan (11.1 GW – 3 GW through intra state) under Phase II, inter-alia includes evacuation of 1.05GW in Bhadla complex, 2.2GW in Fatehgarh complex, 1.9GW in Ramgarh and 2.95 GW in Bikaner.

For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhadla-II, Fatehgarh-II, Sikar &Khetri along with establishment of 765/400kV new substation at Sikar-II &Narela and 400/220kV new substation at Bikaner-II & Ramgarh-II have been planned.

The subject transmission scheme involves establishment of 400/220kV Bikaner-II S/s & implementation of Bikaner-II – Khetri 400kV D/c &Khetri - Bhiwadi 400kV D/c lines.

### **Scope of Transmission Project-**

#### **Transmission Line**

- Fatehgarh II – Bhadla II 765kV D/C line (2<sup>nd</sup>)

#### **Substation**

- Construction of 02 nos. of 765 kV line bays at Fatehgarh II for Fatehgarh II – Bhadla II 765kV D/c line along with 2 x 240 MVAR switchable line reactors.
- Construction of 02 nos. of 765 kV line bays at Bhadla II for Fatehgarh II – Bhadla II 765kV D/c line along with 2 x 240 MVAR switchable line reactors.

#### **General Details**

Special Purpose Vehicle (SPV)	:	Fatehgarh Bhadla Transco Limited
Bid Process Coordinator (BPC)	:	REC Transmission Projects Company Ltd..
Estimated Cost	:	₹ 713.82 Cr.
Levellised Tariff	:	₹ 72.893 Cr.
Request for Proposal	:	05.03.20
Letter of Intent	:	29.01.21
Transmission Service Agreement (TSA)	:	11.11.20
SPV acquisition	:	04.06.21
Transmission License by CERC	:	Applied on 16.06.21.
Tariff adoption by CERC	:	Applied on 16.06.21
Clearance u/s 164	:	To be applied.
Execution plan submitted to CEA :		To be submitted.

NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs issued
Scheduled Date of Completion	:	Dec'22

**Status of progress of transmission project:-**

**Fatehgarh II – Bhadla II 765kV D/C line (Twin HTLS)**

Award placed to M/s L&T and M/s KEC

Length:	190.14km
Locations:	492 nos.
Foundation completed	75 nos.
Towers erected	04 Nos
Stringing completed	-
Scheduled COD	Dec'22
Anticipated COD	Dec'22

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

**Status of progress of Substation/ Extension:-**

NOA for 765 kV extension of Fatehgarh II and Bhadla II placed to M/s TATA.

Engineering at Fatehgarh II and Bhadla II S/s under progress..

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

## 9. Transmission system associated with LTA applications from Rajasthan SEZ Part-C, Phase-II

**SPV Name: Sikar New Transmission Limited**

### **Background**

Government of India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW from Solar and 60 GW from Wind. This includes solar generation potential of about 20 GW in Rajasthan. Transmission system for evacuation of 8.9 GW under phase-I has already been taken up for implementation. Transmission system strengthening scheme for evacuation of power from solar energy zones in Rajasthan (11.1 GW – 3 GW through intra state) under Phase II, inter-alia includes evacuation of 1.05GW in Bhadla complex, 2.2GW in Fatehgarh complex, 1.9GW in Ramgarh and 2.95 GW in Bikaner.

For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhadla-II, Fatehgarh-II, Sikar &Khetri along with establishment of 765/400kV new substation at Sikar-II &Narela and 400/220kV new substation at Bikaner-II & Ramgarh-II have been planned.

The subject transmission scheme involves establishment of 400/220kV Bikaner-II S/s & implementation of Bikaner-II – Khetri 400kV D/c &Khetri - Bhiwadi 400kV D/c lines.

### **Scope of Transmission Project-**

#### **Transmission Line**

- Bhadla II – Sikar II 765kV D/C line
- Sikar II – Neemrana 400kV D/C ( Twin HTLS)

#### **Substation**

- Establishment of 765/400kV Sikar II Substation with 2x 1500 MVA 765/400kV ICTS, 2x 330 MVA, 765kV Bus Reactors and 1x 125 MVA, 400kV Bus Reactor and 2x 330MVA Switchgear line reactors for Bhadla II – Sikar II transmission Line.
- Construction of 02 No 765kV bays at Bhadla II for Bhadla II – Sikar II 765kV D/C Line along with 2/240MVA switchable line reactors.
- Construction of 02 No 400kV bays at Neemrana for Sikar II – Neemrana 400kV D/C line.

#### **General Details**

Special Purpose Vehicle (SPV)	:	Sikar New Transmission Limited
Bid Process Coordinator (BPC)	:	REC Transmission Projects Company Ltd.
Estimated Cost	:	₹ 1562 Cr.
Levelling Tariff	:	₹ 163.705 Cr.
Request for Proposal	:	05.03.20
Letter of Intent	:	01.02.21
Transmission Service Agreement (TSA)	:	14.12.20
SPV acquisition	:	04.06.21
Transmission License by CERC	:	Applied on 16.06.21.



Tariff adoption by CERC	:	Applied on 16.06.21
Clearance u/s 164	:	To be applied.
Execution plan submitted to CEA :		To be submitted.
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs issued
Scheduled Date of Completion	:	Dec'22

**Status of progress of transmission project:-**

**1. Bhadla II – Sikar II 765kV D/C line**

Award placed to M/s KEC

Length:	306 km
Locations:	764 nos.
Foundation completed	100 nos.
Towers erected	14 No
Stringing completed	-
Scheduled COD	Dec'22
Anticipated COD	Dec'22

**2. Sikar II - Neemarana 400kV D/C line (Twin HTLS)**

Award placed to M/s KEC

Length:	137 km
Locations:	350 nos.
Foundation completed	61 No
Towers erected	-
Stringing completed	-
Scheduled COD	Dec'22
Anticipated COD	Dec'22

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

**Status of progress of Substation/ Extension:-**

NOA for 765/400 kV Sikar New, 765kV Bay Extensions both at Bhadla II and 400kV bays extension at Neemarana Substation is placed to M/s Techno.

Land for Sikar II Substation yet to be acquired.

Engineering at Bhadla II and Neemarana S/s under progress..

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

## 10. Transmission system associated with LTA applications from Rajasthan SEZ Part-D, Phase-II

**SPV Name: Sikar II – Aligarh Transmission Limited**

### **Background**

Government of India has set a target for establishing 175 GW renewable capacity by 2022, which includes 100 GW from Solar and 60 GW from Wind. This includes solar generation potential of about 20 GW in Rajasthan. Transmission system for evacuation of 8.9 GW under phase-I has already been taken up for implementation. Transmission system strengthening scheme for evacuation of power from solar energy zones in Rajasthan (11.1 GW – 3 GW through intra state) under Phase II, inter-alia includes evacuation of 1.05GW in Bhadla complex, 2.2GW in Fatehgarh complex, 1.9GW in Ramgarh and 2.95 GW in Bikaner.

For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhadla-II, Fatehgarh-II, Sikar &Khetri along with establishment of 765/400kV new substation at Sikar-II &Narela and 400/220kV new substation at Bikaner-II & Ramgarh-II have been planned.

The subject transmission scheme involves establishment of 400/220kV Bikaner-II S/s & implementation of Bikaner-II – Khetri 400kV D/c &Khetri - Bhiwadi 400kV D/c lines.

### **Scope of Transmission Project-**

#### **Transmission Line**

Sikar II- Aligarh 765kV D/C line

#### **Substation**

- Construction of 02 No 765kV bays at Sikar II for Sikar II- Aligarh 765kV D/C Line along with 2x330 MVAR switchable line reactors.
- Construction of 02 No 765kV bays at Aligarh for Sikar II- Aligarh 765kV D/C Line along with 2x330 MVAR switchable line reactors

#### **General Details**

Special Purpose Vehicle (SPV)	:	Sikar II – Aligarh Transmission Limited
Bid Process Coordinator (BPC)	:	PFC Consulting Ltd.
Estimated Cost	:	₹ 1006 Cr.
Levelling Tariff	:	₹ 99.701Cr.
Request for Proposal	:	06.03.20
Letter of Intent	:	16.02.21
Transmission Service Agreement (TSA)	:	02.11.20
SPV acquisition	:	08.06.21
Transmission License by CERC	:	Applied on 16.06.21
Tariff adoption by CERC	:	Applied on 16.06.21
Clearance u/s 164	:	To be applied.
Execution plan submitted to CEA :		To be submitted.
NIT issued on	:	NIT for all Pkges issued.
EPC awarded on	:	NOAs issued

Scheduled Date of Completion : Dec'22

**Status of progress of transmission project:-**

**1. Sikar II – Aligarh 765kV D/C line**

Award placed to M/s KPTL

Length:	254 km
Locations:	664 nos.
Foundation completed	139 nos.
Towers erected	13 nos
Stringing completed	-
Scheduled COD	Dec'22
Anticipated COD	Dec'22

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

**Status of progress of Substation/ Extension:-**

NOA for 765kV kV Bay Extensions both at Sikar II Substation and Aligarh Substations is placed to M/s Tata.

Land for Sikar II Substation yet to be acquired.

Engineering at Aligarh S/s under progress..

**Constraints being faced during execution:**

1. Work affected due to COVID-19 pandemic.

\*As per Ministry of Power, Govt. of India circular no. 3/1/2020-Trans dated 27th July, 2020, all inter-state projects whose SCOD is beyond 25th March, 2020 and which were under construction on 25th March, 2020, have been given an extension of 5 months in respect of SCOD.

\*\*As per Ministry of Power, Govt. of India circular no. 3/1/2020-Trans dated 12th June, 2021, all inter-state transmission projects which are under construction with SCOD coming after 01 April, 2021 shall get an extension of 3 months in respect of their SCOD.

## **11. 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 (Sterlite Grid 4 Limited; a subsidiary of Sterlite Power Transmission Limited))
Bid Process Coordinator (BPC)	: RECTPCL
Estimated Cost (Rs. crs)	: 2136
Levellised 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
- Locations: 66 nos.
- Scheduled COD: Jul'19

#### Line Commissioned in Mar, 2020.

### 3. System strengthening in WR

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

Length:	180.08 CKm
Locations:	243 nos.
Scheduled COD:	Jul'19

#### Line commissioned in Mar'20

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

Length:	382.66 CKm
Locations:	493 nos.
Foundation completed:	484 nos
Tower erected:	477 nos.
Stringing completed:	354 ckm
Scheduled COD:	Jul'19
Anticipated COD:	Nov'21

### **Constraints where Project Authority requires intervention:**

1. Objection was raised by D.C., Dhule for traversing of line through submergence area of proposed Jamphal Dam in Maharashtra and diversion of line was requested.
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 Proposal was submitted to MoEF.
4. To address the issue of delay in grant of NOC by Irrigation Dept, Dhule (Maharashtra) for commencement of construction work in diverted route. A meeting was held on 12-02-2021 by the Committee constituted by Ministry of Power under the chairmanship of Member (Power Systems), CEA and as directed by Committee, KTL had submitted the Undertaking on 17-02-2021 and the NOC was granted by Irrigation Dept on 23-02-2021.
5. Forest Proposal has been forwarded by Govt of Maharashtra to Regional MoEFCC for consideration in REC Meeting which is scheduled on 11 Feb 2021. Proposal was discussed and recommended in the REC meeting held on 11.02.2021 and Stage-I clearance has been issued and working permission has been issued .
6. Due to ongoing pandemic situation, the Government of Maharashtra and Madhya Pradesh have announced the curfews and lockdowns in the states, thereby impacting the construction activities at site and restrictions in movement of manpower, machines and material.
7. The construction work on the diverted route has been started but the TSP is facing severe RoW issues by the local people.
8. Report from Defence Signals, Army is pending for PTCC Clearance.

### **Details of followup actions:**

1. JS (Trans), MOP office letter to Principal Secretary (Forests) bearing Ref No. D.O No. 3/3/2020-Trans dated 11 Nov & 7 Dec 2020.
2. CEA letter to Additional Chief Secretary (Forests), Maharashtra bearing Ref No.CEA-PS-13-22(13) /1/2018 - PSPM dated 03-07-2020
3. CEA Meeting held on 5 Nov 2020 under the chairmanship of Chairperson, CEA.
4. MOP letter to Principal Secretary (WRD), Govt of Maharashtra bearing Ref No. 3/3/2020-Trans dated 20-01-2021.
5. CEA letter to Deputy Director General of Forests (C), MoEF – Nagpur bearing Ref No. CEA-PS-13-22(13) /1/2018 - PSPM dated 03-02-2021

## **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.,  
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**

Scheduled COD

Jul'19

**Substation commissioned in Mar'20**

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

Scheduled COD                      Jul'19  
Electrical Inspection Done on 18-Sept-2018



## **12. 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 (Sterlite Grid 5 Limited; a subsidiary of Sterlite Power Transmission 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:	187.35 CKm
Locations:	233 nos.
Foundation completed:	2 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	14 Nov'21
Anticipated COD:	Dec'22

#### **Constraints/Approval if any:**

1. Delay in grant of Forest clearance for Diversion of 177.091 Ha of forest land. The Proposal has been forwarded by Nodal Officer to Govt of Karnataka and now the State Govt has to recommend it to MoEFCC, New Delhi for issuance of Stage-I clearance. State Govt had returned the proposal to nodal officer seeking the details that whether the user agency is utilizing the corridor of existing 110kV line or not at possible extent. Proposal submitted on 19-Dec-2018 and the delay is almost of 810 days.
2. Delay in grant of Wildlife clearance for Diversion of 33.273 Ha of wildlife area. The Proposal is pending with Govt of Karnataka and has to be approved by SBWL, Karnataka. State Govt had returned the proposal to nodal officer seeking the details that whether the user agency is utilizing the corridor of existing 110kV line or not at possible extent. Proposal submitted on 18-Jan-2019 and the delay is almost of 760 days.
3. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19
4. The progress is suffered due to petition filed by Goa Foundation in Central Empowered Committee (CEC) constituted by Supreme court and High Court of Mumbai & Goa. Central Empowered Committee (CEC) has submitted their report to Supreme Court on 23<sup>rd</sup> April 2021 and has recommended some modifications in LILO of one ckt of Narendra (existing) – Narendra (new) 400kV D/C line at Xeldem (XN line). Decision of Supreme Court is awaited

#### **Details of followup actions:**

1. CEA letter to Nodal officer/APCCF, Karnataka bearing Ref No. CEA-PS-13-24(21)/1/2018-PSPM dated 22-01-2020
2. CEA letter to Nodal officer/APCCF, Karnataka bearing Ref No. CEA-PS-13-24(11)/1/2018-PSPM dated 08-09-2020
3. MOP meeting held on 23 Oct 2020 under the chairmanship of JS (Trans) along with CEA, M/s GTTPL and CCF, Govt of Karnataka.
4. MOP letter to Additional Chief Secretary (FEE), Govt of Karnataka bearing Ref No. D.O. NO. 6/4/2017-Trans dated 13-01-2021
5. Meeting held on 31<sup>st</sup> March 2021 under the chairmanship of Secretary (Power) to review under construction ISTS projects.
6. A meeting was held on 15<sup>th</sup> March 2021 under the chairmanship of Chief Secretary, Government of Karnataka to review the pending issues on Central PMG portal.
7. A meeting was held on 8<sup>th</sup> April 2021 under the chairmanship of Additional Chief Secretary, Energy Department - Govt of Karnataka
8. A meeting was held on 15<sup>th</sup> June 2021 under the chairmanship of Secretary, MOP to review the under-construction Transmission Projects
9. A meeting was held on 28<sup>th</sup> June 2021 under the chairmanship of Member (PS), CEA to review the under-construction Transmission Projects

#### **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 MoEF  
Karnataka Forest : at Nodal Officer

### **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 : Goa – NBWL approved the diversion and tree cutting permission is under process.Karnataka – Proposal is under process at State Govt level for consideration in upcoming SBWL meeting.

### **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 : 4nos.

### **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 : Received CEA (PTCC) Recommendation for Goa portion and received PTCC Approval for Karnataka Portion.

### **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:	149 nos.
Foundation completed:	35 nos
Tower erected:	7 nos
Stringing completed:	0 ckm
Scheduled COD:	May'21
Anticipated COD:	Apr'22

### **Constraints/Approval if any:**

1. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19
2. The progress is suffered due to petition filed by Goa Foundation in Central Empowered Committee (CEC) constituted by Supreme court and High Court of Mumbai & Goa. Central Empowered Committee (CEC) has submitted their report to Supreme Court on 23<sup>rd</sup> April 2021 and have cleared 400kV D/C Xeldem – Mapusa Line.
3. Working (Tree cutting) permission received on 8<sup>th</sup> July 2021.

### **Details of Followup actions:**

1. CEA letter to Principal Chief Conservator of Forest, Goa bearing Ref No. CEA/PS/PSPM/1/57/41/2018/1539-41 dated 12-10-2018
2. Meeting held on 31<sup>st</sup> March 2021 under the chairmanship of Secretary (Power) to review under construction ISTS projects.
3. CEA has written to PCCF, Govt of Goa for expediting of working permission on 09-06-2021.
4. Office of PCCF, Goa written to CEA on 10-06-2021 to certify that the project area in which tree felling is proposed is not dependent on the part of project for which realignment is proposed by Central Empowered Committee (CEC) and tree felling is essential at this stage for implementation of other parts of this project.
5. A meeting was held on 15<sup>th</sup> June 2021 under the chairmanship of Secretary, MOP to review the under-construction Transmission Projects.
6. CEA vide their letter dated 21-06-2021 clarified the queries raised by PCCF, Govt of Goa.
7. A meeting was held on 28<sup>th</sup> June 2021 under the chairmanship of Member (PS), CEA to review the under-construction Transmission Projects
8. A meeting was held on 06<sup>th</sup> July 2021 under the chairmanship of Additional Secretary (Trans), MOP to discuss issues faced in the State of Goa.

### **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	:	Stage-1, working permission and Stage-2 Approval Received	

#### **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: 179nos.  
Foundation completed: 94 nos.  
Tower erected: 61 nos  
Stringing completed: 0 ckm  
Scheduled COD: 14 July '21  
Anticipated COD: Dec'21

#### **Constraints/Approval if any:**

1. Delay in grant of forest clearance for Diversion of 137.014 Ha of Forest land. Forest proposal has been forwarded by Govt of Chhattisgarh to Regional MoEFCC and the same was discussed in the REC Meeting held on 24-03-2021 and Stage-I clearance has been issued. Tree cutting permission is awaited. Proposal submitted on 10-Aug-2018. Total delay as on date is around 798 Days. Demand note

received from Forest dept on 18<sup>th</sup> June 2021 and the payment has been made by M/s GTTPL on 23<sup>rd</sup> June 2021. Working permission is awaited

2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19

#### **Details of followup actions:**

1. CEA letter to PCCF, Chhattisgarh bearing Ref No. CEA/PS/PSPM/1/57/41/2018/1532-33 dated 12-10-2018
2. CEA letter to PCCF, Chhattisgarh bearing Ref No. CEA-PS-13-24(21)/1/2018-PSPM dated 23-10-2019
3. CEA letter to PCCF, Chhattisgarh bearing Ref No. CEA-PS-13-24(11)/1/2018-PSPM dated 12-05-2020
4. CEA letter to Principal Secretary (Forests), Chhattisgarh bearing Ref No. CEA-PS-13-22(13)/1/2018-PSPM dated 10-09-2020
5. CEA letter to Deputy Director General of Forests (C), MoEF – Nagpur bearing Ref No. CEA-PS-13-22(13)/1/2018 -PSPM dated 03-02-2021
6. Meeting held on 31<sup>st</sup> March 2021 under the chairmanship of Secretary (Power) to review under construction ISTS projects
7. A meeting was held on 15th June 2021 under the chairmanship of Secretary, MOP to review the under-construction Transmission Projects.
8. A meeting was held on 28th June 2021 under the chairmanship of Member (PS), CEA to review the under-construction Transmission Projects.

#### **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	:	Proposal was discussed in the REC Meeting held on 24-03-2021 and Stage-I clearance received. Working permission is awaited			

##### **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:	62 nos.
Foundation completed:	0 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	May'21
Anticipated COD:	Apr'22

**Constraints/Approval if any:**

1. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19
2. The progress is suffered due to petition filed by Goa Foundation in Central Empowered Committee (CEC) constituted by Supreme court and High Court of Mumbai & Goa. Central Empowered Committee (CEC) has submitted their report to Supreme Court on 23<sup>rd</sup> April 2021 and have cleared 220kV D/C Xeldem – Xeldem Line
3. Working permission is awaited from Forest Department, Govt of Goa. The forest proposal is being forwarded by PCCF, Goa to Forest Secretary, Govt of Goa for their recommendation

**Details of Followup actions:**

1. CEA letter to Principal Chief Conservator of Forest, Goa bearing Ref No. CEA/PS/PSPM/1/57/41/2018/1539-41 dated 12-10-2018
2. Meeting held on 31<sup>st</sup> March 2021 under the chairmanship of Secretary (Power) to review under construction ISTS projects.

3. CEA has written to PCCF, Govt of Goa for expediting of working permission on 09-06-2021.
4. Office of PCCF, Goa written to CEA on 10-06-2021 to certify that the project area in which tree felling is proposed is not dependent on the part of project for which realignment is proposed by Central Empowered Committee (CEC) and tree felling is essential at this stage for implementation of other parts of this project
5. A meeting was held on 15th June 2021 under the chairmanship of Secretary, MOP to review the under-construction Transmission Projects
6. CEA vide their letter dated 21-06-2021 clarified the queries raised by PCCF, Govt of Goa.
7. A meeting was held on 28th June 2021 under the chairmanship of Member (PS), CEA to review the under-construction Transmission Projects
8. A meeting was held on 06<sup>th</sup> July 2021 under the chairmanship of Additional Secretary (Trans), MOP to discuss issues faced in the State of Goa

### **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	: Stage-1 & Stage-2 Approval Received and working permission is awaited	

#### **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	:	1 nos.

#### **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 : Pending

**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
Anticipated COD	Apr'22

**Constraints/Approval if any:**

1. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19
2. The construction work will be started after getting Conversion Sanad from District Collector, South Goa. The construction License from Gram Panchayat, Molem has been received on 13 Nov 2020.
3. Approval under Sec17(A) for sloppy land is pending with Chief TCP, Goa
4. The progress is suffered due to petition filed by Goa Foundation in Central Empowered Committee (CEC) constituted by Supreme court and High Court of Mumbai & Goa. Central Empowered Committee (CEC) has submitted their report to Supreme Court on 23<sup>rd</sup> April 2021 and have cleared 400/220kV Xeldem Substation.
5. In a meeting held on 15th June 2021 under the chairmanship of Secretary, MOP, it was decided to hold a meeting under chairmanship of AS, MoP.

**Details of Followup actions:**

1. CEA letter to Principal Chief Conservator of Forest, Goa bearing Ref No. CEA/PS/PSPM/1/57/41/2018/1539-41 dated 12-10-2018
2. Meeting held on 31<sup>st</sup> March 2021 under the chairmanship of Secretary (Power) to review under construction ISTS projects.
3. A meeting was held on 15th June 2021 under the chairmanship of Secretary, MOP to review the under-construction Transmission Projects
4. A meeting was held on 28th June 2021 under the chairmanship of Member (PS), CEA to review the under-construction Transmission Projects.
5. A meeting was held on 06th July 2021 under the chairmanship of Additional Secretary (Trans), MOP to discuss issues faced in the State of Goa

### 13. 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.(Sterlite Grid 14 Limited; a subsidiary of Sterlite Power 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	:	15.09.2018
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	:	24-01-2020
Tariff adoption by CERC	:	28-01-2020
Contract Performance Guarantee	:	12.09.2019
Clearance u/s 164	:	In process
Execution plan submitted to CEA	:	08-01-2020
NIT issued on	:	
EPC contract awarded on	:	13-08-2020 (Transmission Line) 12-08-2020 (S/s and Bay extension)
Scheduled Date of Completion	:	12.11.2022 (38 months from Effective Date)

#### Status of progress of transmission project

##### 1. Udupi (Mangalore) – Kasargode 400kV D/C line

Length:	230.94 ckm
Locations:	310 nos.
Foundation completed:	39 nos.
Tower erected:	2 nos
Stringing completed:	0 ckm
Scheduled COD:	11 <sup>th</sup> Nov 2022
Anticipated COD:	18 <sup>th</sup> Mar 2022

#### Current Status:

1. EPC Partner has been taken on board
2. Detail Survey is in process.
3. Design and Engineering work is in process.
4. Gazette Notification for Sec-164 has been published.

**Constraints/Approval if any:**

1. Due to ongoing pandemic situation, the construction work, Manufacturing & Delivery of materials and resource mobilization are getting impacted and absence of Oxygen supply for industrial purpose has impacted the manufacturing and supply of towers
2. Facing Delay in getting Forest and Statutory clearances (Power line, NH crossing etc)
3. Appointment of nodal officer for administrative support in the State of Karnataka is pending with Energy / Chief Secretary for resolution of ROW issues.

**Detail of Followup actions:**

1. CEA letter to Deputy Commissioner, Dakshin Kannad bearing Ref No. CEA-PS-13-22(13)/1/2018 dated 16-06-2020
2. Meeting held on 26 March 2021 under the chairmanship of Joint Secretary (Transmission) to review the project status.
3. DO Letter by JS (Trans) to Chief Secretary - Karanataka and Kerala bearing Ref No. 6/4/2017-Trans dated 05-04-2021

**Status of statutory approvals:**

**Forest area**

Details of Tr. Line Falling under Forest:-

Locations	: 24 nos.	; Length : 9.45 Kms
Forest area (Ha)	: 43.47 Ha	
Current status	: at Nodal Officer (Kerala) and at DFO (Karnataka)	

**Power line crossing**

Total no. of crossings	: 7 nos.
Proposal submitted	: 4 nos..
Approval obtained	: 0 nos.

**Railway crossing**

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

**National Highway / SH Crossing**

Total no. of crossings	: 7 nos.
Proposal submitted	: 3 nos.
Approval obtained	: 0 nos.

**River Crossings**

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

Approval obtained : 0 nos.

### **PTCC approval**

Current status : Proposal is yet to be submitted

### **Defence/Civil Aviation**

Current status : Proposal for Civil aviation has been submitted and the proposal for Defence is yet to be submitted

## **2. Establishment of 2\*500MVA, 400/220kV GIS S/s at Kasargode**

Land Acquired:	100%
Civil works:	0%
Equipment supplied:	0%
Equipment erection:	0%
Scheduled COD	11 <sup>th</sup> Nov 2022
Anticipated COD:	18 <sup>th</sup> Mar 2022

### **Current Status:**

1. Substation land has been Acquired. Land development work has been completed
2. Soil testing has been done on the S/s land.
3. EPC Partner has been taken on board
4. Design and Engineering work is in process
5. Applied for permanent / construction power connection.

### **Constraints / approval; if any:**

1. CLU order is also pending at Collector Office, Kasargode.
2. Due to ongoing pandemic situation, the construction work, Manufacturing & Delivery of materials and resource mobilization are getting impacted and absence of Oxygen supply for industrial purpose has impacted the manufacturing and supply of reactor.
3. Facing Severe RoW issues in Kasargode Substation as the work has been stopped and local villagers are threatening the people at site.
4. District Administration requested UKTL to move the location of the substation 2 km from the existing location and vide letter dated 29-06-2021 informed UKTL that the Gram Panchayat had found an alternative land in RS No. 89 in Govt Poromboke land of Karinthalam village and also directed UKTL to submit a feasible report about changing the location to nearby Govt land which can be leased out to the company.

### **Details of follow up actions:**

1. A meeting was held on 15th June 2021 under the chairmanship of Secretary, MOP to review the under-construction Transmission Projects
2. In the review meeting taken by Member (PS) on 28.06.2021, M/s UKTL informed that there is severe ROW issue on substation land. Administration is requesting them to move the location of the substation 2 km from the existing location. They are deliberating with the district administration on the issue.
3. Panchayath made a resolution requesting State Govt. of Kerala and M/s UKTL to shift the site for construction to nearby Govt. land.
4. On 15.07.2021, M/s UKTL informed CEA that they agreed for shifting of substation location to nearby Government land and they received communication from KSEB

and District Collector office for providing the technical feasibility for the same. It is planned to provide this alternative land to M/s UKTL on long term lease basis.

5. CEA vide letter dated 19-07-2021 requested DC, Kasargode to consider grant of advance possession of alternate land alongwith working permission to M/s UKTL for setting up the substation by the time lease agreement is finalized by the State Revenue Dept. This will help in make up for the delay which has already impacted the project timelines.

### **3. 2 nos of 400kV line bays and Bus Bar extension works at UPCL Switchyard**

Land Acquired:	Space will be provided by UPCL
Civil work completed:	0%
Equipment supplied:	0%
Equipment erection:	0%
Scheduled COD:	11 <sup>th</sup> Nov 2022
Anticipated COD:	18 <sup>th</sup> Mar 2022

#### **Current Status:**

1. A meeting was held between UKTL and UPCL for document sharing and start of Bay extension work.
2. EPC Partner has been taken on board.
3. Design and Engineering work is in process

## 14. 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) : Vapi II- North Lakhimpur Transmission Limited Sterlite Grid 13 Limited (A Subsidiary of Sterlite Power Trans. Limited)

Bid Process Coordinator (BPC)	:	PFCCL
Estimated Cost (Rs. Crs)	:	2000
Levellised Tariff (Rs. Crs)	:	256.592
Request for Qualification	:	14.08.2018
Request for Proposal	:	13.11.2018
Letter of Intent	:	02.03.2020
Transmission Service Agreement (TSA)	:	07.12.2018
SPV acquisition	:	23.06.2020
Transmission License by CERC	:	01-04-2021
Tariff adoption by CERC	:	01-04-2021
Contract Performance Guarantee	:	23.06.2020
Clearance u/s 164	:	In process
Execution plan submitted to CEA	:	20-10-2020
NIT issued on	:	
EPC contract awarded on	:	

### **Part A - Additional 400kV outlets from Banaskantha 765/400 kV S/s**

#### **1. LILO of second circuit of Zerda –Ranchodpura 400 kV D/c line at Banaskantha (PG) PS**

Length:	17.3 km
Locations:	51 nos.
Foundation completed:	2 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	22-10-2022

**Current Status:** Detailed survey completed

#### **Status of statutory approvals:**

##### **Forest area**

Details of Tr. Line Falling under Forest:- N.A.

Locations	:	.	; Length :
Forest area (Ha)	:		
Forest proposals submitted	:		
Current status	:		

##### **Wildlife area**

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

Locations : ; Length :  
Wildlife area (Ha) :  
Wildlife proposals submitted :  
Current status :

#### **Power line crossing**

Total no. of crossings : 5 nos.  
Proposal submitted : 5 nos.  
Approval obtained : 1 no.

#### **Railway crossing**

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

#### **National Highway / SH Crossing**

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

#### **River Crossings**

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

#### **PTCC approval**

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

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : Civil aviation proposal submitted and Defence aviation proposal submission is pending  
Current Status: NOC from Civil aviation received

### **Part B - Establishment of new substation at Vapi/Ambethi area and its associated transmission line**

#### **1. Establishment of 2 x 500 MVA, 400/220 kV S/s near Vapi / Ambheti (Vapi – II)**

Land Acquired: 100%  
Civil works: 0%  
Equipment supplied: 0%  
Equipment erection: 0%  
Scheduled COD 22-04-2023

#### **Current Status:**

- a) Land for construction of substation has been procured
- b) LOA has been awarded to EPC.
- c) Land Development work has been started

**Constraints/Approval if any:**

1. The Approval for obtaining Non-Agriculture permission under Section 65(b) of Gujarat Land Revenue Act is pending with District Collector office, Valsad. However, out of 10.165 acres land, the approval for 5.402 acres land has been received. Rest Approvals are awaited.

**Details of follow up actions:**

1. CEA letter dated 30-04-2021 to District Collector, Valsad requested to extend necessary support to VNLTTL regarding Permission of Non-Agriculture under Sec-65(b); of Gujarat Land Revenue Act for actual Industrial purpose.
2. A meeting was held on 28th June 2021 under the chairmanship of Member (PS), CEA to review the under-construction Transmission Projects.

**2. LILO of KAPP – Vapi 400 kV D/c line at Vapi – II**

Length:	6.1 kms
Locations:	19 nos.
Foundation completed:	0 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	22-04-2023

**Current Status:**

- a) Detailed Survey Completed
- b) LOA has been awarded to EPC

**Status of statutory approvals:****Forest area**

Details of Tr. Line Falling under Forest:- N.A.

Locations	:		; Length :
Forest area (Ha)	:		
Forest proposals submitted	:		
Current status	:		

**Wildlife area**

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

Locations	:		; Length :
Wildlife area (Ha)	:		
Wildlife proposals submitted	:		
Current status	:		

**Power line crossing**

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

**Railway crossing**

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



Approval obtained : 0 nos.

### **National Highway / SH Crossing**

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos.

Approval obtained : 0 nos.

### **River Crossings**

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos.

Approval obtained : 0 nos.

### **PTCC approval**

Proposal submitted to Defence : No

Proposal submitted to BSNL : No

Proposal submitted to Railways : No

Current status : Proposal is yet to submit

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : Civil aviation proposal submitted and Defence aviation proposal submission is pending

Current Status: NOC from Civil aviation received

## **3. 125 MVAr bus reactor at Vapi – II Substation**

Civil works: 0%  
Equipment supplied: 0%  
Equipment erection: 0%  
Scheduled COD 22-04-2023

**Current Status:** LOA has been awarded to EPC

## **4. Vapi-II – Sayali D/C 220kV D/C line**

Length: 22.2 kms  
Locations: 74 nos.  
Foundation completed: 17 nos  
Tower erected: 0 nos  
Stringing completed: 0 ckm  
Scheduled COD: 22-04-2023

### **Current Status:**

- a) Detailed Survey Completed
- b) LOA has been awarded to EPC
- c) FDP Proposal for DNH and Gujarat portion has been submitted.
- d) Wildlife Proposal for DNH has been submitted

### **Status of statutory approvals:**

#### **Forest area**

Details of Tr. Line Falling under Forest:-

Locations : 6 nos. ; Length : 2 Kms

Forest area (Ha) : 5 Ha  
Forest proposals submitted : Yes  
Current status : at DFO (DNH) & Stage-I Received (Gujarat)

### **Wildlife area**

Details of Tr. Line Falling under Wildlife:-

Locations : 5 nos. ; Length : 1.6 km  
Wildlife area (Ha) : 4.388 Ha  
Wildlife proposals submitted on : Yes  
Current status : At Wildlife Warden

### **Power line crossing**

Total no. of crossings : 9 nos.  
Proposal submitted : 8 nos.  
Approval obtained : 5 nos.

### **Railway crossing**

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

### **National Highway / SH Crossing**

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

### **River Crossings**

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

### **PTCC approval**

Proposal submitted to Defence : No  
Proposal submitted to BSNL : No  
Proposal submitted to Railways : No  
Current status : Proposal is yet to submit

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : Civil aviation proposal submitted and  
Defence aviation proposal submission is pending  
Current Status: NOC from Civil aviation received

## **Part C - Additional ISTS feed to Navi Mumbai 400/220 kV substation of PGCIL**

- 1. Padghe (PG) – Kharghar 400 kV D/c (quad) line to be terminated into one ckt. of Kharghar – Ghatkopar 400 kV D/c (quad) line (thus forming Padghe (PG) - Kharghar 400 kV S/c (quad) line, Padghe (PG) - Ghatkopar 400 kV S/c (quad) line)**

Length: 70.01 kms

Locations:	205 nos.
Foundation completed:	0 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	22-12-2023

**Current Status:** Detailed Survey completed

**Status of statutory approvals:**

**Forest area**

Details of Tr. Line Falling under Forest:-

Locations	: 58 nos.	; Length : 20.329 Kms
Forest area (Ha)	: 93.513 Ha	
Forest proposals submitted	: Yes	
Current status	: at DFO	

**Wildlife area**

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

Locations	:	; Length :
Wildlife area (Ha)	:	
Wildlife proposals submitted	:	
Current status	:	

**Power line crossing**

Total no. of crossings	:	14 nos.
Proposal submitted	:	0 nos.
Approval obtained	:	0 nos.

**Railway crossing**

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

**National Highway / SH Crossing**

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

**River Crossings**

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

**PTCC approval**

Proposal submitted to Defence	: No
Proposal submitted to BSNL	: No
Proposal submitted to Railways	: No
Current status	: Proposal is yet to submit

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation	: No
Current Status:	Proposal is yet to submit

## 2. LILO of Padghe (PG) – Ghatkopar 400kV S/c line at Navi Mumbai GIS (PG)

Length:	19 kms
Locations:	60 nos.
Foundation completed:	0 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	22-12-2023

**Current Status:** Detailed Survey completed.

### **Status of statutory approvals:**

#### **Forest area**

Details of Tr. Line Falling under Forest:-

Locations	: 22 nos.	; Length :	7.8 Kms
Forest area (Ha)	: 35.987 Ha		
Forest proposals submitted	: Yes		
Current status	: at DFO		

#### **Wildlife area**

Details of Tr. Line Falling under Wildlife:-

Locations	:	; Length :	N.A.
Wildlife area (Ha)	:		
Wildlife proposals submitted	:		
Current status	:		

#### **Power line crossing**

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

#### **Railway crossing**

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

#### **National Highway / SH Crossing**

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

#### **River Crossings**

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

#### **PTCC approval**

Proposal submitted to Defence	: No	
Proposal submitted to BSNL	: No	
Proposal submitted to Railways	: No	
Current status		: Proposal is yet to submit

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : No  
Current Status: Proposal is yet to submit

### 3. LILO of Apta – Kalwa/Taloja 220 kV D/c line (i.e. Apta – Kalwa and Apta Taloja 220kV lines) at Navi Mumbai (PG)

Length:	2.9 kms
Locations:	16 nos.
Foundation completed:	0 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	22-12-2022

**Current Status:** Detailed Survey is under progress

#### **Status of statutory approvals:**

##### **Forest area**

Details of Tr. Line Falling under Forest:-

Locations	:		; Length :	Kms
Forest area (Ha)	:			
Forest proposals submitted on	:			
Current status	:			

##### **Wildlife area**

Details of Tr. Line Falling under Wildlife:-

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

##### **Power line crossing**

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

##### **Railway crossing**

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

##### **National Highway / SH Crossing**

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

##### **River Crossings**

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

##### **PTCC approval**

Proposal submitted to Defence	:	
Proposal submitted to BSNL	:	

Proposal submitted to Railways :  
Current status :

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation :  
Current Status:

### **Part D - North Eastern Region Strengthening Scheme – IX**

#### **1. Pare HEP (NEEPCO) (from near LILO point)– North Lakhimpur (AEGCL) 132 kV D/c line (with ACSR Zebra conductor) along with 2 no. 132 kV line bays at North Lakhimpur end**

Length:	29.6 kms
Locations:	91 nos.
Foundation completed:	2 nos.
Tower erected:	0 nos
Stringing completed:	0 ckm
Scheduled COD:	22-06-2023

#### **Current Status:**

- Detailed Survey of Assam portion and Arunachal portion has been completed.
- FDP Proposal of Assam and Arunachal portion has been submitted

#### **Constraints / Approval; if any:**

- Deviation in scope of work for the construction of 132kV Bay Extension works at North Lakhimpur end (AEGCL),

#### **Status of statutory approvals:**

##### **Forest area**

Details of Tr. Line Falling under Forest:-

Locations	: 42 nos.	; Length :	13 Kms
Forest area (Ha)	: 36.024	Ha	
Forest proposals submitted	: Yes		
Current status	: at Nodal Officer (Assam) and at DFO (Arunachal)		

##### **Wildlife area**

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

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

##### **Power line crossing**

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

##### **Railway crossing**

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

Approval obtained : 0 nos.

### **National Highway / SH Crossing**

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

### **River Crossings**

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

### **PTCC approval**

Proposal submitted to Defence : No  
Proposal submitted to BSNL : No  
Proposal submitted to Railways : No  
Current status : Proposal is yet to submit

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : No  
Current Status: Proposal is yet to submit

## **2. LILO of one circuit of Pare HEP – North Lakhimpur (AEGCL) 132kV D/c line (with ACSR Zebra) at Nirjuli (POWERGRID) substation**

Length: 15.7 kms  
Locations: 51 nos.  
Foundation completed: 0 nos.  
Tower erected: 0 nos  
Stringing completed: 0 ckm  
Scheduled COD: 22-06-2023

**Current Status:** Detailed Survey completed

### **Status of statutory approvals:**

#### **Forest area**

Locations : 33 nos. ; Length : 10.89 Kms  
Forest area (Ha) : 29.419 Ha  
Forest proposals submitted on : Yes  
Current status : Proposal submitted

#### **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 : 0 nos.  
Approval obtained : 0 nos.

**Railway crossing**

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

**National Highway / SH Crossing**

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

**River Crossings**

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

**PTCC approval**

Proposal submitted to Defence : No  
Proposal submitted to BSNL : No  
Proposal submitted to Railways : No  
Current status : Proposal is yet to submit

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : Proposal is yet to submit  
Current Status:



## 15. 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** - The scheme involves implementation of Lakadia – Vadodara 765kV D/c line which helps in transfer of power from RE sources in the Kutchh area of Gujarat to Vadodara for onward dispersal of power to their respective beneficiaries

### Scope of transmission project:

1. Lakadia – Vadodara 765kV D/c line
2. 330MVAR switchable line reactors at both ends of Lakadia – Vadodara 765kV D/c line along with 500 ohms NGR at both ends of Lakadia – Vadodara 765kV D/c line (330 MVAR line reactor - 4 nos. & 765kV Reactor bay - 4 nos.)
3. 2 nos of 765kV bays each at Lakadia and Vadodara S/s for Lakadia – Vadodara 765kV D/c line (765kV line bay - 4 nos.)

### General Detail

Special Purpose Vehicle (SPV)	:	Lakadia – Vadodara Transmission Project Limited; Sterlite Grid 18 Limited(A Subsidiary of Sterlite Power Trans. Limited)
Bid Process Coordinator (BPC)	:	PFCCCL
Estimated Cost (Rs. Crs)	:	2100
Levellised Tariff (Rs. Crs)	:	178.866
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	:	26.11.2019
Transmission License by CERC	:	04.03.2020
Tariff adoption by CERC	:	05.03.2020
Contract Performance Guarantee	:	26.11.2019
Clearance u/s 164	:	25-09-2020
Execution plan submitted to CEA	:	18-03-2020
NIT issued on	:	
EPC contract awarded on	:	16-01-2020, 23-01-2020 and 22-02-2020 (Transmission lines)
		18-12-2019 (Bay Extension & Reactor)
Scheduled Date of Completion	:	31-12-2020

### 1. Lakadia – Vadodara 765kV D/c line

Length:	658 cKm
Locations:	810 nos.
Foundation completed:	529 nos.
Tower erected:	293 nos.
Stringing completed:	18 ckm
Scheduled COD:	31-Dec-2020.

Anticipated COD:

Dec'21

**Constraints/Approval if any:**

- i. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19
- ii. Delay in Submission of Sec-164 Application due to lockdown situation
- iii. The TSP was facing severe RoW issues in Kutch, Morbi, Surendranagar, Ahmedabad, Anand, Kheda and Vadodara Districts of Gujarat as the land owners were asking for undue compensation.
- iv. Delay in grant of Forest clearance for Diversion of 47.827 Ha of Forest land. The proposal has been forwarded by Govt of Gujarat to Regional MoEF, Bhopal for consideration in upcoming REC Meeting which is scheduled on 22 Feb 2021 and the Stage-I clearance and working permission has been issued.
- v. Delay in grant of Wildlife clearance for Diversion of 30.81 Ha of Wildlife land. The Proposal has been approved by NBWL and demand note received on 19 March 2021. The partial payment has been done against demand note and due to some technical problem between Parivesh portal and the concerned Bank, the remaining amount has been returned from CAPMA account. The working (Tree cutting) permission has been received.
- vi. DC orders for revised land compensation received for all 403 locations which were applied earlier. Additionally, applied for 13 locations in Kutch District on 1st June 2021 (SDM hearing done) and for 15 locations in Surendranagar District on 26-July'21
- vii. Formal Working permission required to start construction work in Government land (15 locations in Morbi District).
- viii. DM/SDM court hearing pending for 1 location in Anand District and 17 locations in Vadodara District.
- ix. Support required in terms of expediting: Balance 7 no. of Powerline crossing of GETCO, all of them are at advance stage of approval, 1 National Highway (NH-27) crossing which is pending since last 4 months just for final approval at RO-Gandhinagar, 1 Highway (NE-1 under construction) is at PIU-Godhra Level since Dec'20.
- x. Severe resistance from landowners being faced for 78 locations of Halvad Taluka in Morbi district even after revised Land compensation order from DM.
- xi. Landowners are not allowing to start Stringing work in Bhuj area due to present norm of 7.5% compensation against their demand of 15%.
- xii. 3 cases in High court and 82 cases in Civil/District court are ongoing which need to be expedited.

**Details of followup actions:**

1. CEA letter to Additional Chief Secretary(Forests and Environment), Gujarat bearing Ref No. CEA-PS-13-22(13)/1/2018-PSPM dated 02-06-2020
2. CEA letter to Additional Chief Secretary(Revenue), Gujarat bearing Ref No. CEA-PS-13-22(13)/1/2018-PSPM dated 10-06-2020
3. CEA letter to Additional Chief Secretary(Forests and Environment), Gujarat bearing Ref No. CEA-PS-13-22(13)/1/2018-PSPM dated 27-09-2020

4. MOP letter to CEA bearing Ref No 12/7/2017-Trans-Part(2) dated 07-10-2020
5. MOP letter to Chief Secretary, Gujarat bearing Ref No. D.O. No. 7/1/2017-Trans dated 21-12-2020
6. MOP letter bearing ref No. 7/1/2017-Trans dated 17-02-2021 and 01-03-2021 forwarding the copies of DO letters dated 06-02-2021 from Additional Chief Secretary (ACS), Energy & Petrochemicals Dept, Govt of Gujarat and addressed to District Collectors for resolution of RoW issues
7. Hon'ble Prime Minister of India reviewed the project in the last Pragati Meeting which was held on 24 Feb 2021

#### **Status of statutory approvals:**

##### **Forest area**

Details of Tr. Line Falling under Forest:-

Locations	: 3 nos.	; Length : 2.5 Kms
Forest area (Ha)	: 17.017 Ha	
Forest proposals submitted on	: 28-Nov-19, Resubmitted on 31-Dec-19	
Current status	: Stage-I, working permission & Stage-II received	

##### **Wildlife area**

Details of Tr. Line Falling under Wildlife:-

Locations	: 15 nos.	; Length : 4.6 kms
Wildlife area (Ha)	: 30.81 Ha	
Wildlife proposals submitted on	: 19-Dec-19, Resubmitted on 03-Mar-20	
Current status	: Approved by NBWL and working permission received	

##### **Power line crossing**

Total no. of crossings	:	88 nos.
Proposal submitted	:	88 nos.
Approval obtained	:	81 nos.

##### **Railway crossing**

Total no. of crossings	:	14 nos.
Proposal submitted	:	14 nos.
Approval obtained	:	12 nos.

##### **National Highway / SH Crossing**

Total no. of crossings	:	32 nos.
Proposal submitted	:	32 nos
Approval obtained	:	27 nos

##### **River Crossings**

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

##### **PTCC approval**

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

Current status : Proposal Submitted and received NOC from Railway, BSNL and Defence.

### **Defence/Civil Aviation**

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

Current Status: NOC from Civil aviation received. Defence NOC received for Makarpura (Vadodara) and Bhuj section

### **2. 2 nos of 765kV bays at Vadodara S/s for Lakadia – Vadodara 765kV D/c line**

Land Acquired:	Space will be provided by M/s PGCIL
Civil work completed:	90%
Equipment supplied:	90%
Equipment erection:	38%
Scheduled COD	31 <sup>st</sup> Dec'2020
Anticipated COD	Dec'21

#### **Constraints/Approval if any:**

- i. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 .
- ii. PGCIL is insisting that M/s LVTPL is required to provide 3 Nos. bays in each diameter of the line As per the RFP and the TSA, the Applicant is required to install only 2 nos. of bays at the Vadodara S/s.

### **3. 2 nos of 765kV bays at Lakadia S/s for Lakadia – Vadodara 765kV D/c line**

Land Acquired:	S/s land coordinates has been shared by M/s Adani
Civil work completed:	84%
Equipment supplied:	76%
Equipment erection:	5%
Scheduled COD	31 <sup>st</sup> Dec'2020
Anticipated COD	Dec'21

#### **Constraints/Approval if any:**

- i. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19

### **4. 330MVAr switchable line reactors at both ends of Lakadia – Vadodara 765kV D/c line along with 500 ohms NGR at both ends of Lakadia – Vadodara 765kV D/c line (330 MVAR line reactor - 4 nos. & 765kV Reactor bay - 4 nos.)**

Scheduled COD	31 <sup>st</sup> Dec'2020
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## **16. 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 Adani Transmission Ltd)
Bid Process Coordinator (BPC)	:	PFCCL
Estimated Cost (Rs. crs)	:	4805
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
New SPV acquisition as per CERC Order:		26.03.2021
Anticipated Date of Completion	:	Oct '22

Ministry of Power(MoP) vide their letter No. 7/1/2017-Trans dated 16.04.2020 conveyed the following.

1. MoP, GoI has decided that M/s WKTL, the developer of Warora-Warangal 765 kV D/C Transmission Line is required to complete the balance works in above line as per the original approved route in the coal bearing area of WCL involving 16 towers without any further delay and also to comply all other decisions of MoP conveyed as per above letter dated 16.04.2020. Further, WKTL is required to complete all the elements in the above Scheme within the framework of the contractual obligations. It is also requested that the latest status and implementation schedule of all the elements of above line may be conveyed to CEA at the earliest.
2. Lead Long Term Transmission Customer(LTTC), i.e., TANGENDCO Ltd, is requested to take necessary action as per TSA to ensure that there is no further delay in completion of the above project.

M/s WKTL is also advised that in case of any constraints in completion of the above project as per established procedure, the developer may approach CERC for redressal of the issues if any, as MoP/CEA only facilitates the project implementation in a time bound manner. The Project was stalled due to force majeure issues including non resolution of issues pertaining to coal bearing areas associated with Western Coal Fields (WCL) and Singareni Coll. Co. Ltd. (SCCL)

While WKTL has filed detailed petition (dated 5<sup>th</sup> March 2020) with Central Electricity Regulatory Commission for extension of Scheduled Commercial Operations Date along with consequential reliefs, Project implementation is expected to be further worsened pursuant to lockdown imposed by the Central Government of India wherein on all movements have been restricted from 24<sup>th</sup> March to 14<sup>th</sup> April owing to Corona Outbreak /Pandemic (COVID-19). The resultant impact of the force majeure event shall be shared in due course.

The lenders of WKTL have filed Petition (71 /MP/2020) with Central Electricity Regulatory Commission seeking approval under Section 17(3), &(4) and Section 79(1)(c) of the Electricity Act, 2003 read with Regulation 12 of the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission License and other related matters) Regulations, 2009 and Article 15.3 of the Transmission Service Agreement dated 06.01.2016 for the approval of the Hon'ble Commission to transfer the shares and management control of WKTL in favour Adani Transmission Ltd. as Adani Transmission Ltd has been declared successful bidder for acquisition of WKTL, pursuant to public auction conducted by consortium lenders through an independent consultant.

CERC issued the order on 27th January, 2021 and Granted approval for transfer of 100% shareholding/ any other securities held by Essel Infra or its affiliates (including that which is held under pledge by the Lenders) in WKTL in favour of ATL (Adani Transmission Limited) by execution of Share Purchase Agreement. Based on the order issued by the commission SPA carried out with Essel Infra on 26-03-21.

## 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 acquisition : Completed
- Engineering : 100%
- Civil Works : 47%
- Equipment supplied: : 60%
- Erection works : 36%
- Schedule completion : Nov'19
- Anticipated completion : Oct '22

#### Constraints where Project Authority requires intervention:

- a) Covid-19: 2nd wave of Covid-19 has affected progress due to various restrictions imposed by Central/State Governments and because of which it is difficult to arrange labours from other states. Further, labours are not willing to stay at site in fear of lockdown. This has impacted project progress incl. approval of various statutory proposals.

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

- Length: 664 ckm
- Locations: 844 nos
- Foundation completed: 774 nos.
- Tower erected: 425 nos.
- Stringing completed: 58.6 ckm
- Schedule completion: Nov'19
- Anticipated completion Oct '22

#### Constarints where Project Authority requires intervention:

- **RoW issue:** Severe RoW issue in the stretch of AP5B - AP6 (Warangal Urban & Jangaon District, Telengana State), AP15 – AP16 (Warangal Urban District, Telengana State), AP27– AP28 (Peddapalli / Karimnagar District, Telengana State), AP58 (Mancherial District, Telengana State), Yavatmal District, Maharashtra State - AP 99A – AP 102, AP 89 – AP 90, AP 95–AP 96, AP 100A/1, AP 100A/2, AP 100A/3, AP 100A/5.

Chandrapur District, Maharashtra State - AP 116 /8, AP 116/9, AP 116/11, AP 116/12, AP 116/14, AP 116/17, AP 116/18, AP 118/1, AP 118/3, AP 118A/0, AP 118A/4, AP 118A/1, AP 118B/1, AP 118/6.

- The work execution in 765 kV D/C Warora (Pool) – Warangal (New) Transmission line, under state Maharashtra is stopped completely from 05th Oct 2018 due to farmer agitation demanding higher compensation for the construction of transmission line at their fields. This agitation is being led by a local political leader-cum-MLA and land owners of entire area are not allowing project executing team to enter in their fields at any cost, though WKTL have already settled the RoW compensation as per demand provided by Govt. Land and Revenue Department after conducting the TLR survey. For continuation of the work smoothly and speedily, the continuous support is required from the District administration.

- **Court Case :** The Office of Tehsildar, Rajura, Distt. - Chandrapur directed us 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. WKTL have already filed our reply before the Court, however the court has scheduled the matter on 20.10.2020 for hearing. Next date of hearing is yet to be scheduled in this matter. As on date the matter is still pending for scrutiny
- **Court Case:** 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 was scheduled on 16/06/2021. However The case could not be heard on 16/06/2021 and next date of hearing is still awaited. Though, the Court has not passed any order till date, however farmers are reluctant to continue the execution work on those respective locations.
- **Stalemate in project construction work due to coal bearing areas associated with Western Coal Fields (WCL) and Singareni Coll. Co. Ltd. (SCCL) for traversing WKTL line through their expected and future OC mining area:**

WCL vide its letter dated 28.09.2018 and Singareni Coll. Co. Ltd vide its letter dated 12.10.2018 directed WKTL to stop ongoing tower construction work in Penganga OC mine area and in the area of Prof. Jayashankar Open Cast Project respectively with diversion of all upcoming WKTL transmission towers beyond their projected OC mining area.

These issues were also discussed during the review meeting called by the Hon'ble Joint Secretary (Transmission), Ministry of Power (GoI) in presence of the Representatives of WCL & SCCL. During the discussion, it was decided that WKTL shall proceed on its identified routes and the diversion of the line shall be taken up later when the mining activities would start. WKTL was unable to resume its work in that area till receipt the minutes of this meeting, which was issued on 11.02.2019.

Post receipt of minutes from Ministry of Power on 11.02.2019, WKTL started its construction activities as per its approved route alignment u/s 164 of EA-2003, considering any future line diversion at the cost of lateral entrant.

On 11.04.2019, the Joint Secretary (Ministry of Coal) called WKTL for a joint discussion at Shastri Bhavan, New Delhi, where representative of WCL and SCCL were also presented. After entire discussion, the Joint Secretary (Ministry of Coal) 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. However, WKTL was directed to stop the project execution in that area till issuance of further orders from Ministry of Coal. We also pursued with the Ministry of Coal sincerely to get the developments for the resolution of this matter, we are yet to receive any further communication from Ministry of Coal.

Thereafter, in the review meeting called by Chief Engineer (CEA) on 30.05.2019, WKTL informed that 765 kV D/C Warora-Warangal line is the pre-requisite



transmission element for the commissioning of most of the elements of this project but is adversely affected under the objections raised by WCL and SCCL since November, 2018. In absence of clear direction from MoP & MoC for WKTL compensation of additional time and cost required for transmission line diversion, the work progress of 765 kV D/C Warora-Warangal is completely held up. It was also informed that under current scenario, it will take minimum 13 working months after resolution of this issue which is still pending with MoC. The Lead LTTC (TANGEDCO) was also presented 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 also assured to extend all support required for completion of this project in the scheduled timeline.

Further, WKTL also put its case in the meeting held in MoP on dated 03.06.2019 before the Chief Engineer (Trans.) and requested MoP to resolve the issue in discussion with MoC and accordingly direct WKTL on the further steps to be taken to complete the WKTL transmission project. The minutes of this meeting were issued on 18.06.2019 in which it was concluded through constitution of committee led by Chief Engineer (CEA) and having representatives from MoC, WCL, CMPDI, SCCL, CEA and WKTL to examine the issue along with relevant notifications/guidelines and submit its options for resolution of the matter within 15 days of its constitution. Thereafter, MoP constituted a Committee through its Order dated 26.06.2019 to examine the issue of WKTL 765 kV D/C Warora-Warangal transmission line, consisting representatives of MoC, WCL, SCCL, CPMDI and WKTL and under chairmanship of Chief Engineer (CEA). CEA also by letter dated 03.07.2019 asked nomination of Officers from MoC, WCL, SCCL, CPMDI and WKTL to be the designated members of this committee constituted as per MoP Order dated 26.06.2019. In response, WKTL confirmed the requisite details of its Officers to be designated as committee member.

Site visit was conducted with the representative of WCL, SCCL, CMPDI, CEA and WKTL. As decided in the 1<sup>st</sup> Committee meeting, WKTL had joint survey with WCL, CMPDI, and CEA on 26-07-19 and the alternative routes were explored. During discussion of WKTL with SCCL on 29-07-19, they have agreed that since they have 7-10 years of time lap between commencing the mining activity as such they will allow us to follow the same route. However, diversion when required shall be carried out by WKTL and who will bear the cost is required to be decided.

A meeting of LTTCs, Officials of CEA, WCL, SCCL, CMPDI and WCL happened under the chairmanship of CE, CEA on 19-09-19 at the Office of CEA. A meeting was convened by MoP on 19-09-19 and attended by officials of LTTCs, CEA, MoC, WCL, SCCL, CMPDI and the recommendation of committee were presented by CEA. MoP optioned that if WCL require shift of alignment where the most of the work has been completed, then they are required to bear the cost of shifting. WCL is asked to get the board approval and confirm within a specific otherwise the constructed route shall be followed.

Further, a meeting was convened by the additional Secretary (Trans.), MoP on 14-11-19 which was attended by representative of MoC, LTTCs, CEA and WKTL. The matter was discussed and the chairperson has asked specific questionnaire to be replied by the CEA. It was decided that on receipt of the same, the decision on the issue shall be taken in the next meeting.

A joint survey among committee member (including Lead LTTC, representative from PFC, CEA, CTU, WCL, CMPDI and WKTL) was conducted on 16-01-20. The recommendation of committee was sent to the Ministry of Power on 04-02-20. Subsequently, MoP vide letter dated 16-04-20 has conveyed to CEA that M/s WKTL, the developer of the Warora-Warangal 765 kV D/C transmission line, may be asked to complete the balance works in as per original route in coal bearing area of WCL involving sixteen (16) towers without any further delay.

- **Covid-19:** 2nd wave of Covid-19 has affected progress due to various restrictions imposed by Central/State Governments and because of which it is difficult to arrange labours from other states. Further, labours are not willing to stay at site in fear of lockdown. This has impacted project progress incl. approval of various statutory proposals. In Telangana, restriction lifted from 21-06-21 and in the state of Andhra Pradesh unlock is being done however night restrictions are continued. In Chandrapur of Maharashtra state, being in level-3, strict restrictions imposed on construction activity after 04:00 pm.
- **Dead End tower at Warora End:** PGCIL is insisting on putting of WKTL's DE tower outside PGCIL boundary. This is violating gantry design of Max span of 200m as agreed during initial stage. The matter is in discussion with PGCIL for Amicable Solution. Work is held up at warora end for resolution of the issue.

#### **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 Maharashtra + 47.592 ha (7.103 Kms) in Telangana
Forest proposals submitted on	:	Maharashtra- 04-08-17, Telengana - 23-08-17
Current status	:	<b>Maharashtra</b> – Stage I received on 05-02-18. Revised demand note received and payment is under process. <b>Telangana</b> - Stage I received on 13-12-18 Revised demand note received and payment done.

##### **Wildlife Clearance**

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	:	<b>Telangana</b> – 26-02-18
Current status	:	Proposal forwarded by State Government to Member Secretary (NBWL) on 20-11-18. SBWL Recommended the Proposal on 01-02-20. And subsequently recommended in NBWL meeting dated 05-10-20. Demand note awaited from concerned DFO.

**Power line crossing**

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

**Railway crossing**

Total no. of crossings	:	05 nos.
Proposal submitted	:	05 nos.
Approval obtained	:	04 nos.

**National Highway Crossing**

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

**River Crossings**

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

**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: Defence Aviation – approval obtained & Civil Aviation - Approval awaited

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

- Length: 268 ckm
- Locations: 344 nos
- Foundation completed: 316 nos.
- Tower erected: 250 nos.
- Stringing completed: 00 ckm
- Schedule completion: Nov'19
- Anticipated completion: Oct '22.

**Constarints where Project Authority requires intervention:**

**a) RoW issue:** In the stretch of AP 10 - AP 11 (Jangaon District, Telangana State), AP 34 - AP 35, 17/3, 21/6, 23/1, 25/0, AP 37- AP 38 (Yadadri Bhongir District, Telangana State), and AP 41- AP 42(Rangareddy District, Telangana State). Further at location nos. 47/2 & 47/3 (Rangareddy District, Telangana State), locals have removed the stubs by using JCB. Though a FIR in this regard has been lodged with local Police Station, however, the same is yet to be resolved.

**b) 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. Hon'ble High Court has granted the stay on work. Further on hearing held on 03-06-19, the Hon'ble Court adjourned and next date of hearing is yet to be scheduled in this matter. As on date

the matter is still pending for scrutiny. In the present situation, the work is at stand still at this location effectively from 16-03-18.

c) Land owner for the stretch between the location no. 30 to 31 of 765 kV D/C Warangal – Hyderabad has approached the District Court (Bhogir) to accord permanent injunction. On the hearing held on 30-12-19, the Court scheduled next date of hearing on 05-08-21 in this matter. In such situation, the work is at stand still at this location effectively from 20-03-18.

d) **Covid-19:** Due to 2nd wave of Covid-19, various restrictions (imposition of section 144, curfew, restrictions in movement, lockdown, non-availability of industrial oxygen supply etc.) imposed by Central/State Governments to curb the situation and because of which execution work as supply is badly affected as labours are not willing to stay at site and returning back to their native in fear of lockdown. The strict lockdown declared by Government of Telangana vide order dated 20-04-21 and restriction lifted from 21-06-21. Also, manufacturing units are being operated with limited manpowers. Currently, we are losing precious working season. This has impacted project progress incl. approval of various statutory proposals.

**Status of statutory approvals:**

**Forest** : Nil

**Power line crossing**

Total no. of crossings : 15 nos.

Proposal submitted : 15 nos.

Approval obtained : 10nos.

**Railway crossing**

Total no. of crossings : 01 nos.

Proposal submitted : 01 nos.

Approval obtained : 00 nos.

**National Highway Crossing**

Total no. of crossings : 01 nos.

Proposal submitted : 01 nos.

Approval obtained : 01 nos.

**River Crossings**

Total no. of crossings : Nil

**PTCC approval**

Proposal submitted to Defence.

Proposal submitted to BSNL.

Proposal submitted to Railways.

Current status:

**Defence/Civil Aviation**

Current Status: Civil & Defence Aviation approval obtained.

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

Length: 96 ckm

Locations: 126 nos.

Foundation completed: 10 nos.

Tower erected:	00 nos.
Stringing completed:	00 nos.
Scheduled COD:	Nov'19
Anticipated COD:	Oct '22

### Constarints where Project Authority requires intervention:

- a) **Covid-19:** Due to 2nd wave of Covid-19, various restrictions (imposition of section 144, curfew, restrictions in movement, lockdown, non-availability of industrial oxygen supply etc.) imposed by Central/State Governments to curb the situation and becuae of which execution work as supply is badly affected as labours are not willing to stay at site and returning back to their native in fear of lockdown. The strict lockdown declared by Government of Telangana vide order dated 20-04-21 and restriction lifted from 21-06-21. Also, manufacturing units are being operated with limited manpowers. Currently, we are lossing precious working season. This has impacted project progress incl. approval of various statutory proposals.
- b) New 132 kV line by TS TRANSCO has utilised our proposed corridor especially Railway crossing. Impact of the same is being carried out

### Status of statutory approvals:

#### Forest - Nil

#### Power line crossing

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

#### Railway crossing

Total no. of crossings	:	01 no.
Proposal submitted	:	00 no.
Approval obtained	:	00 no.

#### National Highway Crossing

Total no. of crossings	:	02 nos.
Proposal submitted	:	00 nos.
Approval obtained	:	00 nos.

#### River Crossings

Total no. of crossings	:	Nil
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#### PTCC approval

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

#### Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation  
 Current Status: Submission pending

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

- Length: 337 ckm

- Locations: 430 nos.
- Foundation completed: 351 nos.
- Tower erected: 212 nos.
- Stringing completed: 00 ckm
- Scheduled COD: Nov'19
- Anticipated COD: Oct'22

**Constraints where Project Authority requires intervention:**

- Work hampered due to severe RoW issue in the stretch of AP 27 – AP 29 , 41/0, 50/14 (Nagarkurnool District, Telangana State), AP 60 A– AP 60 B, AP 66 – AP 67 (Kurnool District, Andhra Pradesh State)
- **Work hampering in 765 kV D/C Hyderabad – Kurnool Transmission line due to Land Acquisition initiated by Telangana State Industrial Infrastructure Corporation Ltd. (TSIICL):** Recently, Telangana State Industrial Infrastructure Corporation Ltd. (TSIICL) initiated the process of land acquisition around Hyderabad (Maheshwaram) PGCIL Sub-Station. They raised objection for our 765 kV Warangal-Hyderabad and 765 kV Hyderabad–Kurnool Line. After round of discussions, TSIIC agreed for the execution of 765 kV D/C Warangal-Hyderabad Line and the foundation work in the section has been completed. However, for 765 kV D/C Hyderabad–Kurnool line TSIIC has issued the letter for realignment of the route in TSIIC land and joint site inspection for the same, discussions are still in progress & resolution awaited.
- **Covid-19:** Due to 2nd wave of Covid-19, various restrictions (imposition of section 144, curfew, restrictions in movement, lockdown, non-availability of industrial oxygen supply etc.) imposed by Central/State Governments to curb the situation and because of which execution work as supply is badly affected as labours are not willing to stay at site and returning back to their native in fear of lockdown. The strict lockdown declared by Government of Telangana vide order dated 20-04-21 and restriction lifted from 21-06-21. However night curfew is still continue in AP State. Also, manufacturing units are being operated with limited manpowers. Currently, we are losing precious working season. This has impacted project progress incl. approval of various statutory proposals.

**Status of statutory approvals:**

**Forest - Nil**

**Power line crossing**

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

**Railway crossing**

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

**National Highway Crossing**

Total no. of crossings	:	01 no.
Proposal submitted	:	01 no.
Approval obtained	:	-- no.

### River Crossings

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

### PTCC approval

Proposal submitted to Defence.

Proposal submitted to BSNL.

Proposal submitted to Railways.

Current status:

### Defence/Civil Aviation

Current Status: Civil & Defence 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: 390 ckm
- Locations: 510 nos.
- Foundation completed: 446 nos.
- Tower erected: 341 nos.
- Stringing completed: 00 ckm
- Scheduled COD: Nov'19
- Anticipated COD: Oct'22

### Constarints where Project Authority requires intervention:

a) **Severe RoW issue:** In the stretch of AP 10–AP 11(Jangaon District, Telengana State), AP 14-AP 15, AP 25–AP 28, AP 52-AP, AP 55–AP 56 (Suryapeta District, Telengana State), AP 63–63/12, AP 76–AP 77, AP 84-AP 85 & AP 89–AP 90 (Guntur District, Andhra Pradesh State).

b) **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. At this point of time, M/s Emami Cement Ltd. moved to High Court of Andhra Pradesh 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, Andhra Pradesh. So, we are unable to continue the work at the above said locations including nearby locations till listing of this matter and further orders passed by the Hon'ble Court. The next date in the matter is awaited.

c) **Covid-19:** Due to 2nd wave of Covid-19, various restrictions (imposition of section 144, curfew, restrictions in movement, lockdown, non-availability of industrial oxygen supply etc.) imposed by Central/State Governments to curb the situation and becuae of which execution work as supply is badly affected as labours are not willing to stay at site and returning back to their native in fear of lockdown. . The strict lockdown declared by Government of Telangana vide order dated 20-04-21 and restriction lifted from 21-06-21. Howevee night curfue is still continue in AP State. Also, manufacturing units are being operated with limited manpowers. Currently, we are lossing precious working season. This has impacted project progress incl. approval of various statutory proposals.

**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	:	23-08-17
Current status	:	Stage –I forest approval granted on 28-11-18. Demand note received. However, earlier rejected online challan generated based on previous demand note is still pending with Nodal Officer, Guntur.

**Power line crossing**

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

**Railway crossing**

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

**National Highway Crossing**

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

**River Crossings**

Total no. of crossings	:	01 no.	(Minor)
Proposal submitted	:	-- nos.	
Approval obtained	:	-- nos.	

**PTCC approval**

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

**Defence/Civil Aviation**

Current Status : Civil &amp; Defence 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)**

Scheduled COD: Nov'18

**Under commercial operation w.e.f. 29.03.2019**



## **17. 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.)	:	437
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	:	June 2019/Dec 2019
Anticipated Date of Completion	:	Mar'23 / Minimum 27 no. of working months required from the date of resolution of CERC Petitions, IDPL -NOC from Uttarakhand State Govt, DFO (Tehri), DFO (Dehradun), Court proceedings etc

### **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
Anticipated COD:	Mar'23 / Minimum 27 no. of working months required from the date of resolution of CERC Petitions, IDPL - NOC from Uttarakhand State Govt, DFO (Tehri), DFO (Dehradun), Court proceedings etc

### Constraints where Project Authority requires intervention:

- **Non-acceptance of Forest diversion proposal of 400 kV D/C Rishikesh-Koteswar Transmission Line by Forest Deptt.:**

The forest diversion proposal for 400 kV D/C Rishikesh-Koteswar Transmission Line was very first submitted on 24.10.2017, which was returned back due to indicative shortcomings including FRA Certificates to be issued by respective DC's of involved forest divisions. On 19.06.2018, the forest proposal was again submitted with the compliance of all shortcomings and with the submission of an undertaking for FRA Certificates as per MoEF&CC Guidelines (Forest Conservation Amendment (Rules), 2014), according to which User Agency first need to submit the forest diversion proposal and thereafter the Nodal Officer will forward forest proposal to DFO and Respective DC for the issuance of FRA Certificates.

M/s NTL also requested DC (Dehradun, New Tehri, Tehri Garhwal) vide our letters dated 21<sup>st</sup> & 22<sup>nd</sup> June 2018 to grant FRA Certificates and pursued the same regularly. In order to expedite issuance of FRA Certificate, NRSS XXXVI Trans.Ltd also requested CEA for the support. In response, Chief Engineer (CEA- PSPM) also wrote letters to DC (Dehradun, New Tehri, Tehri Garhwal) on 12.10.2018 to issue FRA Certificates as earliest as possible for the timely completion of transmission line.

Further, on 13.11.2018, NRSS XXXVI Trans.Ltd again attempted to submit forest diversion proposal, which was again returned back indicating shortcomings of FRA Certificates, which is to be issued by respective DC's of involved forest divisions, Geologist report, Site inspection, Joint verification report, Tree enumeration etc. As per Format -Part I and Part II of Forest Conservation Amendment (Rules), 2014, all these activities are to be initiated only after acceptance of forest proposal by Nodal Officer.

Hence, in such case, 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 could not be submitted. However, post receipt of communication from CEA in the matter of IDPL NoC, NRSS XXXVI Trans.Ltd have submitted the Forest proposal on 04<sup>th</sup> April 2019 for Tehri & Narendranagar Forest Division. NRSS XXXVI Trans.Ltd also sought consent from DFO (Dehradun) but no response for the submission of forest proposal in light of *IDPL NoC from Uttarakhand State Govt.*

- **Pending Issue for NOC from Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh/Department of Tourism, UK Govt. :**

As per the detailed survey, approx. 3.99 Km. of the Transmission Line having 16 Nos. of Towers is passing through the premises of Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh.

A joint visit was conducted with the officials of IDPL on 24th Jan 2018 and based on the joint visit, the route alignment was submitted to the office of DGM (1/C) IDPL, Rishikesh on 31st Jan 2018.

Further, meetings were held in CEA on 9th Feb 2018 and 3rd Apr 2018 on above issue. CEA vide their letter dated 24th Apr 2018 has issued the minutes of meeting endorsing the route submitted by M/s NTL and requested IDPL to issue the NOC for the route within IDPL premises. However, NOC is yet to be issued from IDPL, Rishikesh.

Vide letter dated 12th Oct 2018, CEA again requested to Chairman cum Managing Director of IDPL to issue final NOC for traversing 400 KV D/C Koteshwar – Rishikesh Transmission Line through the premises of Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh. Through letter dated 10th Dec 2018, the DFO (Dehradun) also requested IDPL, Rishikesh to issue NOC in order to submit forest proposal by the NRSS XXXVI Transmision Ltd.

After a continuous persuasion and many rounds of discussions with IDPL, on 18th January 2019, very first time IDPL informed to CEA that Government of India has taken a decision to close down Indian Drugs and Pharmaceuticals Limited (IDPL). Accordingly, the Deptt. of Pharmaceuticals has decided to transfer back the IDPL Rishikesh land to Govt. of Uttarakhand. In such a situation, it was advised us to obtain first NOC from Govt. of Uttarakhand, based on that IDPL may issue NOC to NRSS XXXVI Tr. Ltd.

Vide its letter dated 01.02.2019, referring IDPL letter dated 18.01.2019, CEA advised us to take up the matter directly with Govt. of Uttarakhand for seeking NOC.

After waiting a long, IDPL conveyed it's no objection on 03.04.2019 to Chief Engineer (CEA) for traversing Rishikesh line through IDPL lease area stating that IDPL is going to hand over the leased land back to Uttarakhand Government in near future and Uttarakhand Government is planning to construct Convention Centre along with Hill Culture, Yoga and Wellness Centre on the said land. Accordingly, IDPL requested to Chief Engineer (CEA) to take no objection certificate also from Uttarakhand Government.

Vide its letter dated 16.04.2019, Chief Engineer (CEA) communicated M/s NTL to take up the matter with Uttarakhand Government in order to secure the said NoC for constructing 400 kV D/C Rishikesh – Koteshwar transmission line in IDPL lease area. Accordingly, NRSS XXXVI Trans.Ltd approached on 18.04.2019 to Secretary (Energy), Uttarakhand for seeking unconditional concurrence traversing Rishikesh line through IDPL premises.

On the basis of communication received from Tourism Deptt. (Uttarakhand), on 23.05.19 Chief Engineer (CEA) directed to forward proposal of NoC to Govt. of Uttarakhand through Tourism Deptt. of Uttarakhand. 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.

A meeting in this regard is convened by The Chief Secretary of the state along with other stake holders along with the consultant M/s E&Y On 10th December 2019. A new route has been proposed. NRSS XXXVI Trans.Ltd shall be remobilizing our team to check the feasibility of the route and will revert with the outcome. The revised route as suggested by M/s E&Y has been submitted to concern for processing the long pending NoC.

To obtain the necessary long pending NOC from the Government of Uttarakhand for the IDPL land, a meeting was convened by the chairman, CEA on 16th March 2020 at its office along with representative from Ministry of Power, Ministry of Forest and Environment, Tourism Department of Uttarakhand Government, Power Transmission Corporation of Uttarakhand (PTCUL), Indian Drug and Pharmaceutical Limited (IDPL), M/s E&Y (Consultant to GoUK) and NRSS-XXXVI Transmission limited (NTL). The revised route submitted is discussed with various stake holders. It was decided that the required inputs shall be provided by M/s E& Y within a week with copy to CEA and NRSS-36. Further PTCUL asked for join verification of revised route.

Further, a meeting was held in CEA under the chairmanship of Chairperson, CEA on 16.10.2020 on above issue, wherein M/s NRSS XXXVI Trans. Ltd conveyed that the issue was resolved and NOC from IDPL is expected by Nov'20 end. After the receipt of the NOC, M/s NTL will submit the forest proposal to the forest department for approval.

On advice of Secy.Tourism a joint detailed survey was held on 4th & 5th June 2021 along with PTCUL, Utrrakhand Tourism & NRSS XXXVVI and after detailed survey following options were explored.

**Option-1 : Route alignment passing through under pass gantry.**

This option suggested by Uttarakhand Tourism on 17.4.2021 is technically not feasible through underpass gantry as the clearance available is, only 2.5 mtr against 5.49mtr. As per Indian Electricity Rule 1956 Minimum clearances between Electrical Lines crossing for 400kV DC to other transmission line is 5.49 mtr.

**Option- 2: Interchange of gantry location with PTCUL**

This option suggested by Uttarakhand Tourism on 17.4.2021 is technically feasible through interchange of Gantry location with PTCUL. It will be the best option available.

**Option-3: Route alignment passing through underground cable.**

This option suggested by Uttarakhand Tourism on 17.4.2021 is also technically feasible through underground cable. NRSS-36 must bear extra cost about 6 cr. in comparison to above 2 options.

Vide letter no. 2-6-1225/2021 dated 14.07.2021 Uttarakhand Tourism Dept. Provided their provisional NOC for the construction of 400kV DC Koteshwar – Rishikesh agreeing with option no-02 for the termination of line traversing through IDPL land.

Further as per NOC NRSS XXXVI Transmission has submitted the proposal of interchange of Gantry location to PTCUL for which acceptance of PTCUL awaited.

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

DFO Tehri through letter dated 21<sup>st</sup> Dec 2018 informed that Central Government plantation Project under “Namami Gangey Scheme” is coming under NRSS XXXVI line route and will be adversely affected from NRSS XXXVI transmission line construction. Accordingly, it was directed us to divert from existing route, which was earlier approved & confirmed by Forest Range officer through verification of land schedule and DGPS survey in Jan-2018.

It is submitted that the tree enumeration and Gram sabha, as per earlier approved route was completed and M/s NTL had also applied for FRA Certificate and geologist survey report.

NRSS XXXVI submitted the revised route avoiding “Namami Gangey Scheme Plantation” to forest authorities on 13.03.19. Post verification and approval, M/s NTL submitted the forest proposal of Tehri Garhwal forest division to DFO Tehri Garhwal on 4<sup>th</sup> 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, which is still under consideration of DFO (Tehri Garhwal).

It is pertinent to mention here that NRSS XXXVI have to divert transmission line route at a later stage as per directions of DFO (Tehri) dated 21.12.2018, though Digital forest map was prepared and provided by ITGC Cell PCCF Office Uttarakhand on 21.6.2018 and later on DGPS survey was done on ground under the guidance of forest authorities itself.

During the meeting taken by Member (PS), CEA on 28.06.2021 M/s NRSSXXXVI submitted that option-2 is preferable i.e. interchange of PTCUL gantry with NRSSXXXVI gantry. Subsequently, TSP clarified that no extra land is required in IDPL area in the proposed route and all the cost for the execution of above option would be borne by TSP. With above clarifications, Uttarakhand tourism department has now assured to process the NoC as per agreed route at the earliest.

**Severe RoW issues:**

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

**Details of followup actions:**

- a) Chief Engg. CEA PSPM requested Chief Secy. Uttrakhand for IDPL NOC so that revised forest proposal can be submitted in compliance to DFO Dehradun letter no.1633 /12-1 Dehradun dated ; 10.12.2018.
- b) CEA took meeting with NRSSXXXVI on 16.10.2020 review the issue.
- c) A meeting was held under the chairmanship of Joint Secretary (Trans), MoP on 11.11.2020 through video conference to review the status
- d) CEA once again requested Chief secretary for intervention vide letter dated 10.12.2020.
- e) A meeting was held under the chairmanship of Joint Secretary (Trans), MoP on 10.02.2021 to review the status of the NoC. TSP informed that there is no progress on NoC front. And support is required to expedite the same.
- f) A DO letter dated 22/02/2021 was sent to Chief Secretary, Uttrakhand by JS, MoP requesting to expedite the issuing of NoC.
- g) A meeting was taken by Secretary (P) on 15.06.21 to review the issues in the transmission project. Subsequently a meeting was taken by Member (PS) on 28-06-21, to review the same.

**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

Though forest proposal of Tehri & Narendranagar Forest Division was submitted on 04th Apr 2019. Forest proposal of Dehradun division is yet to submit.

**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 communication dated 03.04.2019, as communicated through CEA letter 16.04.19, the forest proposal of Tehri & Narendranagar was submitted on 4th Apr 2019 & under processing. The consent of DFO (Dehradun) in this regard for forest proposal submission is also 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  
Anticipated COD: Mar'23 / Minimum 27 no. of working months  
required from the date of resolution of CERC Petitions, IDPL -NOC from Uttrakhand State  
Govt, DFO (Tehri), DFO (Dehradun), Court proceedings etc ..

## **3. LILO of one ckt of 400kV D/C Sikar PG)–Neemrana(PG) line at Babai (Under Commercial operation).**

Length: 2.922 CKm  
Locations: 06 nos.  
Scheduled COD: Dec'16  
Deemed COD: 30 Oct '17

## **4. Babai (RRVNL) – Bhiwani (PG) D/C line**

The route alignment & detailed survey is completed.  
Tower Package is awarded.

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

## **Constarints 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.

**Court Case:** Loc no. 9/1 (Case in Rajasthan high court, Jaipur since 1/12/1) & Loc 47/1-47/2 (Case in Civil Court, Mahendergarh since 25/4/19) . Next hearing was scheduled in April 2020.

### **Status of statutory approvals:**

#### **Forest**

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

Locations: 06 nos. (Rajsthan)

Length:

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

Forest proposals submitted on 15.05.17 for Haryana and on 11.08.17 for Rajasthan.

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

Rajashthan Proposal – Partial Stage I approval received on 6th Jul 2018 excluding wildlife area. However, final Stage I approval including wild life area was granted on 14.02.2019.

#### **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 ,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.	
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Proposal submitted : 14 nos. Date:  
Approval obtained : 14 nos. Date:

**PTCC approval : Proposal Under Approval**

Proposal submitted to Defence.  
Proposal submitted to BSNL.  
Proposal submitted to Railways.  
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 (RRVPL) substation for LILO Line**

Scheduled COD Dec'16  
Deemed COD: 30 Oct'17

**Under commercial operation.**

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

Land Acquired: 100%  
Civil work completed: 100%  
Equipment supplied: 100%  
Equipment erection: 90%  
Scheduled COD Jun'19  
Anticipated COD: Mar'23 / Minimum 27 no. of working months  
required from the date of resolution of CERC Petitions, IDPL -NOC from Utrakhand State  
Govt, DFO (Tehri), DFO (Dehradun), Court proceedings etc

## 18. 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)	:	472 crore for old scope
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	:	Authorization on CCL / MoC suggested route received on 05.11.2019 after 80 days from submission.
Execution plan submitted to CEA	:	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 finalized by CEA and in consultation with NTPC.

- In accordance with the provision of the TSA, NKTL had approached CERC and vide its order dated 20.03.2019 the matter has been disposed off with following decisions:
- NKTL is affected by force majeure on account of non-issue/delay in issue of NOC by MoC/CCL.
  - LTTCs are directed not to take any coercive measures in terms of the TSA till the SCODs are revised taking into account the force majeure events.
  - CERC directed MOC to issue NOC latest by week from issue of the order.
  - Compressed time schedule to implement the project shall be decided by CEA in consultation with NTPC and NKTL.
  - Granted liberty to approach with change in scope and its impact on cost and time overrun.
  - When required to shift line, alternate route shall be provided by MoC.

## **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): 115 nos
- Route alignment completed: 102 Ckm
- Detailed survey completed: 102 Ckm
- Foundation completed: 74 nos (revised route)
- Tower erected: 74 nos (revised route)
- Stringing completed: 21.50 Ckm
- Revised schedule completion date: 14 months from the date of NOC from CCL/MoC (considering receipt of forest approval within 200 days). However, due to delayed Forest Clearance NKTL will be able to complete the NK-C line in 9 months from the date of forest clearance (Working Permission).

## **Constraints where Project Authority requires intervention:**

- a) **Forest Clearance:** CEA had decided that North Karanpura-Chandwa (NK-C) line shall be completed within 14 months from the date of NOC subject to grant of Forest Clearance (FC) within 200 Days from application. The forest proposal for NK-C Line

was submitted on 17-06-19 and even after passing more than 775 days from the application of Forest proposal, the Forest clearance is still awaited. The Proposal processed and recommended by DFO (Chatra South/Latehar) & CF for further processing to Nodal officer on 23-07-20. Nodal officer raised EDS on 03-09-20 for GM/JJ land NOC, FRA certificate & CA land area correction. Compliance submitted on 16-09-20 and Nodal office has recommended and submitted PART-IV to State Government on 11-11-20. State Govt. raised EDS on 22-12-20 regarding GM/JJ land NOC and FRA NOC. Due to DFO, Chatra post was vacant, it got delayed and cleared in online mode only on 16-01-21 after posting of DFO, Chatra South in last week of Dec'20. To expedite proposal in absence of GM/JJ land NOC, undertaking for GMJJ NoC and FRA Certificate also submitted by NKTL to Nodal officer on 02-02-21. However, proposal is still with Nodal office, Ranchi and referring to State Govt. EDS dated 22-12-20.

As the Commissioner Post lying vacant since Jul-20 to 19-02-21, issuance of the NOC delayed and finally Commissioner, Palamu issued the GM/JJ Land NOC on 30-03-21. Further, for FRA Certificate, DC, Latehar issued the Certificate on 02-06-2021. NKTL submitted the received GM/JJ NOC to Nodal office on 07-06-2021. DFO Latehar forwarded GM JJ NOC and FRA Certificate to CF Medininagar on 14-06-2021. CF Medininagar forwarded the same to Nodal, Ranchi on 16-06-2021 for further process.

The said delay has affected schedule adversely. In meeting called by CEA on 16.03.20, Additional PCCF, Forest, Govt. of Jharkhand, had indicated timeline of approx. 7-8 weeks for moving the file from DFO level to Regional Office, MOEF&CC. However, even after passing of 63 weeks, the forest clearance is still awaited. **In said meeting, NKTL stated that NKTL will be able to complete the NK-C line in 9 months from the date of forest clearance (Working Permission).**

CEA again called meeting on 16-10-20, 29-01-21 & 28-06-21, wherein NKTL raised concerned for delay in forest clearance of NK-C line. In said meeting, NKTL had stated that NKC line will be completed 9 months from the date of forest clearance. NKTL requested CEA to take up with State Government to expedite NOC.

The review meeting held on 11-11-20 & 10-02-21 wherein Joint Secretary (Trans), Ministry of Power has reviewed the Status of Important and Critical Transmission Projects. NKTL has apprised the issues which are impacting the project progress and requested support in expediting forest clearances for the line. Also on 31-03-21 & 15-06-21, review meeting conducted by Secretary (Power), MOP wherein NKTL requested support in expediting the Forest clearance for both lines. MOP again requested Chief Secretary; Jharkhand vide letter dated 22-07-2021 to expedite the pending forest clearances.

Presently, no work is pending outside the forest areas.

Presently, no (nil) foundation location and stringing sections are available outside of forest area.

As the delay in grant of forest clearance prevents/ delay performance of our obligation, further delay in grant of Forest Clearance is not within our reasonable control, NKTL has submitted FM notice dated 25-02-20 and FM continuation notice dated 26-11-20 to LTTCs and CEA and requested intervention in the situation and help in getting the approval of forest clearance at the earliest possible, so as to minimize the effect of the delay.

- b) **Removal of soil dumped by NTPC in line corridor:** NTPC had dumped excavated excess soil from plant area in line corridor between tower location no. AP4/1 and AP4/2 after the finalization of revised route on which CCL had issued NOC. Since last one year NKTL is pursuing with NTPC for removal of soil dump. However, it is still not removed and on account of this, NKTL could not take up stringing in section 4/0-5/0 (2.2 Km) of the line.
- c) **Readiness of PGCIL Dead End Multi Ckt tower at Chandwa SS:** 400 kV NK-Chandwa line and 220 kV JUSNL transmission line is to connect with PGCIL, Chandwa SS through the common one no. of multi ckt tower. The said tower is being constructed by PGCIL. NKTL is pursuing with PGCIL for the readiness of tower, the confirmation is awaited from PGCIL, Chandwa. NKTL Requested Eastern Region, PGCIL to speed up the Completion of Dead End tower vide letter dated 22.03.2021. However, response is awaited.
- d) **Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20

**Status of statutory approvals:**

**Forest (including multi-circuit portion)**

Details of Tr. Line Falling under Forest:-Locations: 41 nos and Length: 12 Kms (Affecting stringing section of 30kms)

Forest area affected (ha) : 56.3254 Ha

Forest proposals submitted on : 17.06.2019

Current status: Proposal is at Nodal level for recommendation to State Government.

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

**Power line crossing**

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

**Railway crossing**

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

Approval obtained : 1 no.

### **National Highway Crossing**

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

### **River Crossings**

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

### **PTCC approval**

Submitted on 14-08-2019

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

### **Defence/Civil Aviation**

Current Status: NOC from Civil & Defece Aviation Obtained

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

- Length (as per revised route): 196 Ckm
- Locations (as per revised route): 286 nos
- Route alignment completed: 196 Ckm
- Detailed survey completed: 196 Ckm
- Foundation completed: 138 nos (on revised route)
- Tower erected: 114 nos (on revised route)
- Stringing completed: 35.5 Ckm
- Revised schedule completion date: 23 months from the date of NOC from CCL/MoC (considering receipt of forest approval within 300 days). However, due to delayed Forest Clearance NKTL will be able to complete the NK-G line in 12 clear working months from the date of forest clearance (Working Permission).

### **Constraints where Project Authority requires intervention:**

- a) CEA had decided that NK-G line shall be completed within 23 months from the date of NOC subject to grant of Forest Clearance (FC) within 300 Days from application. The forest proposal for NK-G Line was submitted on 20-07-19. Nodal Officer had asked to explore various routes as it was envisaged that sizeable forest area can be reduced by slight modification in route. All options were worked out in consultation of Nodal officer and proposal has been submitted for acceptance of Nodal Officer. In meeting called by CEA on 16-03-20, Addl. PCCF, Forest, Govt. of Jharkhand informed that timeline for proposal movement will be committed in next meeting. However it is yet to be received from Forest authority. The proposal accepted by Nodal officer after 408 days i.e. on 06.08.20 & presently even after more than 742 days from the application of Forest proposal. It is pending with DFO for further processing.

CEA had called meeting on 16-10-2020, 29-01-2021 & 28-06-21, wherein critical issues related to the project was discussed. NKTL informed that, forest proposal NK G Line is very critical. NKTL informed that presently proposal is at respective DFO level (Chatra South, Chatra North and Latehar forest division in Jharkhand Portion) for

recommendation and Part-II submission. In the said meeting, NKTL requested CEA and representative of forest department to support in expediting recommendation to CF alongwith Part-II compliance. NKTL also requested CEA to provide support in expediting process for issuance of GM Land NOC and FRA certificate from the respective DC of Chatra and Latehar. Also NKTL conveyed that, as per forest guideline, FRA NOC required at Stage-II approval. Hence stage-I of the said proposal need to be processed. In said meeting, NKTL had stated that NKTL will be able to complete the NK-G line in 12 months of clear working season from the date of forest clearance. Presently for GM/JJ land NOC, payment against the Demand Note is done and NOC from DC awaited. For FRA, Gram Sabha for all 51 nos. villages completed and SDLC & DLC meeting also completed in all blocks/district. FRA Certificate awaited from DC.

Also Forest proposal of the Bihar portion forwarded to Regional office by the State government on 15-06-21 and regional office raised EDS on 29-06-21. The compliance of the EDS is being done at state Government level. Also for FRA, proposal is submitted to DM, Gaya and proposal is under process.

The review meeting held on 11-11-20 & 10-02-21 wherein Joint Secretary (Trans), Ministry of Power has reviewed the Status of Important and Critical Transmission Projects. NKTL has apprised the issues which are impacting the project progress and requested support in expediting forest clearances for the line. Also on 31-03-21 & 15-06-21, review meeting conducted by Secretary (Power), MOP wherein NKTL requested support in expediting the Forest clearance for both lines. MOP has requested Chief Secretary, Bihar vide letter dated 15-04-21 to expedite forest clearance for NK-G (Bihar Portion) and resolution of RoW issues at Gaya end. MOP again requested Chief Secretary; Jharkhand vide letter dated 22-07-2021 to expedite the pending forest clearances.

Presently no Location available out of forest areas. Also due to intermittant forest stretches there is very limited stringing stretches are available for work. In view of this, limited workforce available till the receipt of the Forest clearance and working permission.

**Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20

#### **Status of statutory approvals:**

#### **Forest (envisaged based on route alignment & excluding multi-circuit portion)**

Details of Tr. Line Falling under Forest:-

Jharkhand(JH) - Locations: 143 nos. and Length: 42 kms

(Affecting stringing section of 67kms)

Bihar(BH) - Location: 5 no. and Length: 1.2 Kms

Forest area affected (ha) : 193.5525 Ha. In JH portion & 5.437 Ha. in BH portion.

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

**Current status:** Proposal submitted within the timeline committed to CEA on revised route. JH portion FC proposals is at DFO level and BH portion FC proposal is with Regional Office.

**Power line crossing**

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

**Railway crossing**

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

**National Highway Crossing**

Total no. of crossings	:	3	nos.
Proposal submitted	:	3	nos.
Approval obtained	:	1	nos.

**PTCC approval**

Proposal submitted to BSNL in  
Proposal submitted to Railways in  
Current status: Submitted on 23-07-2020

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation  
Current Status: NOC for Civil Aviation and Defence Aviation obtained

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

- Scheduled completion date: 07.05.2019
- Actual completion date: Charged on 21-07-2021

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

- Length: 4.8 Ckm
- Locations: 10 nos
- Revised schedule completion date: Jul-21,
- Actual completion date: Ranchi- Dhanbad Ckt-1 charged on 21-07-2021, Dhanbad -Maithon RB Ckt-1 charged on 23-07-2021, Ranchi- Dhanbad Ckt-2 charged on 27-07-2021, Dhanbad -Maithon RB Ckt-2 charged on 27-07-2021

**Details of followup actions:**

1. CEA Letter dated 07.02.2020 to the Secretary Land & Reform, Govt. of Jharkhand and PCCF, Ranchi regarding issuance of GM/JJ land NOC and to expedite forest clearance.



2. CEA Reminder Letter dated 18.06.2020 to Secretary Land & Reform, Govt. of Jharkhand and PCCF, Ranchi to expedite issuance of GM/JJJ land NOC and forest clearance.
3. CEA Letter dated 02.02.2021 to the Secretary Land & Reform, Govt. of Jharkhand for issuance of GM/JJ land NOC.
4. JS, MOP DO Letter dated 07.12.2020 to PCCF and HoFF, Forest, Ranchi, Jharkhand regarding expedite in issuance of forest clearance.
5. JS, MOP DO Letter dated 08.02.2021 to the Chief Secretary, Govt. of Jharkhand regarding issuance of GM/JJ land NOC.
6. CEA Letter 05.03.2021 to DC, Dhanbad for administration support for LILO of both Ckts of Ranchi-Maihton -RB 400 kV D/C line and 400/220 kV Dhanbad Substation.
7. Meeting taken by Secretary (Power), MOP to review the status on 31.03.2021.
8. Meeting taken by Secretary (Power), MOP to review the status on 15.06.2021.
9. Review meeting by Member (PS), CEA to review the status on 28.06.21
10. JS, MOP DO Letter dated 22.07.2021 to the Chief Secretary, Govt. of Jharkhand for expediting pending forest clearance.

## 19. 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 2<sup>nd</sup> meeting of Northern Region Standing committee on Transmission (NRSCT) held on 13.11.2018. The same was agreed in the 3<sup>rd</sup> ECT meeting held on 21.12.2018 for implementing through TBCB route with a commissioning schedule as December, 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)	:	INR 1630 Crs
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	:	27.12.2019
Tariff adoption by CERC	:	27.12.2019
Contract Performance Guarantee	:	22.08.2019
Clearance u/s 164	:	31.08.2020

Execution plan to CEA	:	submitted on 16.01.2020
NIT issued on	:	
EPC contract awarded on	:	16.11.2019
Scheduled Date of Completion	:	31.12.2020

- There has been delay of 59 days in SPV acquisition for reasons. Accordingly, a notice had been submitted to LTTC on 15.10.2019 to extend the SCOD for the delayed timeframe.

**(i) Bikaner (PG) – Khetri S/S 765 kV D/C line**

- Length: 481 ckm
- Locations: 621 nos
- Foundation completed: 621 nos
- Tower erected: 621 nos
- Stringing completed: 481 ckm
- Schedule completion: Dec'20/Aug-21\*
- Anticipated completion: Aug'21

\*The Ministry of Power, GOI has granted extension of 5 months (for First wave of Covid-19) vide order nos 3/1/2020-Trans dated 27th July, 2020 and further 3 months extension (for Second wave of Covid-19) on 12 June, 2021 from Scheduled Commercial Operation Date (SCOD) for inter-state transmission projects i.e. total extension of 8 months from SCOD. Accordingly revised SCOD comes out as 31-Aug-2021.

**Constraints where Project Authority requires intervention:**

Nil

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest:- Locations: 2 nos and Length: 0.771 KM

Forest area affected (ha) : 5.9738 Ha

Forest proposals submitted on: 03.06.20\*

\* Forest area involved could not be assessed as route finalization is affected. Further, PGCIL during meeting held on 8th May 20 among CEA, CTU, PGCIL and ATL/ BKTL had informed that tentative details can be shared from Site level & subsequently tentative details obtained from PGCIL site and accordingly Forest proposal submitted.

Current Status: Working permission received on 26.05.21.

**Power line crossing**

Total no. of crossings	:	26	nos.
Proposal submitted	:	26	nos.
Approval obtained	:	26	nos.

### **Railway crossing**

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

### **National Highway Crossing**

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

### **PTCC**

Proposal submitted to BSNL in	:	09.07.20
Proposal submitted to Railways in	:	09.07.20
Current status:	:	Approved on 18.12.2020

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation :	14.07.20/ 07.07.20
Current Status:	NOC received on 16.04.21/ 09.10.20

### **(ii) 765 kV Bays at Bikaner (PG) & Khetri for Bikaner (PG) – Khetri S/S 765 kV D/C line (765 kV line bays: 4 nos).**

- Land acquisition: As per RFP, space for bay extension to be provided by PGCIL.
- Engineering: 100%
- Equipment supplied: 100%
- Civil Works: 100%
- Erection works: 99%
- Schedule completion: Dec'20/Aug-21\*
- Anticipated completion: Aug'21, subject to readiness of common/ interconnection points from PGCIL

\*The Ministry of Power, GOI has granted extension of 5 months (for First wave of Covid-19) vide order nos 3/1/2020-Trans dated 27th July, 2020 and further 3 months extension (for Second wave of Covid-19) on 12 June, 2021 from Scheduled Commercial Operation Date (SCOD) for inter-state transmission projects i.e. total extension of 8 months from SCOD. Accordingly revised SCoD comes out as 31-Aug-2021.

### **(iii) 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)**

- Land acquisition: As per RFP, space for bay extension to be provided by PGCIL.
- Engineering: 100%
- Equipment supplied: 100%
- Civil Works: 100%

- Erection works: 100%
- Schedule completion: 31.12.2020
- Anticipated completion: Aug'21, subject to readiness of common/ interconnection points from PGCIL

**Constraints where Project Authority requires intervention:**

a) PGCIL is constructing Sub Station at Khetri under Khetri Transco Limited (KTL) and as per RFP scope, PGCIL is to provide space and allocate Bay No. to BKTL for construction of 2 Nos. 765kV Bays at Khetri SS for Bikaner (PG) – Khetri SS 765kV D/C Line. Presently most of the work is completed and balance work is depending upon the readiness of common/ interconnection points from Khetri PGCIL end. The details are as mentioned below:

1. Control room readiness
2. Earthing connectivity with Grid
3. Fire fighting connectivity readiness

Post receipt of front from PGCIL, BKTL shall require atleast 15-30 days to complete it's scope of work at Khetri end.

b) **Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20

## **20. 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 1<sup>st</sup> meeting of Western Region Standing Committee on Transmission (WRSCT) held on 05.09.2018. The same was agreed in the 3<sup>rd</sup> ECT meeting on 21.12.2018 for implementing through TBCB route with a commissioning schedule as December, 2020. In line with Ministry of Power letter dated 27.07.2019, project completion period is extended for further 5 months in view of pandemic impact of Covid-19 and hence, revised commissioning schedule is May'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)	:	INR 1090 Crs
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	:	received on 24.01.2020
Tariff adoption by CERC	:	received on 27.01.2020
Contract Performance Guarantee	:	
Clearance u/s 164	:	submitted to CEA on 16.01.20, Acknowledgment received on 06.05.20 Approved on 22-07-2020.
Execution plan to CEA	:	submitted on 10.02.2020
NIT issued on	:	
EPC contract awarded on	:	31.10.2019
Scheduled Date of Completion	:	31.12.2020
Anticipated completion	:	30.12.2021

- There has been delay of 91 days in SPV acquisition for reasons. Accordingly, a notice had been submitted to LTTC on 15.10.2019 to extend the SCOD for the delayed timeframe.

\*The Ministry of Power, GOI has granted extension of 5 months (for First wave of Covid-19) vide order nos 3/1/2020-Trans dated 27th July, 2020 and further 3 months extension (for Second wave of Covid-19) on 12 June, 2021 from Scheduled Commercial Operation Date (SCOD) for inter-state transmission projects i.e. total extension of 8 months from SCOD. Accordingly revised SCoD comes out as 31-Aug-2021.

### (i) Bhuj PS – Lakadia PS 765 kV D/C line

- Length: 214 ckm
- Locations: 280 nos
- Foundation completed: 237 nos
- Tower erected: 147 nos
- Stringing completed: 2.147 ckm
- Schedule completion: 31.12.2020
- Anticipated Completion: 30.12.2021

### **Constraints where Project Authority requires intervention:**

- a) **Facing severe Row:** TSP is facing severe Right of Way in the Kutch District of Gujarat State because of which entire project is getting affected due to exorbitant demand of compensation by villagers & landowner. Therefore, TSP has taken up this matter with administration for resolution and applied to District Collector (DC). Application submitted for 35 villages out of total 37 villages All files are forwarded to Mamlatdar office. DC has issued an order for compensation for RoW for 32 villages, thereby increasing the compensation for RoW multifold from a Jantri rate of Rs. 20 – 100 per Sq. Mtr to Rs. 900 / 950 per Sq. Mtr, even then the villagers and landowners are not allowing to carry out the foundation works at site and are creating law and order situation, for which we have taken police protection before lockdown but despite that, the progress has been slow. Further, after resumption of work TSP has approached to administration for Police Protection immediate after resumption of lockdown, but confirmation received on 24.08.2020.

Further, in this project, recently many Power lines are being constructed by other utilities wherein crop compensation paid by them Rs. 60 per Sq. Mtr (3 Times higher than APMC rate from Rs. 15 to Rs. 20 per Sq. Mtr) which is creating huge ROW issues along the corridor.

Need the support of administration to proceed ahead in this situation, wherein WRSS XXI(A) is ready to make a payment of many times over the Jantri rate (in line with the orders of DC) but even then, the Landowners are not willing to allow to work.

Further, situation is more aggravated after recent order issued by SDM Nakhatrana allowing corridor compensation @ 15% of Rs. 900 per Sq. Mtr vide dated: 17.01.2021. Since, our project falls under same vicinity and now farmers of various villagers are not allowing to work and demanding the written assurance that the compensation for corridor shall be given @ 15% in place of @7.5% due to recent SDM order Dated: 17.01.2021.

In Kutch district, the section where TSP has completed Foundation and Erection activities and sections are ready for the stringing, TSP is not able to do the stringing work due to Corridor compensation issue. Hence stringing work is presently on hold.

- b) WRSS XXI(A) apprised these RoW issues to GoG nominated Nodal officer for resolution however support awaited. On 31-03-21, review meeting conducted by Secretary (Power), MOP, GoI wherein WRSS-XXI(A) requested support in resolution of the Jantri Rate issues and administration support from Government of Gujarat.

**Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20

### **Details of followup actions:**



1. Letter have been submitted to DM of Kutch for necessary support in resolving ROW issues.
2. Regular follow up is being done with DM/SDM for expedite the hearing process.
3. Jantri rate issues already taken up with CEA and MoP vide meeting dated: 11.11.2020
4. Letter have been submitted to CEA dated 26.11.20 highlighting ROW issues.
5. Letter have been sent by CEA to Addl. Cheif Sect.( Revenue Dept.), Gujarat dt 11-12-20, regeading necessary support in resolving ROW issues.
6. Meeting taken by Secretary (Power), MOP to review the status on 31.03.2021.
7. Letter have been sent to Addl. Chief secretary, Energy and petrochemicals dept. Govt. of Gujarat for necessary administration support in resolving ROW in Kutch region.
8. Meeting taken by Secretary (Power), MOP to review the status on 15.06.2021.
9. Meeting taken by Member (PS), CEA to review the status on 28.06.2021.

#### **Status of statutory approvals:**

##### **Forest**

Details of Tr. Line Falling under Forest : Length: 0.492 Km

Forest area affected (ha) : 3.0916 Ha

Forest proposals

**Current status:** Stage-I approval received on 23-10-2020. Approval of Stage-II awaited.

##### **Power line crossing**

Total no. of crossings : 16 nos.

Proposal submitted : 16 nos.

Approval obtained : 16 nos.

##### **Railway crossing**

Total no. of crossings : NIL

##### **National Highway Crossing**

Total no. of crossings : 01 nos.

Proposal submitted : 01 nos.

Approval obtained : 01 no.

### **PTCC**

Proposal submitted to BSNL in : Clearance received for IV Calculation.

Proposal submitted to Railways in : Clearance received for IV Calculation.

Current status: : NOC Received on 28.07.2020.

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : Proposal submitted on 06.02.2020

Current Status: Civil NOC received on 29.06.2020.

Defense NOC received on 02.07.2020

### **(ii) LILO of Bhachau – EPGL line 400 kV D/C (triple) line at Lakadia PS**

- Length: 76 ckm
- Locations: 121 nos
- Foundation completed: 85 nos
- Tower erected: 51 nos
- Stringing completed: 0 ckm
- Schedule completion: 31.12.2020
- Anticipated completion: 30.12.2021

(On Account of Severe ROW in the state of Gujarat)

- a) **Facing severe Row:** Landowners are not accepting compensation as per Govt. of Gujarat order and are demanding compensation for RoW multifold from a Jantri rate of Rs. 20 – 100 per sq. mt to Rs. 900 / 950 per sqm, support from local administration is being sought.

In Kutch district, the section where TSP has completed Foundation and Erection activities and sections are ready for the stringing, TSP is not able to do the stringing work due to Corridor compensation issue. Hence stringing work is presently on hold.

- b) **Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20

### **Status of statutory approvals:**

#### **Forest**

Details of Tr. Line Falling under Forest:- : Length: 0.162 Km

Forest area affected (ha) : 0.7507 Ha

Forest proposals

**Current status:** Stage-2 clearance received in Jan-21

### **Power line crossing**

Total no. of crossings	:	28	nos.
Proposal submitted	:	28	nos.
Approval obtained	:	27	nos.

### **Railway crossing**

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

### **National Highway Crossing**

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

### **PTCC**

Proposal submitted to BSNL in	:	Proposal submitted on 05.03.2020
Proposal submitted to Railways in	:	Proposal submitted on 05.03.2020
Current status:	:	Approval Received

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation :	
Current Status:	Civil NOC received on 01.06.2020 Defense NOC received on 02.07.2020

### **(iii) Establishment of 2x1500 MVA, 765/400 kV Lakadia PS with 765 kV (1x330 MVAR) & 420 kV (1x125 MVAR) bus reactor**

- Land acquisition: acquisition under process & at advance stage
- Engineering: 100%
- Equipment supplied: 95%
- Civil Works: 75%
- Erection works: 55%
- Schedule completion: 31.12.2020
- Anticipated completion: 30.12.2021

### **(iv) 2 Nos 765kV Bays at Bhuj PGCIL substation.**

- Engineering: 100%
- Equipment supplied: 100%
- Civil Works: 100%
- Erection works: 100%
- Schedule completion: 31.12.2020

- Anticipated completion: 30.12.2021

**Constraints where Project Authority requires intervention:**

- b) **Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20.

## 21. 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 TBCB 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	:	13.11.2019

Transmission License by CERC	:	03.03.2020
Tariff adoption by CERC	:	05.03.2020
Contract Performance Guarantee	:	
Clearance u/s 164	:	submitted on 24.02.2020
Execution plan to CEA	:	07.03.2020
NIT issued on	:	
EPC contract awarded on	:	24.12.2019
Scheduled Date of Completion	:	30.06.2021
Anticipated date of completion	:	30.11.2021

**(i) Lakadia PS – Banaskantha PS 765kV D/c line**

- Length: 352 ckm
- Locations: 473 nos
- Foundation completed: 435 nos
- Tower erected: 321 nos
- Stringing completed: 128 Ckm
- Schedule completion: Jun'21
- Anticipated completion: Nov'21

**Constraints where Project Authority requires intervention:**

- c) **Severe ROW:** Severe ROW at 9 location of the Banaskantha District, 22 locations of Patan District and 14 location. Of Kutch district as land owners are demanding undue land & corridor compensation that is multifold of Jantri rates. Further, land owners are also demanding undue compensation on account of approach road & guy rope.

In Kutch district, the section where TSP has completed Foundation and Erection activities and sections are ready for the stringing, TSP is not able to do the stringing work due to Corridor compensation issue. Hence stringing work is presently on hold.

GoG has nominated Nodal officer for resolution of RoW, delay in statutory clearance etc, WRSS has apprised issues to Nodal officer however support awaited. On 31-03-21, review meeting conducted by Secretary (Power), MOP, Gol wherein WRSS-XXI(A) requested support in resolution of the Jantry Rate issues and administration support from Governemnt of Gujarat.

**Pandemic COVID 19:** Work affected due to COVID-19 since last week of Feb'20

**Details of followup actions:**

1. Letter have been submitted to DM's of respective districts for necessary support in resolving ROW issues.
2. Letter have been submitted to CEA dated 26.11.20 highlighting ROW issues.
3. Letter have been sent by CEA to ADCS, Revenue Dept., Gujarat dt 11-12-20, regarding necessary support in resolving ROW issues.

4. Letter have been sent to Addl. Chief secretary, Energy and petrochemicals dept. Govt. of Gujarat for necessary administration support in resolving ROW in Kutch region.
5. Meeting taken by Secretary (Power), MOP to review the status on 15.06.2021.
6. Meeting taken by Member (PS), CEA to review the status on 28.06.2021.

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest: Length: 3.1706 KMs  
 Forest area affected (ha) : 25.245 Ha  
 Forest proposal submitted on 31.12.2019

**Wild Life**

Details of Tr. Line Falling under Wild Life: Length: 1.599 KMs  
 Wild Life area affected (ha) : 9.749 Ha  
 Wild Life proposal submitted on 13.01.2020.

**Current status:**

Forest proposal: Stage 1 recieved. Working permission received on 12.05.2021

Wildlife proposal: Wildlife proposal Considered in NBWL Meeting dated 18-02-21.  
 MOM recieved. Working permission Received.

**Power line crossing**

Total no. of crossings	:	33	nos.
Proposal submitted	:	33	nos.
Approval obtained	:	32	nos.

**Railway crossing**

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

**National Highway Crossing**

Total no. of crossings	:	03	nos.
Proposal submitted	:	03	nos.
Approval obtained	:	0	no.

**PTCC**

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

**Defence/Civil Aviation**

Current Status:	Civil Aviation Proposal approved
	Defence Aviation Proposal approved

(ii) 765 kv Bay at Lakadia & Banaskantha- 2 no's at each end

- Land acquisition : Completed in PGCIL Scope
- Engineering : 90%
- Civil Works: : 85%
- Equipment supplied : 90%
- Erection works: : All Equipment erection completed.
- Schedule completion: 30.06.2021
- Anticipated completion: 30.11.2021

Area grading under progress at Lakadia SS for 2 no's 765 kV Bays.

**(iii) Installation for 7 no's 80 mVAR 765 kV Reactors at Banaskantha , PGCIL SS**

- Land acquisition : Completed in PGCIL Scope
- Engineering : 100%
- Equipment supplied : 85%
- Civil Works: : 100%
- Erection works: : 71%
- Schedule completion: 30.06.2021
- Anticipated completion: 30.11.2021



## **22. 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 (WRSCOT) 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 WRSCOT 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	:	13.11.2019
Transmission License by CERC	:	received on 24.03.2020
Tariff adoption by CERC	:	received on 24.03.2020
Contract Performance Guarantee	:	
Clearance u/s 164	:	submitted to CEA on 10.02.2020 Acknowledgment received on 13.05.20 Approval received on 22.07.20
Execution plan to CEA	:	submitted on 07.03.2020
NIT issued on	:	
EPC contract awarded on	:	awarded on 31.01.2020
Scheduled Date of Completion	:	31.03.2021
Anticipated completion	:	31.09.2021

- There has been delay of 23 days in SPV acquisition for reasons. Accordingly, a notice had been submitted to BPC on 12.11.2019 and to LTTC on 19.11.2019 to extend the SCOD for the delayed timeframe.

#### (i) Establishment of 4x500 MVA, 400/220 kV Jam Khambhaliya PS (GIS)

- Land acquisition :Completed
- Engineering : 100%

- Civil Works : 99%
- Equipment supplied: : 100%
- Erection works : 85%
- Schedule completion :31.03.2021
- Anticipated completion : 30.09.2021

**Constraints where Project Authority requires intervention:**

Pandemic COVID - 19: Work affected due to COVID-19 since last week of Feb'20

**(ii) Extension of Essar-Lakadia/Bhachau 400 kV D/C (triple snowbird) line up to Jam Khambhaliya PS**

- Length: 38 ckm
- Locations: 52 nos
- Foundation completed: 49 nos
- Tower erected: 37 nos
- Stringing completed: 0.9 ckm
- Schedule completion: Mar'21
- Anticipated completion: Sep'21

**Constraints where Project Authority requires intervention:**

- Severe ROW: Severe ROW is being faced at balance 3 locations and administration support is being sought for resolution of the the balance three locations ROW alongwith the stringing corridor issues.
- Pandemic COVID - 19: Work affected due to COVID-19 since last week of Feb'20 on account of this, arranging resources is very challenging task. Also, due to lockdown most working season in transmission line projects i.e. March'20 to June'20 had been lost and subsequent to that, entered into monsoon season which further delayed work at site.

Further, 2nd wave of Covid-19 has again affected progress due to various restrictions imposed by Central/State Governments and because of which it is difficult to arrange labours from other states. Further, labours are not willing to stay at site and returning back to their native in fear of lockdown. This has impacted project progress incl. approval of various statutory proposals.

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest:- No forest involved, confirmed by Local forest office.

**Power line crossing**

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

## **Railway crossing**

Total no. of crossings	:	01	no.
Proposal submitted	:	01	no.
Approval obtained	:	00	no.

## **PTCC**

Proposal submitted to BSNL in	:	
Proposal submitted to Railways in	:	
Current status	:	Proposal submitted on 27.07.20

### **(iii) 1x500 MVA, 400/220 ICT at CGPL Mundra switchyard**

- Land acquisition :Pending. Land is to be provided by CGPL.
- Engineering :Commenced
- Equipment supplied :NIL
- Civil Works :NIL
- Erection works :NIL
- Schedule completion :31.03.2021
- Anticipated completion : Timeline will be provided after actual work commencement.

### **Constraints where Project Authority requires intervention:**

- a.) **Space constraint in CGPL, Mundra:** As per RFP, adequate land for construction of installation of 500 MVA transformer and associated system was to be provided by CGPL, Mundra. However, during site visit, CGPL, Mundra as informed that required land is not available. Hence, layout fitment is challenging and there is no confirmation from CGPL, Mundra on allocating required patch of land.

Meeting was held between CGPL & JKTL on 12.05.2020 wherein CGPL informed that unless this issue gets resolved, they will not allow for commencement of work.

Subsequently, meeting between CEA, REC, CTU on 03.06.2020 to discuss way forward on this, wherein JKTL & CGPL to submit best possible way out to conclude matter. Subsequently Meetings were held on 25.06.2020, 07.08.2020. As discussed in last meeting joint site visit conducted 10.08.20 and JKTL shared modified layouts to CGPL incorporating CGPL's suggestions to extent possible and meeting proposal sent to CEA to resolution of issue but confirmation awaited. Matter has been discussed with CEA, GETCO & CGPL. Layout has been revised as per CGPL requirement.

The above is delaying the overall timeline for completion of the project. Therefore, FM notice have been submitted on 15.06.2020. Also, matter taken up with CEA PSPA-1 vide letter dated: 28.07.2020 for early resolution of issue. Joint site visit conducted & layout submitted to CEA on 14.08.2020. As discussed with CEA & CGPL on 06-10-2020; final layout is submitted on 12.10.2020 to CGPL. Subsequently, meeting held with CGPL on 15.02.2021 to expedite layout approval. The Signed Copy of the layout has been provided by CGPL on 27.02.2021. Meeting held with CEA, WRPC, CGPL, GETCO, CTU & JKTL on 31.05.2021 for resolution of the matter and MOM issued by the CEA for approval of the change in scope.

Land & lease agreement submitted to CGPL on 15.02.2021 however acceptance on still pending because of which land Possession and Access to the land yet to granted by CGPL. CGPL informed that leave and license agreement can't be signed off beyond 2038 since PPA of CGPL is up to 2038. Hence requested JKTL for extension of time up to 35 years couldn't be processed i.e. beyond 2038. The issue discussed in the meeting called by CEA on 31.05.2021 and it is agreed that at present agreement will be signed upto 2038 considering the present PPA of CGPL.

**Details of followup actions:**

\* Approached to DM for resolution of RoW. Compensation order received for 6 villages out of total 8 Nos.

\* In Space constraint issues: Over period of times, many follow up meeting have been conducted with CGPL, CEA, BPC for resolution of matter. But matter yet to conclude.

## **23. 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 CERC

### **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 12<sup>th</sup> 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 01<sup>st</sup> 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. CERC has directed PGCIL to file an affidavit on the necessity of the project. PGCIL has filed an affidavit on 17.08.2020 wherein it has been stated that the transmission scheme under the scope of TSP is presently not required on technical grounds only as either investment in alternate corridors development has already been made or alternate scheme has already been planned for implementation. The case is ongoing in CERC and further hearing date is awaited.

## **24. 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 CERC

### **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 12<sup>th</sup> 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 01<sup>st</sup> 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. CERC has directed PGCIL to file an affidavit on the necessity of the project. PGCIL has filed an affidavit on 17.08.2020 wherein it has been stated that the transmission scheme under the scope of TSP is presently not required on technical grounds only as either investment in alternate corridors development has already been made or alternate scheme has already been planned for implementation. The case is ongoing in CERC and further hearing date is awaited.