

Monthly progress Report of
Transmission Projects awarded
through
Tariff Based Competitive Bidding
(TBCB) Route
(Under Construction Projects)
(As on 31.07.2020)

Government of India
Ministry of Power
Central Electricity Authority
New Delhi

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Total Transmission Projects	:	54
Transmission Projects Commissioned/Ready for commissioning	:	28
Transmission Projects Under Construction	:	22
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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 rector 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, 2×1500MVA substation at Medinipur

765kV

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

400kV

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

Bus reactor: 2×125 MVAR

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

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

765kV

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

400kV

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

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

General Details:

Special Purpose Vehicle (SPV) : Powergrid Medinipur-Jeerat

Transmission Limited (A subsidiary of

POWERGRID)

Oct-2020

Bid Process Coordinator (BPC) : Power Finance Corporation

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

Status of progress of transmission project:

1. Ranchi – Medinipur 765kV D/C line

Anticipated Date of Completion

Award placed on 31.03.2017 to M/s L&T

Length : 269 Km
Locations : 718 nos.
Foundation completed : 715 nos.
Towers erected : 715 nos.
Stringing : 262 Km
Scheduled COD July' 2020
Anticipated COD Oct' 2020

Forest:

Details of Tr. Line Falling under Forest: Length: 10.40 kms

Forest area affected (ha): 69.7 km Forest proposals submitted on:

Jharkhand portion: - 6.45 Km (43.26 ha.). The proposal had been submitted on 12.04.18. **Stage-I approval obtained on 22.08.2019. Working permission received in Dec'19.** Tree cutting permission received in Jan'20.

West Bengal portion: - 3.95 km (26.526 ha.). Revised proposal had been submitted on 30.06.2018. It was further found that there is an involvement of 2.66 km (17.87 Ha) forest land only & accordingly the compliance statement had been prepared and submitted to forest department on 25.08.18. Stage-I approval obtained on 16.01.19. **Working permission obtained on 14.03.19 & 18.03.19**. **Stage-II approval received on 06.03.2020**.

Power line crossing (66kV and above)

Total no. of crossings : 14 nos.

Proposal submitted : 07 nos. Date: 26.03.18

06 nos. Date: 23.04.18 01 no. Date: 10.07.18

Approval obtained (WB+JH) : 14 nos. [7 nos (WB) on 19/6, 21/8, 27/7,

29/8,8/5/18 & 2 nos. on 9/8/18]

Railway crossing

Total no. of crossings : 04 nos. + 01 No. (Proposed line)

Proposal submitted : 01 no. Date: 16.03.18 02 no. Date: 26.03.18

01 no. Date: 22.06.18

Approval obtained : 04 nos. [29/09/18, 5/11/18 & 31/12/18]

National Highway Crossing

Total no. of crossings : 05 nos.

Proposal submitted : 01 no. Date: 15.03.18

02 nos. Date: 26.03.18 01 no. Date: 21.06.18 01 no. Date: 23.07.18

Approval obtained : 05 no. 06/08, 06/09 & 16/11/18

River Crossings NIL

PTCC approval : 09.05.18 Online submission for Jharkhand

Approved for West Bengal.

Approval obtained 27.12.2019

Defence/Civil Aviation : Proposal submitted on 20.09.18 &

approval awaited.

Constraints: Work restarted with limited manpower after lockdown. Work was affected by Cyclone Amphan on 20.05.2020.

Route diverted due to non felling of 3 Sarna (Puja) trees in Jharkhand portion of the line. Three new towers to be placed.

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

Award placed on 31.03.2017 to M/s. L&T Completion Target: July'2020

Length:

Locations:
Foundation completed
Towers erected
Stringing completed

Scheduled COD

Anticipated COD

169 Km
441 nos.
435 nos.
123 Km

Scheduled COD

July' 2020
Oct' 2020

Constarints where Project Authority requires intervention:

Status of statutory approvals:

Forest: Nil

Power line crossing (66kV and above)-

Total no. of crossings : 18 nos.

Proposal submitted : 10 nos. Date: 26.03.18

03 nos. Date: 13.04.18 01 nos. Date: 24.04.18 01 nos. Date: 12.05.18 01 nos. Date: 14.09.18

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

Railway crossing

Total no. of crossings : 05 nos.

Proposal submitted : 05 nos. Date: 26.03.18 & 27.03.18.

Approval obtained : 05 nos.

National Highway Crossing

Total no. of crossings : 02 nos.

Proposal submitted : 01 nos. Date: 26.03.18

01 nos. Date: 25.05.18

Approval obtained : 02 nos. Date: 07/12/18 & 04/01/19

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

Approved

PTCC approval : Approved.

Defence/Civil Aviation : Online Proposal submitted on 20.09.18.

Constraints: Work restarted with limited manpower after lockdown. Work affected by Cyclone Amphan on 20.05.2020.

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 143nos.
Tower erection 100 nos.
Stringing NIL

Scheduled COD July' 2020 Anticipated COD Oct' 2020

Constarints where Project Authority requires intervention:

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

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 : 09 nos.. Date: 3 nos each in Sep & Nov'18

Railway crossing

Total no. of crossings : 03 nos.

Proposal submitted : 03. Approval obtained : NIL

National Highway Crossing

Total no. of crossings : 01 nos. Proposal submitted : Submitted.

Approval obtained : NIL

River Crossings : NIL

PTCC approval : Submitted.

Defence/Civil Aviation : Online Proposal submitted.

Constraints: Work restarted with limited manpower after lockdown. Work was affected by Cyclone Amphan on 20.05.2020.

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

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

Completion Target: July'2020

Length: 25 KmLocations: 81 nos.

Foundation completed: 81 nos.
Tower Erection 81 nos.
Stringing 21.5 Km

Scheduled COD : July' 2020 Anticipated COD : Oct' 2020

Constarints where Project Authority requires intervention:

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

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 awaited

Defence/Civil Aviation: Proposal submitted on 11.09.18. approval awaited

Constraints: Work restarted with limited manpower after lockdown.

Work affected by Cyclone Amphan on 20.05.2020.

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.
Foundation completed : 199 Nos.
Towers erected : 197 Nos.

Stringing : 73Km
 Scheduled COD : July' 2020
 Anticipated COD : Oct' 2020

Status of statutory approvals:

Forest: 0.108 Km (0.497 ha.). The proposal had been submitted on 02.07.2018. Stage-I approval obtained on 16.01.19. Working permission obtained on 14.03.19 & 18.03.19. Stage-I compliances has been submitted on 16.07.19. Stage-II approval received on 06.03.2020.

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Power line crossing (66kV and above)

Total no. of crossings : 02 Nos.

Proposal submitted : 02 Nos. Date: 19.03.18 Approval obtained : 02 Nos. Date: 18/05, 3/8/18

Railway crossing : NIL

National Highway Crossing : NIL

River Crossings : NIL

PTCC approval : Approval received 27.12.19

Defence/Civil Aviation: Proposal submitted on 11.09.18 &

approval awaited.

Constraints: Work restarted with limited manpower after lockdown. Work affected by Cyclone Amphan on 20.05.2020.

<u>Critical Issue- Aviation Clearance</u>

Construction works of 765 kV D/C Ranchi (New) - Medinipur Line and LILO of both ckt. of 400 kV D/C Chandithala - Kharagpur Line at Medinipur including the 765/400 kV Substation at Medinipur are in advance stage of completion with works having completed upto nearly 98%.

The routes for above two transmission lines are aligned maintaining the safe distance from the Air Force Station Kalaikunda located near Kharagpur in WestMedinipur District in West Bengal and the nearest tower is located beyond 40.92 Kms distance from the Air Force Station which is more than the requirement of 20 Km for Visual Flight Rules as per the Aviation Regulations.

Applications for issuance of NOC were submitted to the Station Commander, KalaikundaAir Traffic Station on 21st February, 2019 and 30th April, 2019 for LILO of Chandithala - Kharagpur Line and Ranchi (New) - Medinipur Line respectively. Thereafter, CATCO Shillong office issued the NOCs vide their letters dated 10th May, 2019 and 28th June, 2019 with the conditions that Markers and Day/Night Aviation Obstruction Lights (in combination of medium & low intensity Type B) shall be installed on all towers. The total number of towers in these two transmission lines is 916 nos. for 342km combined route length. As installation of Markers and Day/Night Aviation Obstruction Lights is not mandated according to regulations due to the distance of the nearest tower from the airport being more than 40.95 kms. PGCIL had submitted request for waival of providing the day/night aviation obstruction light vide letter dated 19th August, 2019 & 13th June, 2019.

However, CATCO Shillongoffice vide letter dated 24th October, 2019 & 26th July, 2019 reiterated the already issued NOC letters.

Considering the fact that requirement being not mandatory as per regulation and the Cost implication/time required for entire line, the matter has been taken with Aviation Head Quarter, IAF, VayuBhawan, New Delhi vide letter dated 05.06.2020 for necessary direction in this regard and is being followed regularly. decision is still awaited from Aviation Head Quarters New Delhi on the above. Clearance from the Aviation authorities is necessary for commissioning of the aforesaid lines/elements.

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

(Award placed on 29.09.2017 to M/s BHEL)

- Work was stalled from Nov' 19 to Dec' 19 due to agitation by local tribals.
 Restarted slowly from 10.12.19
- Work is being affected due to political unrest since Dec' 19

Land acquired : 100 %
Civil work completed : 86 %
Equipment supplied : 90 %
Equipment erection : 71 %
Scheduled COD : July' 2020
Anticipated COD : Oct ' 2020

Constraints:. Work restarted with limited manpower after lockdown. Work affected by Cyclone Amphan on 20.05.2020.

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

(Award placed on 29.09.2017 to M/s BHEL)

Work under progress.

Land acquired : 100 %
Civil work completed : 61 %
Equipment supplied : 90 %
Equipment erection : 18 %
Scheduled COD : July' 2020
Anticipated COD : Oct' 2020

Work is being affected due to political unrest since Dec' 19

Constraints: Work restarted with limited manpower after4 lockdown. Work affected by Cyclone Amphan on 20.05.2020.

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

(Work being executed by WBSETCL.)

Civil work completed : 87 % Equipment supplied : 95 % Equipment erection : 42 % Scheduled COD : July' 2020 Anticipated COD : Oct' 2020

Constraints: Work restarted with limited manpower after lockdown. Work affected by Cyclone Amphan on 20.05.2020.

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

400 kV

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 nos.
- 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]
- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 nos.
- Space for future line bays (including space for switchable line reactor): 6 nos.
- Space for future ICT bays: 2 nos.

220 kV

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

132 kV ICTs bays: 2 no. Line bays: 4 no. [2 no. for Sitamarhi (New) – Sitamarhi 132kV D/c (Single Moose) line and 2 no. for Sitamarhi (New) - Pupri 132kV D/c line] Space for future line bays: 4 nos. • Space for future ICT bays: 2 nos. Space for future 400/220 kV, 2x500 MVA ICTs Space for future 220/132 kV, 2x200 MVA ICTs Establishment of 400/220/132 kV, 3x500 MVA + 3x200 MVA S/s at Chandauti (New) 2. 400 kV ICTs: 400/220 kV, 3x500 MVA • ICTs bays: 3 no. Line bays with space for switchable line reactor: 4 no. [4 no. for LILO of both circuits of Nabinagar-II – Gaya 400kV D/c (Quad Moose) line of PGCIL at Chandauti (New)] • Bus reactor: 420kV, 2x125 MVAR • Bus reactor bay: 2 nos. • Space for future line bays (including space for switchable line reactor): 6 no. • Space for future ICT bays: 2 nos. 220 kV ICTs: 220/132 kV, 3x200 MVA ICTs bays: 6 nos. 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] Space for future line bays: 4 nos. • Space for future ICT bays: 4 nos. 132 kV ICTs bays: 3 nos. 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)] Space for future line bays: 4 no. Space for future ICT bays: 2 no. Space for future 400/220 kV, 2x500 MVA ICTs Space for future 220/132 kV, 2x200 MVA ICTs

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

3.

400 kV

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

220 kV

- ICTs: 220/132 kV, 2x200 MVA
- ICTs bays: 4 no.
- Line bays: 4 no.

[2 no. for Saharsa (New) – Begusarai and 2 no. for Saharsa (New) – Khagaria (New) 220kV D/c lines]

- Space for future line bays: 4 no.
- Space for future ICT bays: 4 no.

132 kV

- ICTs bays: 2 no.
- Line bays: 2 no.

[2 no. for Saharsa (New) - Saharsa 132kV D/c line]

- Space for future line bays: 6 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs
 Space for future 220/132 kV, 2x200 MVA ICTs

Substation extension at Darbhanga S/s

• 400kV Line bays with space for switchable line reactor: 2 no. [2 no. for Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor]

5. Substation extension at Motihari S/s

400kV

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

132kV

ICT bays: 1 no.

General Detail:

Special Purpose Vehicle (SPV) : ERSS XXI Transmission Limited

Bid Process Coordinator (BPC):REC TPCLEstimated Cost:₹ 1321 CrLevellised Tariff:₹ 138.586 CrRequest for Qualification:28.12.2016Request for Proposal:11.08.2017Letter 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
Anticipated Date of Completion : 12.03.2021

Status of progress of transmission project:

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

(Award placed on 24.01.2018 to M/s TATA)

Locations:
Length
Foundation completed:
Tower Erected:
Stringing:
Scheduled COD
Anticipated COD
221 Nos.
221 Nos.
199 Nos.
49.8 Km
Jan'21
Jan'21

Power line crossing

Total no. of crossings : 07 Nos.

Proposal submitted : 07 Nos. Date: 30.09.2018,

29.07.2019

Approval obtained : 7/7 Nos.

Railway crossing

Total no. of crossings : 02 Nos.

Proposal submitted : 02 Nos. Date: 04.01.2019

Approval obtained : 02/02 Nos.

National Highway Crossing

Total no. of crossings : 03 Nos.

Proposal submitted : 03 Nos. Date:30.09.2018

Approval obtained : 02/3 Nos.

Forest: 0.95 ha (2 divisions i,e; DBG, SMH)

FRA Certificate from DM (Darbhanga) & Sitamarhi received & forwarded to Nodal officer. Proposal is currently at MoEF, Ranchi. **Stage-I approval**

expected by Aug'20.

PTCC: Submitted on 04.01.2019. Approval awaited.

Work Progress severely affected due to RoW and waterlogging. Severe RoW at 2 locations near Darbhanga.

Constraints: Work restarted with limited manpower after lockdown.

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

Award placed on 24.01.2018 to M/s. TATA

Completion Target: Mar' 21

Length: 85.3 Km Locations: 230 Nos. Foundation completed: 230 Nos. Tower Erected: 221 Nos. 60.7 Km Stringing

Scheduled COD Jan'21 Jan'21 Anticipated COD

Work Progress severely affected due to waterlogging

Power line crossing

Total no. of crossings 03 Nos.

Proposal submitted 03 [2 Nos. on 30.09.2018 & 1 no.

on 24.12.2018]

Approval obtained 03/ 03 Nos.

Railway crossing

Total no. of crossings 02 Nos.

Proposal submitted 02 No. Date: 04.01.2019

02/ 02 Nos. Approval obtained

National Highway Crossing

Total no. of crossings 05 Nos.

Proposal submitted 05 Nos. Date:30.09.2018

Approval obtained 05 Nos.

Forest: 0.186 ha (3 divisions i,e; E. Chap, Sheohar, Sitamarhi) Prosposal submitted on 16.10.2018. Presently at PCCF. Patna.

Stage-I approval received in July'2020.

PTCC: Submitted on 30.09.2018. Approval awaited

Constraints: Work restarted with limited manpower after lockdown.

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. Foundation completed: 9 Nos. Tower Erection : 9 Nos. Stringing : 2.9 Km Scheduled COD : Mar'21 Anticipated COD : Mar' 21

Crossings: NIL

Forest: NIL

PTCC: Submitted. Presently at CEA

LILO of Nabinagar - Gaya 400 KV Line at Chandauti has been charged 1st time upto Dead Tower. Line has been charged at rated voltage on 24.06.2020. Through cross Jumpering Nabinagar- Gaya line charged via LILO line as contigency measure. Power flow approx 150 MW in each circuit.

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

Award placed on 24.01.2018 to M/s. TATA

Length: 75 Km
Locations: 211 Nos.
Foundation completed: 161 Nos.
Tower Erected: 150 Nos.
Stringing: 35.7 Km.
Scheduled COD : Mar'21
Anticipated COD : Mar'21

Work Progress severely affected due to water logged condition

Power line crossing

Total no. of crossings : 8 nos.

Proposal submitted : 8 nos. Date: 26.03.2019

Approval obtained 08/08 Nos.

Railway crossing

Total no. of crossings : 2 nos.

Proposal submitted : 2 nos. Date: 12.03.2019

Approval obtained : 02/02 Nos.

National Highway Crossing

Total no. of crossings : 6 nos.

Proposal submitted : 6 nos. Date: 26.03.2019

Approval obtained : 06/06

Forest: 2.9 Ha in Saharsa. Proposal submitted on 08.03.2019.

Joint verification done. Report is with PCCF, Patna. Stage-I approval received on 16.03.2020.

PTCC: Submitted on 09.02.19. Presently at CEA.

Constraints: Work restarted with limited manpower after lockdown

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

Land acquired : 98%
Civil work completed : 70 %
Equipment supplied : 88 %
Equipment erection : 35 %
Scheduled COD : Jan'21
Anticipated COD : Jan'21

Constraints: Work restarted with limited manpower after lockdown

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

Awarded on 20.03.2018 to M/s ABB

Land acquired : 100 %
Civil work completed : 86 %
Equipment supplied : 85 %
Equipment erection : 72 %

Scheduled COD : Mar'21 Anticipated COD : Mar'21

Work was stalled due to heavy rain & flood.

Constraints: Work restarted with limited manpower after lockdown

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 : 95.5 % Civil work completed : 33 % Equipment supplied : 40 % Equipment erection : 5 %

Scheduled COD : Mar'21 Anticipated COD : Mar'21

Constraints: Work restarted with limited manpower after lockdown

8 Substation extension at Darbhanga S/s

Awarded on 27.02.2018 to M/s KEC

Civil work completed : 90 % Equipment supplied : 90 % Equipment erection : 50 %

Scheduled COD : Jan'21 Anticipated COD : Jan'21

Constraints: Work restarted with limited manpower after lockdown

9 Substation extension at Motihari S/s

Awarded on 27.02.2018 to M/s KEC

Civil work completed : 90 % Equipment supplied : 90 % Equipment erection : 50 %

Scheduled COD : Jan'21 Anticipated COD : Jan'21

Constraints: Work restarted with limited manpower after lockdown

3) New WR- NR 765 kV Inter-Regional corridor

Background

The transmission scheme has been approved in the 38th Standing Committee on Power System Planning of Northern Region held on 30th May, 2016 and 40th Standing Committee Meeting on Power System Planning in WR held on 01.06.2016. The corridor shall provide strong connectivity of NR and WR grid and would facilitate flow of power under various contingencies.

Scope of transmission project:

765 kV D/C Vindhyachal Pooling Station- Varanasi D/C Transmission Line

General Detail:

Special Purpose Vehicle (SPV) : WR-NR Power Transmission Limited

Bid Process Coordinator (BPC) **REC TPCL Estimated Cost** ₹ 916 Cr Levellised Tariff ₹ 92.733 Cr Request for Qualification 19.12.2016 Request for Proposal 22.09.2017 Letter of Intent 01.03.2018 Transmission Service Agreement (TSA) : 27.04.2017 SPV acquisition 27.03.2018 Transmission License by CERC 27.08.2018 Tariff adoption by CERC 05.09.2018

Contract Performance Guarantee : Submitted on 27.03.2018

Clearance u/s 164 : 14.03.2019

Execution plan : Submitted in April'18 EPC awarded on : Awarded 11.04.2018

Scheduled Date of Completion : 27.07.2021 Anticipated Date of Completion : 27.07.2021

Status of progress of transmission project:-

Line awarded on 11.04.2018 to M/s KPTL.

Length : 189.5 KmLocations : 521 Nos.

Foundation completed : 389Nos (NR : 174, WR: 215)
 Tower Erection : 365 Nos. (NR : 166, WR: 199)

• Stringing : 74.08kM (NR : 34.19km, WR: 39.89km)

Scheduled COD : July' 2021 Anticipated COD : July' 2021

Western Region portion:

Forest:

Forest proposal's soft copy uploaded on Forest portal on 01.09.2018. Hard copy in 06 sets submitted on 08.09.2018.

Stage-I approval obtained on 27.05.19.

Demand note for CA scheme, NPV & Medicinal scheme obtained from all three division i.e Singrauli, Sidhi and Rewa .

Working Permission of Rewa forest division obtained on 25.06.2019

Demand Note for tree vidohan for Rewa division obtained on 10.07.2019 and subsequently amount depsited on 18.07.2019.

Stage one working permission for Singrauli Forest also obtained on 30.07.19.

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

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

Working Permission of Sidhi forest division obtained on 05.09.2019.

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

Wildlife (Son Ghariyal wildlife sanctuary): Letter regarding permission for construction of T/L over Son & Gopad river submitted on 14.03.19.

Part-I & Part-II of Son Ghariyal wildlife sanctuary crossing over Son & Gopad river submitted online on 23.05.19 and hard copy of the proposal submitted on 26.05.19.

Further, part-III of the proposal has been filled and hard copy of the proposal forwarded to APCCF Bhopal on 26.06.19.

Proposal got clearance from State Wild life Board on 11.10.2019. Proposal cleared in the NBWL meeting held on 17.12.19 and minutes issued on 21st Jan'20. Letter from APCCF (Wildlife), MP Govt Bhopal has been sent to CCF Sanjay Tiger Reserve Sidhi on 30.01.2020 and same was forwarded to POWERGRID on 29.02.2020.

PCCF (WL), Bhopal through letter dated 24.02.2020 asked POWERGRID to submit route alignment and estimated projects cost for further processing. Vide letter dated 12.03.2020 POWERGRID wrote a letter seeking relaxation from condition imposed (use of insulated cable for over the ground / underground crossing). In return to this PCCF(WL), Bhopal vide letter dated 19.03.2020 said that relaxation in condition is out of his jurisdiction and suggested to appeal before competent authority (NBWL, New delhi). Vide letter dated 28.04.2020 POWERGRID again requested to PCCF(WL), Bhopal that there is no such technology (Insulated cable for 765KV) available globaly. Now PCCF (WL) through letter dated 29.04.2020 to Principle secretary, Ministry of Forest(MP) and Additional General of Forest (WL division), MoEFCC, New Delhi, is seeking guidance in this matter.

MOEF(Wildlife Division), New Delhi vide letter Dt 17th June 2020 agreed with the POWERGRID proposal for crossings to use towers to enhance clearance & international high speed protection scheme in absence of underground cable technology at 765kV Voltage level.

Vide letter of even no dt 23.06.2020, final clearance accorded to POWERGRID from the office of Chief Wildlife Warden, Govt of MP, Bhopal.

Working Permission Son Ghariyal wildlife sanctuary issued by Letter Ref No 13-1/(18.7)/4392 Dt 28th July 2020.

Power line crossing

Total no. of crossings : 15 Nos.

Proposal submitted : 15 Nos Date: 16.10.18

Approval obtained : 7 Nos. for 400 kV approved on 11.12.18

5 Nos. for 765 kV approved on 03.01.19

*Powerline crossing of MPPTCL: 3 Nos. for 132kV approved on 29.03.19

Railway Crossing

Proposal submitted : 2 Nos. Date: 28.09.18

Approval obtained : Approved

(Agreement to indeminify Railways is pending)

National Highway Crossing

Proposal submitted : 1 No. Date: 06.09.18 Approval obtained : (Sidhi-Singrauli NH-75-E)

Approval obtained on 06.08.2019

PTCC

Proposal submitted : Proposal submitted on 02.05.19

Proposal from PTCC Mumbai forwarded to Central Electricity Authority on 20.08.2019.

PTCC clearance for MP Portion issued by CEA vide letter of even No Dt 15th July 2020.

Civil Aviation

Proposal submitted : Submitted on 20.06.19. Resubmitted on 16.07.19

Civil aviation approval received on

03.09.2019 (for two parts) and 11.09.2019 for three parts).*Application was splited into

five parts*

Defence Aviation

Proposal submitted : Proposal sent in hard copy on 26.06.19.

Defence Avaition NOC obtained on

04.10.2019.

Constraints: Work was on hold due to countrywide lockdown since 24.03.20 due to COVID-19 Pandemic. The work resumed in April end but the progress is slow due to limited availability of manpower at site. Working Permission from Wild life obtained very recently. Tree cutting by Forest Deptt in forest area is pending and same may be extended because of mansoon season. Slow down because of lockdown and after effect and all these factors may extend the commissioning schedule further.

Northern Region portion:

Forest proposal (30 Km, Mirzapur : 210 Ha, Varanasi : 0.28 Ha) :

NoC received from PWD, Irrigation, Railway & NHAI.

Forest proposal was initially uploaded on Forest portal on 17.09.2018. Subsequently, due to change in forest area of NHAI crossing, total forest area changed. Accordingly, revised forest proposal has been uploaded on 05.08.2019. Further, NOCs have been obtained from PWD, Irrigation, Railways and NHAI.

Present status: Forest proposal forwarded by State Government to RMoEF. Proposal is anticipated to be taken up in the forthcommng REC meeting.

Power line crossing

Total no. of crossings : 13 Nos.

Proposal submitted : 13 Nos Date: 16.10.18

Approval obtained : 13 Nos. [Date: 13.12.18, 21.12.18,

07.05.19, 12.06.19,02.08.19]

Railway Crossing

Total no. of crossings : 2 Nos.

Proposal submitted : 2 No. Date: 30.10.18 Approval obtained : 2 No. Date: 16.04.19

Date: 26.06.20

National Highway Crossing

Total no. of crossings : 2 Nos.

Proposal submitted : 2 Nos. Date: 04.10.18

Approval obtained : 2 Nos. Date : 30.08.19 & 04.10.19

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

Pile foundation: 40/48 nos.of pile completed.

PTCC: Proposal submitted to Central Electricity Authority, New Delhi on 02.09.2019.

Aviation (Civil): NOC obtained.

Work was kept under abeyance due to corona virus pandemic & complete lockdown imposed by Govt. of India on 25.03.2020. Due to lockdown/restrictions imposed by Govt. of India/State Governments to contain spread of Covid-19, transmission line work was completely stopped including supplies of line materials as well as construction materials such as cement, sand, aggregate etc., mobilization of manpower, machineries and other resources at site. The work has recommenced with available manpower. However, non-availability of construction materials such as sand, aggregate etc., difficulty in getting construction gangs/ manpower, various restrictions at site e.g. social distancing, gang size etc. are still putting serious constraints on progress of the work.

4) Transmission system associated with LTA applications from Rajasthan SEZ Part-C

Background

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

Project Description

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

Scope of Transmission Project-

Transmission Lines

- 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

 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

TANSMISISON SYSTEM LTD

Bid Process Coordinator (BPC) : REC Transmission Projects Company Ltd.

Levellised Tariff:₹ 122.042Cr.Request for Qualification:12.01.2019Request for Proposal:13.03.2019Letter of Intent:31.07.2019Transmission Service Agreement (TSA):23.04.2019SPV 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

Status of progress of transmission project:-

1. Khetri– Jhatikara 765kV D/c line

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

Length: 142.577Kms
Locations: 394 nos.
Foundation completed 266 nos.
Towers erected 136 nos.
Stringing completed 6.016 km

Scheduled COD Dec'20 Anticipated COD Mar'21

Constraints where Project Authority requires intervention:

Authorization u/s 164 of EA-2003: Application Submitted to CEA.
 Acknowledgement received. Query raised. Compliance under progress.

Status of statutory approvals:

Forest :Delhi portion- Forest proposal for FCA submitted on

24.06.2020. Query raised on 29.06.20. Proposal

resubmitted on 06.07.20.

: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.

Replied on 27.07.20

Rajasthan (1.547Hec): Online proposal submitted on 20.05.20. Hard Copy of proposal submitted. Proposal with DFO (Jhunjhunu) at present.

Power line crossing

Total no. of crossings : 33 nos. Proposal submitted : 33 nos. Approval obtained : 23 nos.

Railway crossing

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

National Highway Crossing

Total no. of crossings : 4 nos. Proposal submitted : 4 nos. Approval obtained : 1 nos.

River Crossings

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

PTCC approval : submitted on 26.05.2020 Hard Copy of the

proposal submitted in July'20.

Defence/Civil Aviation: Both proposals submitted on 15.05.2020

Constraints: Work restarted after lockdown. Permission obtained on 24.04.20 for mobilization of gangs and work in progress in Sikar, Jhunjhunu, Jhajjar and Mahendargarh districts. However work is hampered due to shortage of manpower and construction materials.

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

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

Length: 78.610Kms
Locations: 207 nos.
Foundation completed 162nos.
Towers erected 122 nos.

Stringing completed 2.54 km

Scheduled COD Dec'20 Anticipated COD Mar'21

Constraints where Project Authority requires intervention:

Work is under progress.

Status of statutory approvals:

Forest : Submission of online proposal done on 22.05.2020.

Hard Copy of proposal submitted. Proposal with DFO

(Jhunjhunu) at present.

Power line crossing

Total no. of crossings : 10 nos. Proposal submitted : 10 nos. Approval obtained : 8 nos.

Railway crossing

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

National Highway Crossing

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

PTCC approval : Proposal submitted on 15.05.2020. Hard Copy

of the proposal submitted in July'20

Defence/Civil Aviation: Aviation proposal submitted on 22.05.2020,

Defense proposal submitted on 15.05.2020

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 awarded.

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

Constraints: Work restarted after lockdown. However work is hampered due to shortage of manpower and construction materials.

5) Transmission system associated with LTA applications from Rajasthan SEZ Part-A

Background

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

Project Description

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

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

Scope of Transmission Project-

Transmission Lines

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

Substation

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

General Details

Special Purpose Vehicle (SPV) : AJMER PHAGI TRANSCO LIMITED

Bid Process Coordinator (BPC) : REC Transmission Projects Company Ltd

Levellised Tariff : ₹ 61.331Cr.

Request for Qualification 12.01.2019 Request for Proposal 13.03.2019 Letter of Intent 29.08.2019 Transmission Service Agreement (TSA): 23.04.2019 SPV acquisition 03.10.2019 Transmission License by CERC 4.03.2020 Tariff adoption by CERC 4.03.2020 Contract Performance Guarantee 30.08.2019

Clearance u/s 164 Newspaper Notice Published on

23.11.2019

Execution plan submitted to CEA: Submitted on 13.2.20

NIT issued on : All NOAs to Execution Agency issued. EPC awarded on : NOAs for S/Stn, T/L & B/R issued

Scheduled Date of Completion : Dec'2020

Status of progress of transmission project:-

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

Award placed to M/s BAJAJ Electricals Ltd. (BAJAJ)

Length: 134.196kM
Locations: 358 nos.
Foundation completed 298nos.
Towers erected 193 nos.
Stringing completed 20.49 km
Scheduled COD Dec'20
Anticipated COD Mar'21

Constraints where Project Authority requires intervention:

Authorization u/s 164 of EA-2003: Application Submitted to CEA.
 Acknowledgement received. Gazette published on 22.07.20.

Status of statutory approvals:

Forest : Online proposal submitted on 17.01.2020.

Proposal forwarded to State Govt on 04.06.20. FRA pending at

ADM.

Power line crossing

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

Railway crossing

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

National Highway Crossing

Totalno. of crossings : 3 nos. Proposal submitted : 3 nos. Approval obtained : 3 nos.

PTCC approval : proposal submitted on 12.05.2020. Proposal

forwarded to CEA(Delhi) on 27.07.20.

Defence/Civil Aviation: Approval received from Aviation dept. on

23.06.20.

Constraints: Work restarted after lockdown. Work in progress in Ajmer, Phagi and Tonk districts. However work is hampered due to shortage of manpower and construction materials.

2. Status of progress of Bay Extensions project:

NOAs for AIS Type 765kV Bay Extensions both at Ajmer and Phagi is placed to M/s ABB and GIS Type 765kV Bays at Phagi to M/s GE T&D India Ltd. Civil work under progress at Ajmer and Phagi s/s.

- Bus Reactor Package awarded to M/s T&R on 27.11.2019
- 1 No additional 1-Ph 80MVAR rector is added at later date of RFP- awarded to M/s BTW on 28.02.20.

Constraints: Work restarted after lockdown. However work is hampered due to shortage of manpower and construction materials.

6) 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.

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 : Applied on 16.10.2019
Tariff adoption by CERC : Applied on 16.10.2019

Clearance u/s 164 Newspaper Notice Published on

30.11.2019

Execution plan submitted to CEA: is being prepared.

NIT issued on: NIT for all Pkges issued.

EPC awarded on : NOAs except L/R Package issued

Scheduled Date of Completion : Dec'2020

Status of progress of transmission project:-

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

Length: 184.977 kM
Locations: 485 nos.
Foundation completed 317 nos.
Towers erected 165 nos.
Stringing completed 4.486 km
Scheduled COD Dec'20
Anticipated COD Mar'21

Constraints where Project Authority requires intervention:

Authorization u/s 164 of EA-2003: Application Submitted to CEA.Query Raised.
 Compliance under progress

Status of statutory approvals:

Forest : Forest proposal submitted on 14.03.2020.Query regarding layout plan, maps etc raised by Nodal on 18.05.20. Proposal resubmitted on 06.07.20. Query raised by nodal officer for submitting hard copies on 13.07.20. Hardcopy to be submitted.

Power line crossing

Total no. of crossings : 16 nos. Proposal submitted : 14 nos. Approval obtained : 8 nos.

Railway crossing

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

National Highway Crossing

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

- **PTCC approval** : Proposal submitted to PFTL. File submitted to Jaipur, BSNL office & then forwarded to Delhi for final approval on 10.06.20.
- **Defence/Civil Aviation**: Civil aviation submitted on 11.05.2020 and defense proposal is submitted on 10.01.2020. With Air Force HQ, New Delhi at present.

Constraints: : Work restarted after lockdown Permission obtained on 21.04.20 for mobilization of gangs and work in progress in both Fatehgarh II and Bhadla II.

- Severe ROW issues encountered in this line. FIR lodged in Jaisalmer against 8 persons on 02.03.20.
- 74 locations work withheld on want of defence clearance.

Status of progress of Bay Extensions project:-

NOAs for 765kV Bay Extensions both at Fathegarh-II (PG) Substation and Bhadla–II Substation (PG) is placed to M/s BHEL. Civil work under progress in Fatehgarh and Bhadla S/s

Constraints: Work has suffered due to lockdown. Delay attributed to Corona virus pandemic.

7) 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 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 5.9.2018. Further in the 2nd WRSCT meeting held on 21.05.2019, 1×240 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 38th 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

 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 2×1500 MVA (765/400kV), 4×500 MVA (400/220kV) Bhuj-II PS (GIS) with 765kV (1×330 MVAR) and 420kV (1×125 MVAR) bus reactor

(2×1500MVA (765/400kV), 4×500MVA (400/220kV)), 1×500 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.; 1×330 MVAr, 765 kV; 1×125 MVAr, 420 kV; 765 kV

reactor Bays -1 no.; 400 kV reactor Bays -1 no.; 1×110 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

1×240MVAr switchable Line reactor for each circuit at Bhuj-II PS end of Bhuj-II-lakadia 765 kV D/c line (2×240 MVAR, 765 kV with 400-ohm NGR; 765 kV Reactor Bays-2 no.; 1×80 MVAR, 765 kV, 1ph switchable line Reactor (spare unit) at Bhuj-II end).

General Details

Special Purpose Vehicle (SPV) : POWERGRID BHUJ TRANSMISSION LTD.

Bid Process Coordinator (BPC) : PFC Consulting Ltd.

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 : Letter of acknowledgment issued on

30.06.2020

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

Status of progress of transmission project:-

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

Awarded to M/s Translail Lighting limited

Length: 106 kM
Locations: 284 nos.
Foundation completed: 51 nos.
Towers erected: 12 nos.
Stringing completed: NIL Km
Scheduled COD Dec'20
Anticipated COD Mar'21

Status of statutory approvals:

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 Expeditiously clearance is required to complete the project with in schedule.

Power line crossing

Total no. of crossings : 14 nos.(7 nos. Loop IN & 7 nos. Loop Out)

Proposal submitted : 12 nos. Approval obtained : NIL nos.

PTCC approval : Proposal submitted.

Defence/Civil Aviation : Propsoal is being prepared

Constraints: Work stopped completely due to country wide lockdown from Mar'20 to April20. The work resumed in last week of Apr'20. Work progress is low due to limited avialbility of manpower and sever RoW probelm. Support of local administration is required to settle land compensation assessment expeditiously.

3. 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 etc. are in

progress

Equipment supplied : Tower foundation bolts, LA, BPI, MS Rod supplied

Equipment erection : Nil

Scheduled COD : Dec'20 Anticipated COD : Mar'21

- 1. Contouring completed and FGL finalized.
- 2. Major Engineering activities completed.
- 3. Equipment foundation, building works and supply is under porgress

Constraints: Work stopped complely due to country wide lockdown from Mar'20 to April20. The work resumed in last week of Apr'20. Work progress is low due to limited avialbility of manpower. 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

8) 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

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: 378.88 CKm
Locations: 492 nos.
Foundation completed: 476 nos.
Tower erected: 474 nos.
Stringing completed: 350.44 ckm
Scheduled COD: Jul'19

Constraints where Project Authority requires intervention:

- 1. Objection has been raised by D.C., Dhule for traversing of line through submergence area of proposed Jamphal Dam in Maharastra and diversion of line is requested. Work is stopped now.
- 2. Construction site of Jamphal dam area was visited by CEA offcers 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.
- Based on site visit and meeting with DC, Dhule in July 2019, CEA had advised M/s KTL for diversion of the route of transmission line. Now re-routing work of line has been started and the Forest Diversion Prposal has been submitted to MoEF. Approval under Section 164 of Electricity Act, if required, will be processed on fast track.
- 4. Forest clearance proposal for diverted route is pending with Nodal officer, MoEF.
- 5. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs
- 6. CEA vide their letter dated 07.04.2020 has requested DC, Dhule to extend support for expediting construction of line on earlier approved route.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest: Locations: 62 nos. Length: 61144Mtrs. Forest area affected (ha): 159.126 [KD-MP: 39.437 {11.866 (Barwah Division) + 27.571 (Sendhwa Division)} + KD-MH: 119.689 (Dhule Division)]
Forest proposals submitted on KD-MP: 30 Nov 2016 KD-MH: 03 Dec 2016

Current status:

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

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

Power line crossing

Total no. of crossings: 9 (EB-MP), 1 (EB-MH), 2 (PG-KNW), 2(BDTCL), 1(KTL) nos. Proposal submitted: 9 (EB-MP), 1 (EB-MH), 2 (PG-KNW) nos. Date: 29-06-17 (EB-MP), 30-05-17 (EB-MH), 21-02-17 (PG-KNW), 01-07-17 (BDTCL); 2Nos. 1Nos. Submission pending(For U/C line KTL)

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

Railway crossing

Total no. of crossings: 1 no.

Proposal submitted: 1 nos., 07-05-17 (NH3)

Approval obtained : 1 no

National Highway Crossing

Total no. of crossings: 1 nos.

Proposal submitted: 1 nos., 07-05-17 (NH3)

Approval obtained: 1 no

River Crossings

Total no. of crossings: 1 no.

Proposal submitted: Not Required 1 no. Date: Approval obtained: Not Required 1 no. Date:.

PTCC approval

Proposal submitted to Defence on 20-05-17 Proposal submitted to BSNL on 12-05-17 Proposal submitted to Railways on 19-06-17

Current status: NOC Recieved

Defence/Civil Aviation

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

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

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

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

Background

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

Scope of transmission project

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

400kV

- ICTs: 400/132 kV, 7x105 MVA single phase (including one spare)
- ICTs: bays: 2 no.
- Line bays: 2 no.

[2 no. for Palatana – Surajmanigagar and 2 no. for Surajmaninagar – PK Bari 400 kV D/C Line]

- Bus reactor bays: 2x125 MVAR
- Bus reactor bays: 2 no.
- Space for future line bays (incl. space for sw. line reactor): 6 no.
- Space for ICT bays: 1 no.

132 kV

- ICTs bays: 2 no.
- Line bays: 2 no.

[2 no. for Surjmaninagar (TSECL) - Surajmaninagar (TBCB) 132 kV Line with high capacity/HTLS (equivalent to single moose)]

- Space for future line bays: 6 no.
- Space for ICT Bays: 1 no.

Space for future 400/132 kV, 315MVA ICT

TSP is free to choose the location of Surajmaninaagar S/s within a radius of 10 km from the Surajmaninagar (TSECL) S/s.

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

400 kV

- ICTs 400/132 kV, MVA single (including one spare)
- ICTs bays: 2 no.
- Line bays: 4 no.

[2 no. for Surajmaninagar – P. K. Bari and 2 no. for P. K. Bari – Silchar 400 kV D/C line]

- Bus reactor: 2x125 MVAR
- Bus reactor bays: 2 no.
- Space for future line bays (including space for sw. line reactor): 6 no.
 Space of ICT bays: 1 No

132 kV

- ICTs bays;2 no.
- Line bays: 2no.

[2 no. for P.K. Bari (TSECL) – P. K. Bari (TBCB) 132kV D/C line with high Capacity/HTLS (equivalent of single moose)]

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

General Details

Special Purpose Vehicle : NER II Transmission Limited (Sterlite

Grid 4 Limited; a subsidiary of Sterlite Power

Transmission Limited)

Bid Process Coordinator : Rural Electrification Corporation

Estimated Cost (Rs. crs) 2471 431.653 Levellised Tariff (Rs. Crs) Request for Qualification 29.12.2015 Request for Proposal 18.01.2017 Letter of Intent 22.02.2017 Transmission Service Agreement (TSA): 27.12.2016 SPV acquisition 31.03.2017 Transmission License by CERC 20.06.2017 Tariff adoption by CERC 12.06.2017 Contract Performance Guarantee 27.03.2017 Clearance u/s 164 31.08.2018 Execution plan submitted to CEA 24.07.2017

Status of progress of transmission project;

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

Land Acquired :95%
Civil work completed :77%
Equipment supplied :100%
Equipment erection : 74%
Scheduled COD :Jul'20

Constraints/Approval if any:

- 1. Allotment of 0.69 acres of Government land is in process
- 2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs.
- 132kV transmission line (downstream system) has to be constructed by TSECL from Surajmaninagar (TBCB) to Surajmaninagar (TSECL) for optimum utilization of the system

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

Land Acquired :95%
Civil work completed :78%
Equipment supplied :100%
Equipment erection :75%
Scheduled COD :Jul'20

Constraints/Approval if any:

- 1. Allotment of 1.16 acres of Government land is in process.
- 2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs.
- 3. 132kV transmission line (downstream system) has to be constructed by TSECL from P.K. Bari (TBCB) to P.K. Bari (TSECL) for optimum utilization of the system

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

Length : 154.212 ckm
Locations : 209 nos
Foundation completed : 205 nos
Tower erected : 189 nos
Stringing completed : 93 ckm
Scheduled COD : Jul'20

Constraints where Project Authority requires intervention:

1. The proposal for PLCC Carrier frequency has been submitted to Ministry of Commnication (WPC Wing) and the approval is still awaited.

- 2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs
- Severe RoW issue at Location No. AP-68 in Village Mendi, Tehsil Salema, Sub Division – Kamalpur and District – Dhalai. Support required from District Collector, Dhalai for resolution of RoW

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations : 79 nos.

Length : 30.41 Km (36.632 KM forest affected stretch)

Forest area (ha) : 139.931 ha

Forest proposals submitted on : Submitted online on 09-Jan-18

Current status : Stage-I & tree cutting permission received

Power line crossing

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

Railway crossing

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

National Highway Crossing

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

River Crossings

Total no. of crossings : 0 nos.

PTCC approval

Proposal submitted to Defence on – 17-Apr-18 Proposal submitted to BSNL on – 28-Apr-18 Proposal submitted to Railways on - 19-Apr-18 Current status: PTCC Approval received.

Defence/Civil Aviation

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

Defence Received

Current Status: Civil Aviation Approval Received

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

Detailed Survey is completed.

Length : 166.85 ckm
Locations : 236 nos.
Foundation completed : 235 nos
Tower erected : 220 nos
Stringing completed : 110 ckm
Scheduled COD : Mar'20

Constraints where Project Authority requires intervention:

- 1. The proposal for PLCC Carrier frequency has been submitted to Ministry of Commication (WPC Wing) and the approval is still awaited.
- 2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations: 20nos.

Length: 6.5km (7.65 KM forest affected stretch)

Forest area affected (ha): 17.569 ha Forest proposals submitted on 10-01.18

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

Power line crossing

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

Railway crossing

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

National Highway Crossing

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

River Crossings

Total no. of crossings : 0 nos.

PTCC approval

Proposal submitted to Defence on - 17-Apr-18 Proposal submitted to BSNL on - submitted Proposal submitted to Railways on - 19-Apr-18

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

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - submitted

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

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

Detailed Survey Completed

Length : 133.64 ckm
Locations : 211 nos
Foundation completed : 163 nos
Tower erected : 150 nos
Stringing completed : 74 ckm
Scheduled COD : Mar'20

Constraints where Project Authority requires intervention:

- Due to Non-grant of NOC, re-routing of line has been proposed by AAI. and proposal for the same has been submitted. AAI has not issued NOC certificate for 8 tower locations
- 2. Right of Way (RoW) issue in Biswanath Chariyalli (PG) Itanagar 132kV D/c (Zebra) line at Loc No. AP 101-105 in village Chimpu, District Papum Pare as the land owners are asking for undue compensation.
- 3. The proposal for PLCC Carrier frequency has been submitted to Ministry of Commication (WPC Wing) and the approval is still awaited
- 4. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations : 68nos. Length : 21.631km Forest area affected (ha) : 48.147

Forest proposals submitted on : 31.07.2017(online submission date) Revised

on 06.03.18

Current status : Assam state forest Stage-I received, Received

Tree Cutting permission

Power line crossing

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

Railway crossing

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

National Highway Crossing

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

River Crossings

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

PTCC approval

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

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - submitted

Current Status: NOC from Defence received and NOC from Civil Aviation is awaited

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

Detailed Survey Completed

Length : 356.56 ckm
Locations : 487 nos
Foundation completed : 480 nos
Tower erected : 416 nos
Stringing completed : 205 Ckm
Scheduled COD : Nov'20

Constraints where Project Authority requires intervention:

- 1. PGCIL bays at Silchar and Misa end has to be completed so as to match with the transmission line schedule.
- 2. The proposal for PLCC Carrier frequency has been submitted to Ministry of Commication (WPC Wing) and the approval is still awaited
- 3. RoW issue in 400kV D/C Silchar Misa Transmission line as the land owners are asking for undue compensation. The details are as per the below details:
 - a. Location No. AP 29 in village Barjatrapur, Teshil Katigorah, District Cachar
 - b. Location No. 184/2, AP 185, 185/1, 185/2, 185/3, AP 186 and 186/1 in village Dithur, Teshil Umrangso, District Dima Hasao
 - c. Location No. 218/4 in village Borphura gaon, Teshil Donka Mokam,
 District West Karbi Anglong
- 4. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-Locations : 62nos. Length : 24.24km Forest area (ha) : 108.162

Forest proposals submitted on: 4-Aug-17 (online submission date)

Current status: Stage-1 & tree cutting permission received

Power line crossing

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

Railway crossing

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

National Highway Crossing

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

River Crossings

Total no. of crossings : 0 nos.

PTCC approval

Proposal submitted to Defence on - Submitted Proposal submitted to BSNL on - Submitted Proposal submitted to Railways on - Submitted

Current status: Received

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on - Submitted

Current Status: Approvals Received

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

Length : 16.97 ckm
Locations : 30 nos.
Foundation completed : 28 nos.
Tower erected : 13 nos
Stringing completed : 0
Scheduled COD : Mar'20

Constraints where Project Authority requires intervention:

- 1. Non-finalization of terminal bays at Gohpur S/s by AEGCL for the termination of LILO of one ckt of Biswanath Chariyalli Itanagar 132kV D/C line at Gohpur S/s for utilization of LILO line
- 2. The proposal for PLCC Carrier frequency has been submitted to Ministry of Commication (WPC Wing) and the approval is still awaited
- 3. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations : 18 nos. Length : 5.1km Forest area (ha) : 23.782

Forest proposals submitted on - 31.07.2017(online submission date) Current status: Stage-I received, Received Tree Cutting Permission.

Power line crossing

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

Railway crossing

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

National Highway Crossing

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

River Crossings

Total no. of crossings : 0 nos.

PTCC approval

Proposal submitted to Defence on - Submitted Proposal submitted to BSNL on - submitted Proposal submitted to Railways on - Submitted

Current status: Received PTCC Approval

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

8. Line bays

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

Land Acquired: Space wil be provided by OTPC

Civil work completed: 0
Equipment supplied: 0
Equipment erection: 0
Scheduled COD Jul'20

Constraints/Approval if any:

1. Percentage of Work completion as informed by OTPC is 87%

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

Land Acquired: Space wil be provided by NEEPCO

Civil work completed: 100% Equipment supplied: 100% Equipment erection: 100% Scheduled COD Mar'20

Filed Application for Electrical Inspection on 12-11-2019

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

Land Acquired: Space wil be provided by TSECL

Civil work completed: 100% Equipment supplied: 100%

Equipment erection: 100% Scheduled COD Mar'20

Filed Application for Electrical Inspection on 12-11-2019

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

Land Acquired: Space wil be provided by DoP, AP

Civil work completed: 100% Equipment supplied: 100% Equipment erection: 100% Scheduled COD Mar'20

Filed Application for Electrical Inspection on 07-04-2020

10) 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

- LILO of one ckt. of Narendra (existing) Narendra (New) 400kV D/c quad line at Xeldem
- 2. Xeldem Mapusa400kV 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 29.11.2018 Clearance u/s 164 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

 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

Constraints/Approval if any:

1. Delay in getting forest and wildlife clearances. Support required for expediting the same.

- 2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs
- 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.

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 DFO

Wildlife area

Details of Tr. Line Falling under Wildlife:-

Locations : 23 nos. ; Length : 9.031 Km

Wildlife area (Ha) : 42 Ha

Wildlife proposals submitted on : Wild Life Goa :25 Aug'18

Wild Life Karnataka: 13 Oct'18

Current status : Goa – at SBWL

Karnataka – at DFO Level

Power line crossing

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

Railway crossing

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

National Highway / SH Crossing

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

River Crossings

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

PTCC approval

Proposal submitted to Defence : Yes

Proposal submitted to BSNL : Yes

Proposal submitted to Railways : Yes

Current status : Received CEA (PTCC) Recommendation for Goa and

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: 146 nos.
Foundation completed: 8 nos.
Tower erected: 2 nos
Stringing completed: 0 ckm
Scheduled COD: 14 May'21

Constraints/Approval if any:

- 1. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs
- 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

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 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: 178nos.
Foundation completed: 5 nos.
Tower erected: 0 nos
Stringing completed: 0 ckm
Scheduled COD: 14 July '21

Constraints/Approval if any:

- 1. Delay in getting forest clearance. Support required for expediting the same.
- 2. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs

Status of statutory approvals:

Forest area

Details of Tr. Line Falling under Forest:-

Locations : 65 nos. ; Length : 20.45 mtrs

Forest area (Ha) : 137.014 Forest proposals submitted on : 10 Aug'18

Current status : at State Government

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: 14 May'21

Constraints/Approval if any:

1. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs

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

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 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 : 3 nos.

Proposal submitted : 3 nos.

Approval obtained : 3 nos.

Railway crossing

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

National Highway / SH Crossing

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

River Crossings

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

PTCC approval

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

Current status : 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

Constraints/Approval if any:

- 1. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs
- 2. NoC is pending with Gram Panchayat.
- 3. 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

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 Pardesh, 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

754.87 Estimated Cost (Rs. Crs) 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

Execution plan submitted to CEA : 08-01-2020

NIT issued on :

EPC contract awarded on :

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: 0 nos.
Tower erected: 0 nos
Stringing completed: 0 ckm

Scheduled COD: 11th Nov 2022 Anticipated COD: 18th Mar 2022

Current Status:

1. EPC Partner will be on board by Aug'20

- 2. Detail Survey is in process.
- 3. Foundation work will be started by Sept'20, after receipt of Sec-164 approval and finalization of Engineering drawings.
- 4. Design and Engineering work is in process.
- 5. Gazette Notification for Sec-164 has been published.

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 : Forest Diversion proposal will be submitted once the

detail survey is completed

Power line crossing

Total no. of crossings : 7 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 : 7 nos. Proposal submitted : 0 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 is yet to be submitted

6. 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 11th Nov 2022 Anticipated COD: 18th Mar 2022

Current Status:

- 1. Substation land has been Acquired.
- 2. Soil testing has been done on the S/s land.
- 3. EPC Partner will be on board by Aug'20
- 4. Design and Engineering work is in process

7. 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: 11th Nov 2022 Anticipated COD: 18th Mar 2022

Current Status:

- 1. A meeting is to be held between UKTL and UPCL for start of Bay extension work.
- 2. EPC Partner will be on board by Aug'20
- 3. Design and Engineering work is in process

12) 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)

Levellised Tariff (Rs. Crs)

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

Tariff adoption by CERC

Contract Performance Guarantee : 23.06.2020

Clearance u/s 164

Execution plan submitted to CEA

NIT issued on

EPC contract awarded on :

13) 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
- 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) : PFCCL

Estimated Cost (Rs. Crs)

Levellised Tariff (Rs. 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 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 In process 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: 642.90 cKm
Locations: 780 nos.
Foundation completed: 64 nos.
Tower erected: 0 nos.
Stringing completed: 0 ckm

Scheduled COD: 31-Dec-2020.

Constraints/Approval if any:

- i. Delay in bidding process and Acquisition of SPV.
- ii. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs
- iii. Delay in Submission of Sec-164 Application due to lockdown situation
- iv. Facing severe RoW issues in Kutch, and Morbi Districts as the land owners are asking for undue compensation. Support required from the concerned District Collectors for resolution of same.
- v. Working permission and support is required from District Collectors of Morbi and Kutch Districts to execute the construction work in Government land (40 locations), We are facing problems in the locality where undue compensation is being sought for Govt land.
- vi. Delay in grant of Forest clearance (Diversion of 47.827 Ha of Forest land) and Wildlife clearance (Diversion of 30.81 Ha of Wildlife land).

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 : DFO & CF Level

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 : At Wildlife warden level

Power line crossing

Total no. of crossings : 83 nos.
Proposal submitted : 83 nos.
Approval obtained : 24 nos.

Railway crossing

Total no. of crossings : 14 nos.
Proposal submitted : 10 nos.
Approval obtained : 0 no.

National Highway / SH Crossing

Total no. of crossings : 32 nos.
Proposal submitted : 32 nos
Approval obtained : 8 nos.

River Crossings

Total no. of crossings : 2 nos.
Proposal submitted : 2 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 on: Civil Aviation & Defence proposal submitted

Current Status: 30 out of 41 NOC for Civil aviation proposal received. Defence NOC received for Makarpura (Vadodara).

8. 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: 0% Equipment supplied: 0% Equipment erection: 0%

Scheduled COD 31st Dec'2020

Constraints/Approval if any:

- i. Delay in bidding process and Acquisition of SPV
- ii. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs.

9. 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: 0% Equipment supplied: 0% Equipment erection: 0%

Scheduled COD 31st Dec'2020

Constraints/Approval if any:

- i. Delay in bidding process and Acquisition of SPV
- ii. Delay due to occurrence of Force Majeure (FM) event i.e. outbreak of COVID-19 and this FM event has been intimated to all LTTCs.
- iii. Delay in getting the Substation land co-ordinates of Lakadia Substation from M/s Adani Transmission Limited (ATL)

10.330MVAr 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 31st Dec'2020

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

Background

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

Scope of transmission project

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

765 kV bay requirement (in Warangal)

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

400 kV bay requirement (in Warangal)

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

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

General Detail

Special Purpose Vehicle (SPV) : Warora Kurnool Transmission Ltd.

(A subsidiary of Essel Infraproj. Ltd)

Bid Process Coordinator (BPC) : PFCCL Estimated Cost (Rs. crs) : 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

Anticipated Date of Completion : Minimum 13 no. of working months

required from the date of resolution of coal mining issue related to WCL and

SCCL

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.
- 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) (Detailed update is provided in 'Other issues' section).

While WKTL has filed detailed petition (dated 5th 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 24th March to 14th 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 Licence 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. Adani Transmission Ltd has been declared successful bidder for acquisition of WKTL pursuant to public auction conducted by consortium lenders through an independent consultant.

Status of progress of transmission project

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

Land Acquired: 100%. Civil work completed: 47%

Equipment supplied: 60% substation material

10 no. of reactors

Equipment erection: Structrure erection & earthing work is in progress

Scheduled COD: Nov'19

Anticipated COD:

Constraints/Approval if any: Nil

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

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

Anticipated COD:

Constarints where Project Authority requires intervention:

- RoW issue: Severe RoW issue in the stretch of AP 5B AP 6, AP 15 AP 16, AP 27-AP 28, AP 58, AP 99A AP 102, AP 89 AP 90, AP 95-AP 96, AP 100A/1, AP 100A/2, AP 100A/3, AP 100A/5 and, 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. Under the continuously extended support by District Administration, the work could only be taken up at site.
- 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.
- Farmers in the section AP 89-AP 98 of 765 kV D/C Warora-Warangal Line (Maharashtra Section) have filed a writ petition (Civil) No 2269/2019 in the Nagpur Bench of Bombay High court against the compensation amount finalized by the District Magistrate Chandrapur. The hearing of the case is scheduled on 31/12/2019. Though, the Court has not passed any order till date in this case, however farmers are reluctant to continue our execution work on those respective locations.

Other issues:

 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:

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

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 1st Committee meeting, WKTL had joint survey with WCL, CMPDI, and CEA 0n 26th July 2019 and the alternative routes were explored. During discussion of WKTL with SCCL on 29th July 2019, 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 19th Sept 2019 at the Office of CEA. A meeting was convened by MoP on 19th September 2019 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 14th November 2019 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 16th January 2020. The recommendation of committee was sent on 04.02.2020 to the Ministry of Power.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations : 22

Length : 10.057 Kms

Forest area affected (ha) : 19.793 ha (2.954 Kms) in Maharastra +

47.592 ha (7.103 Kms) in Telangana

Forest proposals submitted on : Maha – 4th Aug 17, Telengana – 23 Aug 17

Current status : **Maharashtra –** Stage I received on 05.02.2018 **Telangana -** Stage – I received on 13th Dec

2018 and communicated by PCCF Office to

respective DFO on 24.12.2018.

Wildlife Clearanace

Details of Tr. Line Falling under Wildlife:-

Locations : 01 No. Length : 0.465 Kms

Forest area affected (ha) : 3.1142 ha (0.465 Kms) in Telangana

Forest proposals submitted on : **Telangana –** 26th Feb 18

Current status : Proposal forwarded by State Government to

Member Secretary (NBWL) on 20.11.2018. Proposal forwarded to NTCA for their recommendation and MoEF&CC asked State Govt. to submit SBWL MoM. The SBWL Telengana Govt. recommended the wildlife proposal to Member SEcy NBWL MoEF, New Delhi for trheir consideration and approval of the project .Next meeting of NBWL (National Board of Wildlife clearance, MoEF&CC, New Delhi)

expected in August 2020

Power line crossing

Total no. of crossings : 27 nos.

Proposal submitted : 27 nos. Date: Approval obtained : 20 nos. Date:

Railway crossing

Total no. of crossings : 5 nos.

Proposal submitted : 5 nos. Date: Approval obtained : 4 nos. Date:

National Highway Crossing

Total no. of crossings : 04 nos.

Proposal submitted : 04 nos. Date: Approval obtained : 04 nos. Date:

State Highway Crossing

Total no. of crossings : 05 nos.

Proposal submitted : 05 nos. Date: Approval obtained : 00 nos. Date:

River Crossings

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

PTCC approval

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

Current status:

Defence/Civil Aviation

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

Current Status: Approval awaited

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

Length: 265.218 ckm
Locations: 344 nos.
Foundation completed: 312 nos.
Tower erected: 247 nos.

Stringing completed:

Scheduled COD: Nov'19

Anticipated COD:

Constarints where Project Authority requires intervention:

RoW issue:

In the stretch of AP 10 - AP 11,AP 34 - AP 35, AP 37- AP 38, and AP 41- AP 42. Further at location nos. 47/2 & 47/3, 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.

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 03rd June 2019, 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 16th Mar 2018.
- 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 30.12.2019, the Court scheduled next date of hearing on 17.06.2020 in this matter. In such situation, the work is at stand still at this location effectively from 20th Mar 2018.

Status of statutory approvals:

Forest : Nil

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

Forest area(ha): Nil

Forest proposals submitted on

Current status:

Power line crossing

Total no. of crossings : 15 nos.

Proposal submitted : 15 nos. Date: Approval obtained : 10nos. Date:

Railway crossing

Total no. of crossings : 01 nos.

Proposal submitted : 01 nos. Date: Approval obtained : 0 nos. Date:

National Highway Crossing

01 nos. Total no. of crossings Proposal submitted 01 nos. Date: Approval obtained 01 nos. Date: **State Highway Crossing** Total no. of crossings 02 nos. Proposal submitted 02 nos. Date: 00 nos. Approval obtained Date: **River Crossings** Total no. of crossings Nil PTCC approval Proposal submitted to Defence on Proposal submitted to BSNL on Proposal submitted to Railways on Current status: **Defence/Civil Aviation** Proposal submitted to Defence/Civil Aviation: Defence & Civil aviation proposal submitted **Current Status:** Civil Aviation approval obtained. 4. Warangal (New) - Warangal (existing) 400 kV (quad) D/C line Length: 94.94 ckm Locations: 130 nos. Foundation completed: 09 nos Tower erected: Stringing completed: Nov'19 Scheduled COD: Anticipated COD: Constarints where Project Authority requires intervention:nil Status of statutory approvals: Forest - Nil Details of Tr. Line Falling under Forest:- Locations: Length: nos. Forest area affected (ha): Nil Forest proposals submitted on Current status: Power line crossing Total no. of crossings 05 nos. Proposal submitted 05 nos. Date: Approval obtained Date: nos.

Railway crossing Total no. of crossings

Total no. of crossings : 01 no.

Proposal submitted : nos. Date: Approval obtained : nos. Date:

National Highway Crossing

Total no. of crossings : 02 no.

Proposal submitted : nos. Date: Approval obtained : nos. Date:

River Crossings

Total no. of crossings : Nil

PTCC approval

Defence/Civil Aviation

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

Current Status:

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

Length: 331.58 ckm
Locations: 422 nos.
Foundation completed: 339 nos.
Tower erected: 183 nos.

Stringing completed:

Scheduled COD: Nov'19

Anticipated COD:

Constarints where Project Authority requires intervention:

- Work hampered due to severe RoW issue in the stretch of AP 27 AP 29, AP 60 A– AP 60 B and AP 66 AP 67.
- 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 discussions are in progress & awaited to be resolved.

Status of statutory approvals:

Forest - Nil

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

Forest area affected (ha): Nil

Forest proposals submitted on

Current status:

Power line crossing

Total no. of crossings : 21 nos.

Proposal submitted : 21 nos. Date: Approval obtained : 18 nos. Date:

Railway crossing

Total no. of crossings : Nil

Proposal submitted : nos. Date: Approval obtained : nos. Date:

National Highway Crossing

Total no. of crossings : 01 nos.

Proposal submitted : 01 nos. Date: Approval obtained : -- nos. Date:

State Highway Crossing

Total no. of crossings : 03 nos.

Proposal submitted : 03 nos. Date: Approval obtained : 00 nos. Date:

River Crossings

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

PTCC approval

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

Current status:

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on.. Defence & civil aviation proposal submitted

Current Status: Civil aviation approval obtained

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

Length: 394.33 ckm
Locations: 565 nos.
Foundation completed: 446 nos.
Tower erected: 341 nos.

Stringing completed:

Scheduled COD: Nov'19

Anticipated COD:

Constarints where Project Authority requires intervention:

Severe RoW issue existing in the stretch of AP 10–AP 11, AP 14-AP 15, AP 25–AP 28, AP 52-AP 53, AP 55–AP 56, AP 63–63/12, AP 76–AP 77, AP 84-AP 85 & AP 89–AP 90.

Court Case:

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

At present this matter is under consideration of Hon'ble High Court, Hyderabad. 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.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations : 07nos.

Length:Forest area affected (ha): 18.442 ha (2.75 Kms) in Andhra pradesh

Forest proposals submitted on : 23.08.2017

Current status : Stage –I forest approval granted on 28.11.18.

Stage I communicated by State Govt. to PCCF

office on 24.12.2018.

Power line crossing

Total no. of crossings : 29 nos.

Proposal submitted : 29 nos. Date: Approval obtained : 24 nos. Date:

Railway crossing

Total no. of crossings : 03 nos.

Proposal submitted : 03 nos. Date: Approval obtained : 02 nos. Date:

National Highway Crossing

Total no. of crossings : 01 no.

Proposal submitted : 01 nos. Date: Approval obtained : 01-- nos. Date:

State Highway Crossing

Total no. of crossings : 03 no.

Proposal submitted : 03 nos. Date: Approval obtained : 00 nos. Date:

River Crossings

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

PTCC approval

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

Current status:

Defence/Civil Aviation

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

Current Status

: Civil aviation approval obtained.

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

Scheduled COD: Nov'18

Under commercial operation w.e.f. 29.03.2019.

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

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 RRVPNL 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 (RRVPNL) Bhiwani (PG) D/C line 248.61 Ckm.
- 5. 4 Nos. of bays at 400 kV Babai (RRVPNL) 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 : _____

Status of progress of transmission project

1. Koteshwar 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: Awaiting NOC issue on IDPL Land

Project stalled because of unexpected delay in obtaining IDPL -NOC from Uttrakhand

State Govt.

Constarints where Project Authority requires intervention:

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

The forest diversion proposal for 400 kV D/C Rishikesh-Koteshwar 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.

We also requested DC (Dehradun, New Tehri, Tehri Garhwal) vide our letters dated 21st & 22nd 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 04th 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 Uttrakhand 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 us 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 Transmisison 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 us 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.

Recently 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 0n 10th December 2019. A new route has been proposed. NRSS XXXVI Trans.Ltd shall be remobilizing our team to check the feasility 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.

However, because of CORONAVIRUS (COVID-19) and the restriction imposed by Government of India towards movement, some delay is anticipated

• 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 21st 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 we had also applied for FRA Certificate and geologist survey report.

It is submitted that due to such change in transmission line route at later point of time adversely affected the progress of transmission line project because activities like selection and finalization of new alternative route, tree enumeration, completion of DGPS survey and land schedule will have to be initiated from zero level, which resulted in a significant time overrun for the construction of transmission project. It is also worth to

mention here that any deviation in transmission line route will result in increase in forest area through which transmission line will have to traverse. The exact quantum of increased forest area will be communicated post receipt of forest approval of this line.

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

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 .

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:

Civil work completed:

Equipment supplied:

Equipment erection:

Scheduled COD Dec'19

Anticipated COD:

Constraints where Project Authority requires intervention: nil.

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

Length:
Locations:
Coefficients

2.922 CKm
06 nos.
Foundation completed:
Tower erected:
Coefficients

30 Oct '17

4. Babai (RRVPNL) – 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

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.

Proposal submitted : 14 nos. Date: Approval obtained : 14 nos. Date:

PTCC approval: Proposal Under Approval

Current status:

Defence/Civil Aviation

Proposal submitted: 13.03.2018

Current Status: Civil Aviation approval received on 31.05.18

Approval from Defence received on 06.06.18

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

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

Under commercial operation.

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

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

Anticipated COD:

16) 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 substations.

Scope of transmission project:

- 1. North Karanpura Gaya 400kV D/c line with guad 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 subsidary 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 03.06.2016 Contract Performance Guarantee :

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:

 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: 72 nos (revised route)
 Tower erected: 59 nos (revised route)

Stringing completed: Nil

 Revised schedule completion date: 14 months from the date of NOC from CCL/MoC (considering receipt of forest approval within 200 days)

Constraints where Project Authority requires intervention:

a) 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. Currently FC proposal is processed by DFO and CCF of respective division and circle. The FC proposal is with Nodal Officer for recommendation to State Govt. However, GM-JJ Land NOC and FRA certificate is still awaited from respective DC offices. As around 397 days have passed and has

affected schedule adversely for reasons beyond control of NKTL. 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. In said meeting, NKTL had stated that NKTL will be able to complete the NK-C line in 9 months from the date of forest clearance. This is assuming that the COVID 19 situation will be over by the time NKTL gets the forest clearance.

- b) 132 kV Powerline Crossing approval from DVC: The approval from DVC for powerline crossing of their 132 kV line is yet awaited. Approval from DVC is on hold as NTPC has asked DVC to shift their line for NTPC's coal conveyor belt of external CHP. Shifting of this line is yet to be finalized by NTPC / DVC and is impacting execution works of 400 kV NKSTPP Chandwa line which is very much required for evacuation of power from NTPC's STPP. Subsequently, in meeting called by CEA on 16.03.20 it was informed that DVC has conducted detailed field survey and a joint meeting was scheduled on 24th Mar'20 at Kolkata. However, the said meeting got postponed due to lockdown and imposition of 144 as measure to take care of COVID 19. Later DVC's Line Diversion proposal technically cleared and joint site inspection held among DVC, NTPC and NKTL on 09.07.2020. Based on site inspection DVC has raised demand note to NTPC on 25.07.2020 for line diversion work.
- c) Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 3 months, after the situation is brought under control and lockdown is lifted, as the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. The country vide lockdown continues and presently operating with limited local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

Status of statutory approvals:

Forest (including multi-circuit portion)

Details of Tr. Line Falling under Forest:- Locations: 41 nos and Length: 12 Kms

Forest area affected (ha): 56.3254 Ha Forest proposals submitted on: 17.06.2019

Current status: Proposal is at DFO level and NOC of GM – JJ land from Revenue Dept. is

awaited for forward processing.

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

Power line crossing

Total no. of crossings : 3 nos.
Proposal submitted : 3 nos.
Approval obtained : 2 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

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

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation
Current Status: Submitted

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

Length (as per revised route): 196 Ckm
Locations (as per revised route): 285 nos
Route alignment completed: 196 Ckm
Detailed survey completed: 190 Ckm

Foundation completed: 107 nos (on revised route)
 Tower erected: 70 nos (on revised route)

Stringing completed: Nil

Revised schedule completion date: 23 months from the date of NOC from

CCL/MoC (considering receipt of forest

approval within 300 days)

Constraints where Project Authority requires intervention:

a) 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. Currently FC is at Nodal office. 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. Proposal is yet to be accepted by Nodal Officer and around 306 days have passed and is on critical path. 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. During the said meeting, NKTL informed that NK-G line will be commissioned within 12 months from the date of Forest Approval. This is assuming that the COVID 19 situation will be over by the time NKTL gets the forest clearance. b) Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 – 3 months, after the situation is brought under control and lockdown is lifted, as the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. The country vide lockdown continues and presently operating with limited local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

Status of statutory approvals:

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

Details of Tr. Line Falling under Forest:- Jharkhand(JH) - Locations: 150 nos. and Length: 42 kms and Bihar(BH) – Location: 1 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: uploaded 20.07.2019 for JH portion & 01.08.2019 for BH portion

Current status: Proposal on revised route has been submitted within the timeline committed to CEA. Acceptance from Nodal Officer is still awaited for JH portion.

Power line crossing

Total no. of crossings	:	10	nos.
Proposal submitted	:	10	nos.
Approval obtained	:	4	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 : 0 nos.

PTCC approval

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

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation

Current Status: Submitted

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

Land acquired: completed

Civil works completed
Equipment supplied
Equipment erected
0%

Scheduled completion date: 07.05.2019

Revised schedule completion date: 18 months from date of NOC from CCL/MoC

Constraints where Project Authority requires intervention:

Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 – 3 months, after the situation is brought under control and lockdown is lifted, as the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and will also require a lot of extra expenses towards mobilization and de-mobilization. The country vide lockdown continues and presently operating with limited local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

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

Length: 2.4 CkmLocations: 4 nos

Revised schedule completion date: 18 months from date of NOC from CCL/MoC

Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 – 3 months, after the situation is brought under control and lockdown is lifted, as the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. The country vide lockdown continues and presently operating with limited local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

17) Transmission System for Ultra Mega Solar Park in Fatehgarh, Distt. Jaisalmer Rajasthan

Background

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

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

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

Scope of transmission project:

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

General Detail

Special Purpose Vehicle (SPV) : Fatehgarh-Bhadla Transmission Limited

(A subsidiary of Adani Transmission

Limited)

Bid Process Coordinator (BPC) : Power Finance Corporation

Estimated Cost (Rs. crs) : 624

Request for Qualification : 30.12.2016
Request for Proposal : 30.04.2017
Letter of Intent : 21.02.2018
Transmission Service Agreement(TSA) : 10.01.2018
SPV acquisition : 14.03.2018

Transmission License by CERC : 27.08.2018 (Order date)

Tariff adoption by CERC : 27.08.2018

Contract Performance Guarantee : 12.03.2018

Clearance u/s 164 : Authorization on revised route received

on 14.11.2019 after 110 days.

Execution plan to CEA : 09.07.2018

NIT issued on

EPC contract awarded on

Scheduled Date of Completion : 30.09.2019

Anticipated Date of Completion : Dec'20, however, it can be ascertained

Only once the situation normalizes from

current restriction due to pandemic COVID-19

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

Length (as per revised route): 292 ckm
Locations (as per revised route): 405 nos

• Foundation completed: 384 nos (on revised route)

 Earlier casted 24 nos will be scraped due to re-routing on account of GIB arc and another 19 nos. scraped due to height restrictions laid in Defence Aviation NOC dated 16.12.2019.

Tower erected: 323 nos (on revised route)

Stringing completed: 206 ckmSchedule completion: 30.09.2019

Anticipated completion: Dec'20, however, it can be ascertained

only once the situation normalizes from current

restriction due to pandemic COVID-19

Constraints where Project Authority requires intervention:

- a) Defence NOC: Conditional NOC has been received from Defence authority on 16.12.2019. Severe height restrictions has been levied by authority and have asked to reduce the tower heights of 50 towers by 35 to 50 Mtrs near Phalodi Airport both within and outside the funnel area, This has impacted ~54 towers and new towers are required to be designed to comply the conditions stipulated in the NOC. Detailed designing of these new truncated towers and survey activities with revised tower spotting data has been completed. This line was targeted to be completed by Mar'20, however, due to this aforementioned conditional NOC, it required to develop new truncated towers which will be used first time in INDIA and number of towers required have increased as spans have to be reduced to meet required clearances and comply with conditions related to height restrictions laid in NOC. Furthermore, 19 foundations have to be scrapped. This developments will lead to revised estimated completion timeline of this line and FM notice as per TSA provision to this effect have been served to LTTCs on 15.01.2020. Compliance to NOC have been submitted to Defence Authority on 20.02.2020. Foundation activities at these truncated towers were commenced before imposition of lockdown.
- b) Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 – 3 months, after the situation is brought under control and lockdown is lifted, as

the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC.. The country vide lockdown continues and presently operating with limited local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

- c) Powerline crossing approval from Reliance Solar: Proposal was submitted on 14.06.19, approval is still awaited for the same. FBTL had also submitted undertaking to do Hot line crossing. Reliance Solar is yet to respond. Due to non responce of reliance solar crossing work has been completed through hot line crossing method.
- d) Powerline crossing approval from Terraform Global: Proposal was submitted on 02.07.19, approval is awaited. However, Terrafoam Global is insisting a clause for power line crossing, which is neither standard utility practice and nor applicable. The same was conveyed to Terrafoam Global via mail dated 21.04.20. CEA and SLDC, Heerapura has been requested for intervention in this matter for early approval. It has been communicated to Terraform via mail dated 09.03.20 that crossing will be done by Hotline method.
- e) Delay in receipt of forest clearance: Proposal was submitted in Jun'19; however after passage of about 12 months, Stage-1 approval received from Regional MoEF, Lucknow on 16.06.2020. Subsequntly, working permission received on 28.07.2020.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- Length: Forest area affected (ha): 1.33 Ha (on revised route)

Forest proposals submitted on 27.06.2019 (for revised route)

Current status: Line was not allowed to pass on original route factoring the habitant of GIB, even with provision of bird deflectors/diverters and hence had to be re-routed based on the letter received from DNP, Jaisalmer. Forest proposal for revised route have been uploaded. Stage-1 approval received from Regional MoEF, Lucknow on 16.06.2020. Subsequently, working permission received on 28.07.2020.

Power line crossing (on revised route)

Total no. of crossings : 10 nos. Proposal submitted : 10 nos. Approval obtained : 8 nos.

Railway crossing (on revised route)

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

National Highway Crossing (on revised route)

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

PTCC approval (on revised route)

Proposal submitted to BSNL in : Proposal submitted to Railways in :

Current status: : approval received

Defence/Civil Aviation (on revised route)

Proposal submitted to Defence/Civil Aviation: conditional NOC received

Current Status: on 16.12.2019

(ii) Establishment of 400 KV Pooling Station At Fategarh

• Land acquisition: Sub-lease agreement has been signed

between FBTL & Beneficiary.

Engineering: 100%
Equipment supplied: 100%
Civil Works: 97%
Erection works: 93%

Schedule completion: 30.09.2019

Anticipated completion: Dec'20, however, it can be ascertained once

situation

normalizes from current restriction due to

pandemic COVID-19

Constraints where Project Authority requires intervention:

Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 – 3 months, after the situation is brought under control and lockdown is lifted, as the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. The country vide lockdown continues and presently operating with limited local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

(iii) 2 nos of 400 kV line bays at Fatehgarh Pooling substation

• Schedule completion: 30.09.2019

 Anticipated completion: Dec'20, however, it can be ascertained once situation normalizes from current restriction due to pandemic COVID-19

(iv) 1x125 MVAR Bus reactor at 400kV Fatehgarh Pooling sub-station along with associated bay

• Schedule completion: 30.09.2019

 Anticipated completion: Dec'20, however, it can be ascertained once situation normalizes from current restriction due to pandemic COVID-19

18) Transmission System Associated with LTA applications from Rajasthan SEZ Part-D

Background

Government of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. Towards this, solar generation potential of about 3.55 GW in Bhadla complex, 3.5 GW in Fatehgarh complex and 1.85 GW in Bikaner has been envisaged. For integration and evacuation of power from generation projects in the above areas, a high capacity 765 kV and 400 kV transmission system interconnecting Bhadla, Fatehgarh, Bikaner, Sikar & Khetri along with establishment of 765/400 kV new substation at Bhadla-II, Fatehgarh-II & Khetri have been planned.

The subject transmission scheme involves implementation of Bikaner – Khetri 765 kV D/C line which shall help in transfer of power from RE sources in above complexes for onward dispersal of power to various beneficiaries.

The proposal has been technically agreed in the 2nd meeting of Northern Region Standing committee on Transmission (NRSCT) held on 13.11.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementing through TBCB route with a commissioning schedule as 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 : application submitted to CEA on

29.01.2020 and is under review

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: 472 ckm
Locations: 611 nos
Foundation completed: 505 nos
Tower erected: 134 nos
Stringing completed: 0 ckm
Schedule completion: 31.12.2020

Anticipated completion: Mar'21, however, it can be ascertained

only once the situation normalizes from current restriction due to pandemic

COVID-19

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. Plan layout of Khetri S/S was provided by PGCIL on 03.07.2020. However, primary & secondary engineering documents are still awaited from PGCIL. This delay has adversely affected Engineering activities of Bay construction and has impacted on subsequent construction activities as now only 5 months are left to achieve SCOD. Furthermore, route finalization of transmission line along with submission of statutory proposals is also getting affected. Non-availability of details has impact on achieving SCoD and thus FM notice to this effect has been submitted on 18.12.19. Request letter has been submitted to CEA on 14.04.20 for extending support in the matter of delay in receipt of inputs
- b) Pandemic COVID 19 situation had become uncontrollable since last week of Feb'20 and the work is affected at site. Deliveries of materials started getting affected since beginning of Feb'20. Further, the situation will take at least 2 3 months, after the situation is brought under control and lockdown is lifted, as the sites have been demobilized and most of the migrant workers have left sites and balance also insisting to leave site since the Govt. has allowed travel for migrant workers and they will return to work only after the situation stabilizes completely. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. The country vide lockdown continues and presently operating with limited

local workers. This has impacted entire project progress including approval of Statutory proposals. FM & CIL notices has been accordingly submitted.

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:- Locations: 3 nos and Length: 0.767 KM Forest area affected (ha): 5.137 Ha

Forest proposals submitted on: 03.06.20*

Current Status: Proposal has been accepted by Nodal Officer on 29.06.20 and Proposal is pending at DFO level.

P	ow	er	line	cro	ssing
-		•			

Total no. of crossings	:	26	nos.
Proposal submitted	:	26	nos.
Approval obtained	:	20	nos.

Railway crossing

Total no. of crossings	:	05	no.
Proposal submitted	:	05	no.
Approval obtained	:	0	no.

National Highway Crossing

Total no. of crossings	:	04	nos.
Proposal submitted	:	04	nos.
Approval obtained		0	no.

PTCC

Proposal submitted to BSNL in : Proposal submitted to Railways in :

Current status: : Submitted on 09.07.2020, Proposal preparation

impacted due to non-availability of termination

details at Khetri S/S from KTL/PGCIL.

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation:

Current Status: Submitted on 14.07.2020, proposal preparation

is impacted due to non-availability of termination

details at Khetri S/S from KTL/PGCIL

^{*} 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.

19) Transmission System for Western Region Strengthening Scheme – 21 (WRSS – 21) Part – A – Trasnsmission System Strengthening for Relieving Over Loadings Observed in Gujarat Intra-State System Due to Re-injections in Bhuj PS

Background

Government of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. This includes wind potential of about 6 GW in Bhuj complex, 2 GW in Lakadia and 1.5 GW in Dwarka. For integration and evacuation of power from generation projects in the above areas, a high 765 kV and 400 kV transmission system interconnecting Bhuj, Lakadia, Banaskantha, Vadodara & Dwarka along with establishment of 765/440/220 kV new substations at Bhuj-II & Lakadia and 400/220 kV new substation at Jam Khambhaliya (Dwarka) have been planned.

The subject transmission scheme involves establishment of 765/400 kV Lakadia Pooling station along with LILO of Bhachau – EPGL 400 kV D/C (triple) line at Lakadia PS and Bhuj PS – Lakadia PS 765 kV D/C line which helps in transfer of power from RE sources in the Kutch area of Gujarat (Bhuj complex) to Lakadia for onward dispersal of power to their respective beneficiaries.

The proposal has been agreed in the 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 05.09.2018. The same was agreed in the 3rd ECT meeting on 21.12.2018 for implementing through TBCB route with a commissioning schedule as December, 2020.

Scope of transmission project:

- 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 MVAr, 765 kV,
 - 1x125 MVAr, 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 Final clearance received 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 : 30.04.2021*

➤ 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.

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

Length: 214 ckm (ii) (iii) Locations: 287 nos Foundation completed: (iv) 73 nos (v) Tower erected: 2 nos (vi) Stringing completed: 0 ckm Schedule completion: 31.12.2020 (vii)

(viii) Anticipated completion: 30.04.2021*

*Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

Constraints where Project Authority requires intervention:

a) Facing severe Row: We are 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, we have taken up this matter with administration for resolution and applied to District Collector (DC). Application submitted for 33 villages out of total 37 villages All files are forwarded to Mamlatdar office. DC has issued an order for compensation for RoW (Lodai Village), thereby

^{*}Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

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 we have approached to administration for Police Protection however due to current Covid-19 they denied to provide Police Protection.

Apart, it is noticed that after application to DC to issuance of final order for compensation it took 3-4 month which also major area of concern for such stressed targeted projects. This timeline must be curtailed down so expedite process in the national interest. Further, due to Covid-19, DM also postponing hearing which is leads to further delay in issuance of order.

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 us to work.

- b) Finalization of Tapping point and Route finalization near Bhuj: PGCIL to tap 765kV D/C Bhuj- Lakadia line at Bhuj-2 SS for which tapping proposal from PGCIL is awaited because of which 2.5 Kms route of 765kV D/C Bhuj-Lakadia line is on hold, which needs to be needs to be taken up on priority.
- c) Pandemic COVID 19: As apprised in last month report that situation had become uncontrollable since last week of Feb'20 and entire supply chain as well as works is affected at site. Further, the situation has not been normalized till date as gangs have gone to their native places & only few gangs are available at site. Further, Gangs are not willing to move considering present situation, so arranging resources is very challenging task.

Apart from this, due to lockdown most working season in transmission line projects i.e. March to June had been lost due to COVID-19 lockdown & its effects. Further, we already entered into monsoon season which will further delay work at site and gangs also tends to remain native because of monsoon so probably by Sept'20 they will back to site. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. Accordingly, FM & CIL notices as per TSA provisions have been submitted. This has impacted project progress incl. approval of various statutory proposals.

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: Proposal signed from Forest Minister (State Goverment) & forwarded to RmoEF, Bhopal on 29.06.2020.

Power line crossing

Total no. of crossings : 17 nos. Proposal submitted : 17 nos. Approval obtained : 10 nos.

Railway crossing

Total no. of crossings : NIL

National Highway Crossing

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

PTCC

Proposal submitted to BSNL in : clearance received for IV(interference Voltage)
Proposal submitted to Railways in : clearance received for IV(interference Voltage)

Current status: : NOC Received on 28.07.2020.

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation:

Current Status: Proposal submitted on 06.02.2020

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: 118 nos
Foundation completed: 05 no
Tower erected: 0 nos
Stringing completed: 0 ckm
Schedule completion: 31.12.2020
Anticipated completion: 30.04.2021*

Constraints where Project Authority requires intervention:

- 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. Receipt of Authorization U/S 164 will help in arranging support from local administration.
- b) Pandemic COVID 19: As apprised in last month report that situation had become uncontrollable since last week of Feb'20 and entire supply chain as well as works is affected at site. Further, the situation has not been normalized till date as gangs have gone to their native places & only few gangs are available at site. Further, Gangs are not willing to move considering present situation, so arranging resources is very challenging task.

Apart from this, due to lockdown most working season in transmission line projects i.e. March to June had been lost due to COVID-19 lockdown & its effects. Further, we already entered in the monsoon season which will further delay work at site and gangs also tends to remain native because of monsoon so probably by Sept'20 they will back to site. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. Accordingly, FM & CIL notices as per TSA

^{*}Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

provisions have been submitted. This has impacted project progress incl. approval of various statutory proposals.

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-1 clearance received on 28.07.2020

Power line crossing

Total no. of crossings : 28 nos. Proposal submitted : 28 nos. Approval obtained : 14 nos.

Railway crossing

Total no. of crossings : 04 no. Proposal submitted : 04 no. Approval obtained : 00 no.

National Highway Crossing

Total no. of crossings : 04 nos. Proposal submitted : 04 nos. Approval obtained : 00 no.

PTCC

Proposal submitted to BSNL in : Proposal submitted to Railways in :

Current status: : proposal submitted on 05.03.2020

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: UnderprogressEquipment supplied: Under progress

Civil Works: Commenced in aguired land.

Erection works:

Schedule completion: 31.12.2020
Anticipated completion 30.04.2021*

Constraints where Project Authority requires intervention:

^{*}Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

a) Pandemic COVID - 19: As apprised in last month report that situation had become uncontrollable since last week of Feb'20 and entire supply chain as well as works is affected at site. Further, the situation has not been normalized till date as gangs have gone to their native places & only few gangs are available at site. Further, Gangs are not willing to move considering present situation, so arranging resources is very challenging task.

Apart from this, due to lockdown most working season in projects i.e. March to June had been lost due to COVID-19 lockdown & its effects. Further, we already entered in monsoon season which will further delay work at site and gangs also tends to remain native because of monsoon so probably by Sept'20 they will back to site. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. Accordingly, FM & CIL notices as per TSA provisions have been submitted. This has impacted project progress incl. approval of various statutory proposals.

20) 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.
- 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

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

Length: 352 ckm
Locations: 473 nos
Foundation completed: 75* nos
Tower erected: 10 nos
Stringing completed: 0 ckm
Schedule completion: Jun'21

Constraints where Project Authority requires intervention:

Pandemic COVID – 19: : As upraised in last month that situation had become uncontrollable since last week of Feb'20 and entire supply chain as well as works is affected at site. Further, the situation has not been normalized till date as gangs have gone to their native places & there are no gangs available at site to work now. The 4 no's most working season in transmission line projects i.e. March to June have been lost due to COVID-19 lockdown & its effects. Further, the monsoon months of July & August are just around the corner & It may take at least 1 - 2 months more before the adequate labor gangs are back at site. Accordingly, FM notices as per TSA provisions have been submitted. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. Accordingly, FM & CIL notices as per TSA provisions have been submitted. This has impacted project progress incl. approval of various statutory proposals.

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 – proposal submitted on 13.01.2020.

Current status:

Forest proposal has been forwarded to Nodal Officer, Ghandhinagar Wildlife proposal accepted by CF and is ready for submission to CWW, Gandhinagar

Power line crossing

Total no. of crossings : 33 nos.

Proposal submitted	:	33	nos.
Approval obtained	:	13	nos.

Railway crossing

Total no. of crossings	:	02	no.
Proposal submitted	:	02	no.
Approval obtained	:	0	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: :

Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation:

Current Status: Civil Aviation Proposal submitted

Defence Aviation Proposal submitted

21) Transmission System for Jam Khambaliya Pooling Station and Interconnection of Jam Khambaliya Pooling Station for Providing Connectivity to RE Projects (1500 MW) in Dwarka (Gujarat) and Installation of 400/220 kV ICT along with Associated Bays at CGPL Switchyard

Background

Connectivity System for RE projects (1500 MW) in Dwarka (Gujarat)

Govt. of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. This includes wind potential of +about 6GW in Bhuj complex, 2GW in Lakadia and 1.5GW in Dwarka. For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400kV transmission system interconnecting Bhuj, Lakadia, Banaskantha, Vadodara & Dwarka along with establishment of 765/400/220kV new substations at Bhuj-II & Lakadia and 400/220kV new substation at Jam Khambhaliya (Dwarka) have been planned.

The subject transmission scheme involves establishment of 400/220kV Jam Khambhaliya Pooling station along with extension of Essar–Lakadia/ Bhachau 400kV D/c (triple snowbird) line upto Jam Khambhaliya PS for providing connectivity to RE projects in Dwarka (Gujarat). This could be utilized for injection of power (~1500 MW) from wind or solar projects in the area.

The proposal has been agreed in the 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 5.9.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementation through TBCB route with a commissioning schedule of June, 2020.

Installation of 400/220 kV ICT along with associated bays at M/s CGPL Switchyard

Over the years, the National Grid has become robust; however, the systems have also become more complex and the uncertainties have increased a lot, particularly in terms of weather and natural calamities. This leads to low probability high impact incidents impacting pockets of the grid often leading to prolonged power supply outages. Therefore, Resilience of the grid becomes important. A resilient system recognizes the fact that there can be failures in the system but has well proven systems for quick revival.

The same principle also applies to large power plants like the Ultra Mega Power Projects (UMPPs) and other large power stations. In view of the above, the 500 MVA, 400/220 kV ICT at CGPL Mundra was agreed by the members during the 1st WRSCT meeting held on 05.09.2018 from the viewpoint of having a resilient system in place. The scheme would provide the startup power to CGPL through Nanikhakhar-CGPL 220 kV S/C line (existing). The line would normally be kept open from CGPL end. The scheme was

discussed in the 2nd NCT meeting held on 04.12.2018 & 3rd ECT meeting held on 21.12.2018 wherein it was agreed to implement the same through TBCB route.

Scope of transmission project:

A) Jam Khambhaliya Pooling Station for providing connectivity to RE projects (1500 MW) in Dwarka (Gujarat)

- 1. Establishment of 4x500 MVA, 400/220 kV Jam Khambhaliya PS (GIS).
- 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 Khambaliya 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 :

NIT issued on

EPC contract awarded on : awarded on 31.01.2020

Scheduled Date of Completion : 31.03.2021 Anticipated completion : 30.06.2021*

^{*}Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

➤ 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: commenced and under progress

- Equipment supplied:
- Civil Works:
- Erection works:

Schedule completion: 31.03.2021Anticipated completion 30.06.2021*

*Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

Constraints where Project Authority requires intervention:

a) Pandemic COVID - 19: As apprised in last month report that situation had become uncontrollable since last week of Feb'20 and entire supply chain as well as works is affected at site. Further, the situation has not been normalized till date as gangs have gone to their native places & only few gangs are available at site. Further, Gangs are not willing to move considering present situation, so arranging resources is very challenging task.

Apart from this, due to lockdown most working season in projects i.e. March to June had been lost due to COVID-19 lockdown & its effects. Further, we are onset of monsoon season which will further delay work at site and gangs also tends to remain native because of monsoon so probably by Sept'20 they will back to site. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. Accordingly, FM & CIL notices as per TSA provisions have been submitted. This has impacted project progress incl. approval of various statutory proposals.

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

Length:

Locations:
Foundation completed:
Tower erected:
Stringing completed:
Schedule completion:

Anticipated completion
38 ckm
0 nos
0 ros
0 ckm
Mar'21
30.06.2021*

*Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

Constraints where Project Authority requires intervention:

a) Pandemic COVID - 19: As apprised in last month report that situation had become uncontrollable since last week of Feb'20 and entire supply chain as well as works is affected at site. Further, the situation has not been normalized till date as gangs have gone to their native places & only few gangs are available at site. Further, Gangs are not willing to move considering present situation, so arranging resources is very challenging task.

Apart from this, due to lockdown most working season in transmission line projects i.e. March to June had been lost due to COVID-19 lockdown & its effects. Further, we are already entered onto monsoon season which will further delay work at site and gangs also tends to remain native because of monsoon so probably by Sept'20 they will back to site. This will call for delay by a much longer period and may also incur additional expenditure on account of mobilization, de-mobilization, Management expenses and IDC. Accordingly, FM & CIL notices as per TSA provisions have been submitted. This has impacted project progress incl. approval of various statutory proposals.

b) Authorization of under section 164 of EA'03: Receipt of Authorization U/S 164 will help in arranging support from local administration, which is still awaited.

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 : 01 nos. Proposal submitted : 01 nos. Approval obtained : 0 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:

Civil Works:

• Erection works:

Schedule completion: 31.03.2021

- Anticipated completion June'21*
- *Estimated based on considering present scenario, it is subjected to change depending upon complete outbreak of Covid-19.

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. 2ND Meeting was scheduled on 25.06.2020 and CEA will take-up matter with CGPL. 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.

22) Name of transmission project - North Eastern Region Strengthening Scheme (NERSS-VI)

Background

The expansion of 400 kV network in NER is planned through new 400 kV line and up gradation of existing 400 kV lines presently charged at 132 kV to its rated voltage of 400 kV. A 400 kV ring is being established in Assam and Megahlaya connecting Silchar – Misa – Balipara – Bongaigaon – Azara/Byrnihat - Silchar substations. Another 400 kV ring in being established interconnecting Assma and Tripura through Silchar – Palatana – Surajmaninagar – P. K. Bari – Silchar corridor.

The extension of 400 kV system to the states of Manipur and Nagaland by interconnecting them with Assam has been planned through a 400 kV ring connecting Silchar- Imphal – New Kohima – New Mariani – Misa – Silchar along with new 400 kV substation at New Mariani and charging the New Mariani – Misa line at its rated voltage of 400 kV. Additionally, the Silchar- Imphal – New Kohima- New Maraiani – Misa corridor would be an alternate for Silchar – Misa line.

The present scheme will form the Imphal – New Kohima – New Mariani section of Silchar-Imphal – New Kohima – New Mariani – Misa – Silchar 400 kV ring along with establishment or new 400/200 kV substation at New Kohima. This would require up gradation of the New Mariani S/s of POWERGRID to 400 KV and LILO of the Kathalguri – Misa D/C line at New Mariani S/s along with charging of Misa – New Mariani section at rated voltage of 400 KV (under the scope of POWERGRID). The New Mariani – Kathalguri section would be kept charged at 220 KV.

The subject scheme has been approved in the 5th Standing Committee Meeting on Power System Planning of North Eastern Region held on 08-08-2015 at Imphal, 15th NERPC/TCC meeting held on 21-08-2015 at Guwahati and 35th Empowered Committee meeting on Transmission held on 14-09-2015 at New Delhi.

Scope of transmission project:

A. Establishment of 400/220 kV, 7x167 MVA s/s at new Kohima

400 kV

ICTs: 400/220 kV, 7x167 MVA

ICTs bays: 2 nos. Line bays: 4 nos.

Bus Reactor: 2x125 MVAR 400 kV bus reactor bays: 2 nos.

Space for future bays: 4 nos. (along with space for switchable line reactor)

220 kV

ICTs bays: 2 nos. Line bays: 4 nos.

Space for future bays: 4 nos.

Space for 400/220 kV 500 MVA ICT along with associated bays

B. Imphal-New Kohima 400 kV D/C line (Twin Moose ACSR)

General Details

Special Purpose Vehicle : Kohima-Mariani Transmission. Ltd

Bid Process Coordinator (BPC) : Power Finance Corporation

Request for Qualification : 15.02.2016
Request for Proposal : 25.11.2016
Letter of Intent : 17.01.2017
Transmission Service Agreement (TSA) : 02.09.2016
SPV acquisition : 31.03.2017
Transmission License by CERC : 10.07.2017
Tariff adoption by CERC : 06.07.2017
Contract Performance Guarantee : 07.03.2017

Clearance u/s 164 : Obtained in Feb'18

Execution plan submitted to CEA : 29.07.2017

NIT issued on : 14.01.2016

EPC contract awarded on : 28.06.2017

Scheduled Date of Completion : 31st Jul. 2020

Scheduled Date of Completion : 31st Jul. 2020
Actual Date of Completion : 31st Jul. 2020 (Element no. 1 & no. 3)

Anticipated Date of Completion : 30th Sep. 2020 (Element no. 2)

Status of progress

Hindering Factor for Commissioning

a) National Highway approval: - 04 nos. approval pending

b) Power Line Crossing: - 03 nos. approval pending

c) Non-readiness of downstream in Nagaland - <u>Construction of Downstream</u> <u>Connectivity with State power, Govt. of Nagaland is required to be started on top</u> priority

d) Non-readiness of PGCIL Substation at Mariani Assam.

1. Establishment of 400/220 kV, 7x167 MVA s/s at new Kohima

• Schedule COD Jul' 2020.

o Testing of all 7 Transformers completed

Testing of both the Reactors completed

2. Imphal-New Kohima 400 kV D/C line

Status of progress

Length: 135.77 Km approx. Locations: 324 Nos approx.

Foundation completed 323 nos Tower erected 314 nos Stringing completed 123.191 km Schedule COD: Jul'2020

Constraints where Project Authority requires intervention:

- a) There is minimal progress due to lockdown imposed in north eastern states upto 31st July 2020..
- b) Due to Pandemic condition of COVID-19 Corona virus outbreak & imposition of National Lockdown, the physical movement of material, manpower, documents & vehicles is severely hindered and restricted.
- c) Due to COVID 19 restrictions, KMTL not able to work as per the schedule output there has been restrictions for number of workers & working time
- d) The Lockdown has been extended upto August 2020 resulting in delay in execution of the project for Element no. 2
- e) Not able to mobilise specialised resources due to 14 days of quarantine & non-availability of rooms for accommodation
- f) Frequent rains haulting the works and making the working unsafe and risky
- g) ROW Issues are as follows:

Activity	Loc.	Issues
Manipur		
Erection	4 nos.	Work in Progress at Loc. 1/0, 134A/0, 135/0 and 141/0
Erection	2 nos.	Work under Hold at Loc. 77/0 and 78/0 (1.458 Kms)
Stringing	7.54 Kms	Other than above locations, work under hold in 138/0-139/0, 141A0-143/0 and 157/0-158/0
Nagaland	1 11110	1117 to 11676 and 16176 16676
Foundation	207/0	Erection at loc. 206/0 & 208/0 completed in Feb. 2020 & Dec. 2019. Land Owner demanding for Line diversion (Village - Cheshama) as constructed house to have more distance required from the line - Matter pending at Kohima DC Officials
Erection	197/0 198/0 199/0	Foundation at 197/0, 198/0 & 199/0 re-casted due to ROW Erection will be taken up after curing
Stringing	4.96 kms	Foundation balance at loc. 207/0 (1.650 kms) Erection balance from 197/0 to 199/0 (2.001 kms) Shutdown awaited 173/0 to 174/0 (1.082 kms)

Status of statutory approvals:

Forest

Details of Tr. Line Falling under Forest:-

Locations: 91 nos. Approx.,

Length: 41.647 KM

Forest area affected (ha): 191.62

Forest proposals submitted on 14.08.2017 (online) & 28.08.20017 (Hard copy).

Status: The Stage 1 approval was received on 24.01.2019. (payment is paid to forest department) .The working permission File has been approved by forest office.

Current Status: -Working permission has been granted on 07.03.2019.

Power line crossing

Total no. of crossings : 10 nos

Proposal submitted : 10 nos. Date:15.11.19 (latest submission

date)

Approval obtained : 07 nos. Date: 29.04.19,17.10.19,21.11.19 &

21.01.20.21-04-20

Status : 03 case are under process at Concerned

Authority(PGCIL).

Railway crossing

NIL

National Highway Crossing

Total no. of crossings : 8 nos

Proposal submitted : 8 nos. Date:10.04.2019 (latest submission

date)

Approval obtained : 3 nos. Date: 22.11.18 & 27.04.19

Current Status : 5 cases are under process at Concerned

Authority.

River Crossings

NIL

PTCC approval

• Current Status: Approval dated 27th Jul. 2020 from PTCC, New Delhi.

Defence/Civil Aviation Proposals

Defence Aviation: Proposal submitted on 13.02.2019 Current Status: NOC granted vide letter dtd-31.07.2019.

Civil Aviation:

Manipur: Proposal submitted on 13.02.2019 (same was re-submitted on 14.04.19,

12.06.19, 10.08.19, 03.10.19, 25.10.19 & 18.11.19)

Current Status :- NOC Granted

Nagaland: Proposal submitted on 24.12.2019 (Same was re-Sumitted on 04.01.20)

Current Status :- NOC Granted

3. New Kohima - Mariani 400 kV D/c line

Status of progress

Length 118.20 Km Approx.
Locations: 282 Nos Approx.

Schedule COD: Jul'2020.

Line is declared achieved scheduled COD as on 31st Jul. 2020

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 APTEL

Status of progress of transmission project:

The Company had approached Central Electricity Regulatory Commission (CERC) for allowing tariff revision and Force Majeure due to delay in grant of clearance u/s 164 of Electricity Act (EA). CERC notified an unfavorable order dated 09.05.2013, which was later challenged by NKTCL in Appellate Tribunal for Electricity (ATE). ATE allowed the appeal filed by company and set aside the unfavorable CERC order.

Pursuant to the ATE Order dated 02.12.2013, written requests were sent to the beneficiaries seeking following main reliefs to mitigate effect of Force Majeure in line with the prayers allowed in appeal:

- a) Re-fixation of implementation time of the Project as was originally envisaged considering zero date as issuance of section 68 approval from MoP.
- b) Tariff Increase to the tune of 160%.

Concerned utilities in Tamilnadu, Gujarat and Maharashtra have appealed against the order of ATE in the Supreme Court of India. First hearing was held on March 07, 2014 in case of Gujarat and April 21, 2014 in case of Maharashtra. The Tamilnadu petition has been merged with Gujarat. The matter is going in the Registrar court and notices are being served on all the beneficiaries. Once the servicing is complete the matter will be argued in Supreme Court. All the petitions filed by beneficiaries have been clubbed together by SC. The petition has been admitted and next hearing is awaited.

Further, on March 04, 2014, CERC reopened Power Grid Corporation of India Limited's (PGCIL) petition nos. 19 and 20 seeking revocation of license of the company and transferring the project to them on cost plus model and at the risk and cost of Reliance Power Transmission Limited (the Holding Company). CERC notified an order dated 02 Sep 2015, against the said petition for revocation of transmission license. NKTCL filed Appeal No. 200 of 2015 & IA-337 of 2015 in ATE challenging the above mentioned CERC order. ATE rejected the IA meant for stay but allowed the appeal. NKTCL filed a Civil Appeal number 9291 of 2015, in SC against ATE's order. Supreme Court has given a stay order directing no coercive action to be taken by CERC.

SC on 12th August has disposed of the appeal and directed ATE to decide on the appeal. An Interim Application (IA Nos. 479 & 480 of 2018) was filed in ATE. APTEL in its hearing dated 01st Feb 19 disposed off the case directing to go back to CERC for a fresh treatment - including (but not limited to) the aspect of the very necessity of NK and TT transmission system. A petition has been filed with a stay application in CERC for redressal of grievances. CERC has directed PGCIL to file an affidavit on the necessity of the project. The case is ongoing in CERC. Next Hearing date 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 APTEL

Status of progress of transmission project

- 1. Talcher II Rourkela 400 kV D/C (Q) line
- 2. Talcher II Behrampur 400 kV D/C line
- 3. Behrampur Gazuwaka 400 kV D/C line
- 4. 2x315 MVA, 400/220 kV Behrampur substation

The Company had approached Central Electricity Regulatory Commission (CERC) for allowing tariff revision and Force Majeure due to delay in grant of clearance u/s 164 of Electricity Act (EA). CERC notified an unfavorable order dated 09.05.2013, which was later challenged by TTCL in Appellate Tribunal for Electricity (ATE). ATE allowed the appeal filed by company and set aside the unfavorable CERC order.

Pursuant to the ATE order dated 02.12.2013, written requests were sent to the beneficiaries seeking following main reliefs to mitigate effect of Force Majeure in line with the prayers allowed in appeal:

- a) Re-fixation of implementation time of the Projects as was originally envisaged considering zero date as issuance of section 68 approval from MoP.
- b) Tariff Increase to the tune of 90%.

Concerned utilities in Tamil Nadu have appealed against the order of ATE in the Supreme Court of India (SC). First hearing was held on August 1, 2014. The matter is still pending before Supreme Court. All the petitions filed by beneficiaries have been clubbed together by SC. The petition has been admitted and next hearing is awaited.

Further, on March 04, 2014, CERC has reopened Power Grid Corporation of India Limited's (PGCIL) petition nos. 19 and 20 seeking revocation of license of the company and transferring the project to them on cost plus model and at the risk and cost of Reliance Power Transmission Limited (the Holding Company).

CERC notified an order dated 02 Sep 2015, against the said petition for revocation of transmission license. TTCL filed Appeal No. 201 of 2015 & IA-338 of 2015 in ATE challenging the above mentioned CERC order. ATE rejected the IA meant for stay but allowed the appeal. TTCL filed a Civil Appeal number 13370 of 2015, in SC against ATE's order. Supreme Court has given a stay order directing no coercive action to be taken by CERC.

SC on 12th August has disposed of the appeal and directed ATE to decide on the appeal. An Interim Application (IA Nos. 479 & 480 of 2018) was filed in ATE. APTEL in its hearing dated 01st Feb 19 disposed off the case directing to go back to CERC for a fresh treatment - including (but not limited to) the aspect of the very necessity of NK and TT transmission system. A petition has been filed with a stay application in CERC for redressal of grievances. CERC has directed PGCIL to file an affidavit on the necessity of the project. The case is ongoing in CERC. Next Hearing date awaited.