#### I/6573/2019

### File No.CEA-PS-13-16(15)/1/2019-PSPM Division



### भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत प्रणाली परियोजना प्रबोधन प्रभाग Power System Project Monitoring Division

सेवा में,

(संलग्न सूची के अनुसार)

## विषय: क्रिटिकल ट्रांसमिशन लाइनो और सबस्टेशन की प्रगति की समीक्षा करने के लिए मीटिंग नोटिस ।

Subject: Meeting notice to review the progress of critical transmission lines and substations.

महोदय,

A meeting is scheduled to be taken by Member (Power System), CEA on 28.08.2019 to review the construction progress of critical transmission lines & substations (as per list attached at annexure).

The time and venue of meeting is as under

Date : 28.08.2019 Time : 11:00 AM Venue : CEA conference Room (MANTHAN), 2<sup>nd</sup> Floor, Sewa Bhawan, R K Puram, New Delhi

Kindly make it convenient to attend the meeting. A line of confirmation to participate in meeting may be sent at ceapspm@gmail.com and pspm-cea@gov.in.

भवदीय Signature Not Verified Digitally signed by SANJAY JAIN Date: 2019,08.22 15:55:33 IST

> (संजय जैन) निदेशक

## प्रति सूचनार्थ एवं आवश्यक कार्यवाही हेत्

- 1. संयुक्त सचिव (ट्रांसमिशन), विद्युत मंत्रालय, श्रमशक्ति भवन, नई दिल्ली |
- 2. सदस्य (विद्युत प्रणाली) के मुख्य निजी सचिव, के.वि.प्रा. |

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## File No.CEA-PS-13-16(15)/1/2019-PSPM Division

<u>पते की सूची:</u>

SI. No.	Organization	Address	Tele/Fax No./email
1	PGCIL	Sh. K. Sreekant, Chairman & Managing Director, Powergrid Corporation of India Ltd., SAUDAMINI, Plot No.2, Sector-29, Gurgaon, Haryana-122001.	Ph: 0124- 2571800/2571900 Fax:01242571990 cmd@powergridindia.com ksreekant@powergridindia.com rkchauhan@powergridindia.com
2	UPPTCL	Chairman & Managing Director, Uttar Pradesh Power Corporation Ltd., Shakti Bhawan, 7th Floor,14, Ashok Marg, Lucknow – 226 001	Fax: 0522 -2288410/22877892 cmd@upptcl.org director_project@upptcl.org
3	HPPTCL	Managing Director, Himachal Pradesh Power Transmission Corp. Ltd, Himfed Bhawan, New ISBT Road, Panjari Shimla – 171005	FAX: 0177 2620227 md@hpptcl.in directorprojects@hpptcl.in
4	RVPNL	Chairman & Managing Director, Rajasthan Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Janpath, Jaipur – 302 005.	Ph: 0141 2740118 Fax: 0141 2740168 cmd.rvpn@gmail.com se.pp@rvpn.co.in
5	PTCUL	Managing Director , Power Transmission Corporation of Uttrakhand Ltd. Vidut Bhawan (Near I.S.B.T. crossing) Saharanpur road, Majra Dehradun - 248002	FAX: 0135-2643460 md@ptcul.org director_project@ptcul.org
6	JKPDD	Development Commissioner(Power), Office of the DCP, Near Exhibition Grounds Srinagar, J&K	Ph: 0194-2479836 Fax No: 0194-2452173 dcpjkpdd@yahoo.com sojpdd@gmail.com dosokashmir@rediffmail.com
7	WBSETCL	Managing Director, West Bengal State Electricity Transmission Corporation Limited 8th Floor, DJ Block, Sector-II Salt Lake, Kolkata – 700 091	Fax: 033-23370206/23591954 dir.projects@wbsetcl.in cpd.wbsetcl@gmail.com
8	MSETCL	Chairman & Managing Director Maharashtra State Electricity Transmission Co. Ltd. Prakashganga, Bandra Kurla Complex, Plot No C-19, E-Block, Bandra (E), MUMBAI – 400 051	Fax: 022-26598595 md@mahatransco.in cecm@mahatransco.in
9	GETCO	Managing Director, Gujarat Energy Transmission Corporation Limited, Sardar Patel Vidyut Bhawan, Race Course, VADODARA – 390 007	Fax: 0265 2337918 / 0265 2338164 / 0265 2338221/ 0265 5512072 md.getco@gebmail.com ceproject.getco@gebmail.com

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10	Sterlite Grid Limited	CEO & Business Head Sterlite Grid Limited, The Mira Corporate Suite Plot No.1 & 2. C Block, 2 nd Floor, Ishwar Nagar, Mathura road, New Delhi110065	Ph: 011- 49962200 Fax: 011-49962288 tan.reddy@sterlite.com rohit.gera@sterlite.com
11	ESSEL Infraprojects Ltd.	Shri Rajnish Mahajan, AVP-Poject, Essel Infraprojects Ltd. 06th Floor, Plot no.19, Film City, Sec-16 A, Gautam Buddha	Mobile No. : 7986432159 rajnish.mahajan@infra.esselgrou p .com ;
		Nagar, Noida, U.P 201301	sundeep.rai@infra.esselgroup.co m
12	Adani Power Ltd.	Senior Vice President, M/s Adani Power Limited, 7th Floor, Sambhav Building, Judges Bunglow	09099900244 In.mishra@adani.com sameer.ganju@adani.com
	n de la composition 11 de la Carlo III 11 de la Carlo IIII	Road, Bodakdev, Ahmedabad, Gujarat- 380015	
13	Kalpataru Power Transmission	Alipurduar Transmission Ltd. (A subsidiary of Kalpataru Power Transmission Ltd.) 7th Floor, Kalpataru	saurabh.gupta@kalpatarupo wer.com kausik.Chowdhuri@kalpatar
	Ltd.	Synergy, Opp- Grand Hyatt, Vakola, Santa Cruz (E), Mumbai - 400 055, Maharashtra	upower .com ajay.tripathi@kalpatarupowe r.com
14	Sneha Kinetic Power Projects Pvt. Ltd.	CEO, Sneha Kinetic Power Projects Pvt.Ltd. 31 -A, National Highway, Behind SNOD building,. Deorali, Gangtok, Sikkim-73710	info@snehakinetic.com

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# **Regionwise List of Critical Transmission Projects**

Sr.	Transmission	Scheduled	Actual/Likely	Purpose of the	Executing Agency	Progress	Reason for delay and	Action
No	00111401 /	Commissioning	0	Transmission System			brief detail of issues	required/Remedial measures taken
	Substation	Date	Date					
1	Anpara-D –Unnao 765kV S/C line.	Jan'12	Jun'19	Required for evacuation of power from Anpara-D STPS.	Uttar Pradesh Power Transmission Corporation Limited (UPPTCL)	LGH: 416 Ckm TL: 1225 nos. FDN: 1214 nos. TE: 1151 nos. STG: 371.519Ckm	<ul> <li>765 KV Jhusi-Unnao section completed. Work on Anpara-Jhusi section incomplete.</li> <li>Contract of M/s Jyoti Structures Limited has been terminated on 26.07.18 due to poor progress.</li> <li>Balance works awarded to M/s Simplex Infra on 17.09.18 but work is held up due to hindrances created by local sub-contractors of previous contractor M/s Jyoti Structures.</li> </ul>	≻Physical verification of stores completed. Work under progress.
2	Bara TPS-Mainpuri 765kV S/C line-I.	Mar'17		Out of 2 no. 765kV S/C lines, one has been commissioned (Ckt-II) but this line is required for evacuation of full power from Bara TPS and to meet N-1 criteria.	South East UP Power Transmission Company Limited (SEUPPTCL)	LGH: 378Ckm TL: 903 nos. FDN: 613 nos. TE: 346 nos. STG: 0Ckm	➢Work at standstill for more than a year due to poor financial health of SEUPPTCL, the transmission service provider, owned by M/s Isolux. The line is a part of TBCB project awarded to M/s Isolux.	➢GoUP is considering various options for quick and amicable resolution for completion of project on commercially viable purchase price. M/s PFC may exercise its option of substitution of M/s Isolux or M/s Isolux may be allowed to bring new investor to

Sr. No.	Transmission Corridor / Substation	Scheduled Commissioning Date	Actual/Likely Commissioning Date	Purpose of the Transmission System	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
3.a	Bajoli HEP-Lahal 220kV D/C line	Oct'16	Dec'19	Required for evacuation of power from Bajoli HEP (3x60MW) in H.P., which is scheduled for completion by year 2019-20.	H.P. Power Transmission Corporation Limited (HPPTCL)	LGH: 36 Ckm TL: - 59 nos. FDN: - 5 nos. TE: - nos. STG: - Ckm	<ul> <li>&gt;Work awarded in Dec'17.</li> <li>&gt;Connecting road from Chamba to Bharmour Severely Damaged since September 2018,</li> <li>&gt;Extra tress encountered than anticipated during tree cutting.</li> </ul>	≻Forest Case being resubmitted.
	D/C line		Mar'21			LGH: - 71 Ckm TL: - 114 nos. FDN: - nos. TE: - nos. STG: - Ckm	<ul> <li>Project award delayed due to delay in signing of Tranche-3 of ADB loan</li> <li>Connecting road from Chamba to Bharmour Severely Damaged since September 2018, completely cutoff during Mar 2019</li> </ul>	<ul> <li>Repair Works of road under progress.</li> <li>Forest Clearance obtained</li> </ul>
3.c	630 MVA, 400/220/33 kV Lahal (GIS)	Oct'16	Dec'19		H.P. Power Transmission Corporation Limited (HPPTCL)	LA:100% CW:75% ER: 80% EE: 45%	<ul> <li>Delay due to road closed by heavy rain fall &amp; land slide at different locations over site.</li> <li>Connecting road from Chamba to Bharmour Severely Damaged since September 2018, completely cutoff during Mar 2019</li> </ul>	➢Repair Works of road under progress.
4	Suratgarh TPS – Babai (Jhunjhunu) 400kV D/C line	Jan'13		This line is part of ATS of Suratgarh Super Critical TPS (2x660 MW).	Rajasthan RajyaVidyutPrasaran Nigam Limited (RVPNL)/ M/s Aster Chennai	LGH: 490 Ckm TL: 676 nos. FDN: 676 nos. TE: 676 nos. STG: 460.612Ckm	<ul> <li>Slow progress.</li> <li>Stringing work under progress.</li> </ul>	➢RVPNL to expedite construction of Line.

Sr. No	Transmission Corridor / Substation	Scheduled Commissioning Date	Actual/Likely Commissioning Date	Purpose of the Transmission System	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
5	Unnao – Mainpuri (Quad) 765 kV S/C Line	Aug'15	uncertain	This would help in evacuating power from Anpara complex.	South East UP Power Transmission Company Limited (SEUPPTCL)	LGH: 188Ckm TL: 450 nos. FDN: 380 nos. TE: 274 nos. STG: 0Ckm	➢Work at standstill for more than a year due to poor financial health of SEUPPTCL, the transmission service provider, owned by M/s Isolux. The line is a part of TBCB project awarded to M/s Isolux.	➢GoUP is considering various options for quick and amicable resolution for completion of project on commercially viable purchase price M/s PFC may exercise its option of substitution of M/s Isolux or M/s Isolux may be allowed to bring new investor to
	– Ghansali (Srinagar) 220 KV D/C line	Mar'13	Jul'19	Baramwari – Srinagar 220 kV D/C line and LILO of this line at SingoliBhatwari HEP (92 km/184 ckm) are required for transfer of power from SingoliBhatwari HEP up to Srinagar pooling station	Power Transmission Corporation of Uttaranchal Limited (PTCUL)	Currently work in section from SingoliBhatwari HEP to Ghansali (Srinagar) section is under progress by M/s L&T. LGH: 150 Ckm TL: - 231 nos. FDN: - 198 nos. TE: 170 pcs	<ul> <li>Delay of above 8 months due to termination of old contract with LANCO on nonperformance on 25.10.2017.</li> <li>Balance work of Line was awarded to M/s L&amp;T on 28.03.2018</li> <li>Final approval of forest case was obtained on 18.05.2018 from</li> </ul>	<ul> <li>The issue of payments to sub-contractors of M/s LANCO is required to be settled, for which a committee of different wing of PTCUL constituted.</li> <li>The report of Committee was put up in Board meeting held on date 28.11.2018.</li> </ul>
6.b	LILO of Baramwari - Srinagar at SingoliBhatwari 220 KV D/C line	Oct'16	Jul'19			TE: - 170 nos. STG: - 52Ckm	<ul> <li>18.05.2018 from MoEF&amp;CC Regional Office Dehradun. GO for final approval issued by Uttarakhand Government on 13.08.2018</li> <li>&gt;RoW issues in some locations of Line and same are being settled by consistent persuasion to concern land owners.</li> </ul>	Energy Department GoU on 27 May 2019 intimated that it will be preferable to resolve the proposal as per condition of agreement.

Sr.	Transmission	Scheduled	Actual/Likely	Purpose of the	Executing Agency	Progress	Reason for delay and	Action
No.	Corridor / Substation	Commissioning Date	Commissioning Date	Transmission System			brief detail of issues	required/Remedial measures taken
	TapovanVishnugadh - Kunwari Pass (Pipalkoti) 400 KV D/C line	Mar'17		For transfer of power from TapovanVishnugad HEP and VishnugadPipalkoti HEP up to Srinagar pooling station.	Power Transmission Corporation of Uttaranchal Limited (PTCUL)	LGH: 36 Ckm TL: - nos. FDN: - nos. TE: - nos. STG: - Ckm	<ul> <li>NOC as per Forest Right Act, obtained for 12 nos. villages and pending for 1 Nos. village (HattGaon).</li> <li>Nodal office send the case of forest proposal to Gov. of Uttrakhand on 28.03.19</li> <li>▶125 Hec land has been identified for CA with Digital Map &amp; co- ordinates.</li> </ul>	➢Persuasion is going on with forest department for early approval of Stage-I clearance. Thereafter construction work will be started.
7.b	Kuwari Pass (Pipalkoti)- Karanprayag – Srinagar 400 KV D/C line (in three package )		Sep'20	-Do-	Power Transmission Corporation of Uttaranchal Limied (PTCUL)	Package-1Pipalkoti- Nakot line (62 ckm) Package-2Nakot- Dhanpur forest line Package-3Dhanpur- Srinagar line (62 ckm) LGH: 186 Ckm TL: - nos. FDN: - nos. TE: - nos. STG: - Ckm	<ul> <li>FRA certificate obtained from competent authority excludingHatt village in Package I.</li> <li>Land bank with digital maps and co-ordinates, has already been identified for Compensatory afforestation for all packages.</li> <li>Forest proposal has been submitted on dated 24.11.2018 for package-I, on dt.23.10.18 for package-II and on dt.</li> </ul>	➢Persuasion is going on with forest department for early approval of Stage-I clearance. Thereafter construction work will be started.

Sr.	Transmission	Scheduled	Actual/Likely	Purpose of the	Executing Agency	Progress	Reason for delay and	Action
No	Corrigor /	Commissioning	Commissioning	Transmission System			brief detail of issues	required/Remedial
	Substation	Date	Date					measures taken
8	Srinagar- Kashipur400 KV D/C line	Mar, 16	Dec, 20	Required for evacuation of power from SingoliBhatwari HEP(3x33MW), TapovanVishnugad HEP(4x1301MW) and VishnugadPipalkoti HEP(4x111MW) beyond Srinagar.	Power Transmission Corporation of Uttaranchal Limited (PTCUL)	LGH: 362 Ckm TL: - nos. FDN: - nos. TE: - nos. STG: - Ckm	<ul> <li>Contract had been awarded to M/s Cobra but due to poor financial condition of company, M/s Cobra had abandoned the project.</li> <li>Fresh tendering in process for the project.</li> </ul>	➢ NIT floated on dated 08/03/2019. Bid part-1 (technical bid) was opened on dated 07/05/2019 and techno- commercial evalution are under process.
9.a	320 MVA, 220/132 kV Substation at Alusteng	Mar'10		The transmission project shall provide grid connectivity and reliable power supply to the strategically important Ladakh region. The electric supply system of Ladakh Region in the State of J&K is currently isolated from the Northern Grid and is fed through local small hydro generation and diesel generator sets. Being an area of defence establishments and strategic importance, there is a need to improve the	Power Development Department Jammu & Kashmir (JKPDD)	132/33 KV level: 95% completed. 220/132 KV level: 90 % completed.	Contract with M/S Jyoti Structures Ltd has been terminated and work is being executed departmentally by JKPDD.	➢Most of the works of the 220/132/33 kV Grid Station have been completed and the Grid Station has been charged on 132 kV voltage by stepping up the voltage to 220 kV level.
9.b	Alusteng – Zainkote 220 kV D/C line	Mar'10	Jun'19	-Do-	Power Development Department Jammu & Kashmir (JKPDD)	Length: 100 CKm TL: 161 nos. TF: 156 nos. TE: 138 nos. STG: 49CKm	<ul> <li>Line was awarded to M/s ECI, Hyderabad.</li> <li>Most of the RoW issues resolved</li> <li>Tower material for 10 nos. Towers yet to be supplied by the contractor ECI.</li> </ul>	Additional gangs deployed at the risk and cost of the contractor. The completion of the Transmission Line has been delayed due to inclement weather conditions.

Sr. No.	Transmission Corridor / Substation	Scheduled Commissioning Date	Actual/Likely Commissioning Date	Purpose of the Transmission System	Executing Agency	Progress	<b>Reason for delay and brief detail of issues</b>	Action required/Remedial measures taken
	Tanda – Gonda 400 KV D/C line	Aug'15	Uncertain	ATS of Tanda TPP	South East UP Power Transmission Company Limited (SEUPPTCL)	LGH: 200 Ckm TL: - 241 nos. FDN: - 97 nos. TE: - 54 nos. STG: - 0 Ckm	➢Work at standstill for more than a year due to poor financial health of SEUPPTCL, the transmission service provider, owned by M/s Isolux. The line is a part of TBCB project awarded to M/s Isolux.	➢GoUP is considering various options for quick and amicable resolution for completion of project i.e. takeover of transmission project on commercially viable purchase price or price M/s PFC may exercise its option of substitution of M/s Isolux or M/s Isolux may be allowed to bring new investor to complete the project.
	Gonda - Shahjehanpur (PG) 400 KV D/C line	Aug'15	Uncertain	-Do-	South East UP Power Transmission Company Limited (SEUPPTCL)	LGH: 460 Ckm TL: - 543 nos. FDN: - 296 nos. TE: - 140 nos. STG: - 0 Ckm	➢Work at standstill for more than a year due to poor financial health of SEUPPTCL, the transmission service provider, owned by M/s Isolux. The line is a part of TBCB project awarded to M/s Isolux.	➢GoUP is considering various options for quick and amicable resolution for completion of project i.e. takeover of transmission project on commercially viable purchase price or price M/s PFC may exercise its option of substitution of M/s Isolux or M/s Isolux may be allowed to bring new investor to

Sr. No.	Transmission Corridor / Substation	Scheduled Commissioning Date	Actual/Likely Commissioning Date	Purpose of the Transmission System	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
	Bamnauli – Jattikalan at Dwarka-I 400 KV D/C	May'17	Dec'19	This line can take care and reliably meet the existing and future 400 kV and 220 kV load demand of Delhi network.	Corporation of India Limited (PGCIL)	LGH: 17 Ckm TL: 41 nos. FDN: 23 nos. TE: 6 nos. STG: 0 Ckm	➢Forest proposel under FCA & DPTA submitted. Forest approval & tree cutting permission awaited.	➢It has been decided to re-route the line through Golf course to reduce forest area. Working permission from DDA received in Feb'19 using pole type structure which has been awarded in Mar'19.
	Bhadla – Bikaner 765 KV D/C	May'19		To evacuate power from solar park at Bhadla, Rajasthan.	Corporation of India Limited (PGCIL)	LGH: 338 Ckm TL: 455 nos. FDN: 433 nos. TE: 374 nos. STG: 103 Ckm	➢Forest clearance awaited. ROW issues are being faced.	
	Kadarpur-Sohna road 400 kV D/C ( <b>TBCB</b> )	Sep'19		Looking at the load growth at in Gurgaon area, this line is proposed to meet the demand.	Transmission Limited (A subsidiary of Sterlite Power Transmission	LGH: 20.56 Ckm TL: 29 nos. FDN: 23 nos. TE: 21 nos. STG: 0 Ckm)	➤One Power Line crossing approval is pending with HVPNL	≻Work under progress.
13.b	2x500 MVA, 400/220 kV GIS at Sohna Road (Gurgaon) ( <b>TBCB</b> )	Sep'19	Sep'19	-Do-	Transmission Limited (A subsidiary of Sterlite	LA: 100% CW: 51% ES: 99% EE: 15%	➢HVPNL has raised the issue of difficulty in finalizing the route of 220 kV D/S line. In purasuance to the meeting, a committee comprising of the members from CEA, HVPNL and GPTLhave been formed to review the route of D/s 220 kV line from Sohna road.	➤Committee in meeting held on 16.11.2018 conveyed that construction of 220kV line up to and including dead end tower is not in the scope of M/s GPTL being executed under TBCB process. However, HVPNL may send formal proposal for termination of 220 kV lines or any other important elements of HVPNL to be constructed.

Sr. No	Transmission Corridor /	Scheduled Commissioning	Actual/Likely Commissioning		Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial
	Substation	Date	Date					measures taken
14	Koteshwar – Rishikesh 400 KC D/C	Jun'19		400 kV AC link between Rishikesh and Koteshwar 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.	Transmission Ltd. (A subsidiary of Essel Infraproj. Ltd.)	LGH: 81 Ckm TL: 106 nos. FDN: 20 nos. TE: 0 nos. STG: 0 Ckm)	<ul> <li>Forest clearance awaited.</li> <li>NOC was delayed by Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh and issued on April, 2019.</li> </ul>	<ul> <li>Forest clearance awaited.</li> <li>&gt;IDPL conveyed it's no objection on 03.04.2019</li> <li>stating that Uttarakhand</li> <li>Government is planning to construct Convention</li> <li>Centre along with Hill</li> <li>Culture, Yoga and</li> <li>Wellness Centre on the said land. Accordingly,</li> <li>IDPL requested to take no objection certificate also from Uttarakhand</li> <li>Government. Accordingly,</li> <li>the detailed proposal of NoC was submitted to</li> <li>Tourism Deptt.</li> <li>ofUttarakhand on 27.05.2019.</li> </ul>

# **Critical Transmission Projects in Eastern Region(ER)**

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	Actual/Likely Commissioning Date	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
1	Rajarhat – Purnea 400 kV D/C line	Apr'16	-	Required for Eastern Region system Strengthening	Powergrid Corporation of India Limited (PGCIL)	LGH: 881 Ckm TL: 1219 nos. FDN: 1217 nos. TE: 1217 nos. STG: 874 Ckm	<ul> <li>Severe ROW problem at Rajarhat area. Processing of forest case in Jharkhand slow.</li> <li>Work in Rajarhat was hold for last 16 months. Work resumed in Oct'17 again stopped on 01.12.2017 due to protest.</li> </ul>	Matter followed up at all levels for early resolution. Now work re- started on 14.08.18 with the help of administration. Work under progress
2.a	North Karanpura – Chandwa 400 kV D/C line ( <b>TBCB</b> )			Evacuation of power from North Karanpura TPP .	North Karanpura Transco Ltd. (NKTL, a subsidiary of Adani Transmission Ltd.)	As per latest route. LGH: 102Ckm TL: 110 nos. FDN: 0 nos. TE: 0 nos. STG: 0 Ckm	(No Objection Certificate) from CCL/MoC, the work was stopped. >NKTL approached CERC for termination of license. Matter was taken up by CERC with MoC and disposed off with the condition that MoC will give NOC for construction of lines and lines will be diverted in future when required, however alternative route	≻NOC has been provided by CCL/MoC.
2.b	North Karanpura – Gaya 400 kV D/C line ( <b>TBCB</b> )		Uncertain (As per CERC directive, it is being finalized by CEA and in consultation with NTPC.)		North Karanpura Transco Ltd. (NKTL, a subsidiary of Adani Transmission Ltd.)	As per latest route. LGH: 196Ckm TL: 289 nos. FDN: 0 nos. TE: 0nos. STG: 0 Ckm	will be provided by MoC. ≻Revised route is under survey.	

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	·	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
3	Sagardighi – Gokarna 400kV D/C line	Jul'15		This line is part of ATS of generation project Sagardighi-TPP (2x300MW). Out of 2 lines, one line has been commissioned. This line is required to meet the N-1 criteria.	West Bengal State Electricity Transmission Company Limited (WBSETCL)	LGH: 88.5 Ckm TL: 154 nos. FDN: 153 nos. TE: 153 nos. STG: 86.7 Ckm	➤Work Delayed due to poor performance of the vendor (Jyoti Structures Ltd.).	≻Contract terminated.
4	Jigmeling – Alipurdua 400KV D/C	Mar'18		Transmission System Strengthening in Indian System for Transfer of Power from Mangdechhu Hydroelectric Proj, in BHUTAN.	Powergrid Corporation of India Limited (PGCIL)	LGH: 324 Ckm TL: 466 nos. FDN: 315 nos. TE: 301 nos. STG: 109.2 Ckm	➤Working permission received in Feb'19. Progress is delayed due to NCLT proceeding against contractor M/s C&C.	PGCIL to find alternate ways to complete the project at the earliest.
5	Alipurduar – Siliguri 400 KV D/C ( <b>TBCB</b> )	Mar'19		Indian System for Transfer of Power from various Hydroelectric Proj, in BHUTAN.	Alipurduar Transmission Ltd. (A subsidiary of Kalpataru Power Transmission Ltd.)	LGH: 232 Ckm TL: 321 nos. FDN: 319 nos. TE: 312 nos. STG: 79.42 Ckm	faced,demanding high compensations. Few landowners have also filed a case in the court of law.	<ul> <li>Work at many locations can be taken up after settlement of compensation with landowners, which is under process.</li> <li>Adminstrative support is required.</li> </ul>

Sr. No	Transmission Corridor	Scheduled Commissio ning Date	Actual/Likely Commissioning Date	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
1.a	Bableshwar- Kudus 400 kV D/C line	Oct'12	Dec,19	Due to delay in commissioning of 400 kV Bableshwar –Kudus D/C line, heavy loading is observed on 400 kV Bableshwar - Padghe line. Further 400 kV Ektuni-Bableshwar only one circuit is kept in service by MSETCL to control the loadings at Bableshwar.	Maharashtra State Electricity Transmission Company limited (MSETCL)	LGH: 456.96 Ckm TL: 730 nos. FDN: 571 nos. TE: 508 nos. STG: 175.33 Ckm	<ul> <li>Progress affected in Nashik and Vashi Zones due to involvement of 148 Ha of forest area and severe RoW issues at 48 locs.</li> <li>Second &amp; Final approval received</li> <li>on 06.04.2018.</li> <li>RoW:</li> <li>A) Nashik Zone: 27 cases filed to Collector, Pune, he delegated powers to SDO Manchar, Junnar, Ambegaon, Hearing completed, orders awaited.</li> <li>B) Vashi Zone: 21 cases filed to Collector, Thane on 08.03.2017, he delegated powers to SDO Kalyan/ Bhiwandi, orders awaited</li> <li>&gt; As per GR dated 31.05.2017 there is provision for 2 times compensation, however, revenue department informed 4 times compensation.</li> <li>&gt; GMRT issue: Consequent to the committee report, survey for revised route has been carried out. Committee members suggest to re- route the line on the western side to meet the minimum distance norm of 6 km and on eastern side where the distance is less than 6KM,</li> </ul>	<ul> <li>➤The variation in locations and line length is due to 2<sup>nd</sup> diversion of route due to GMRT (Giant Metrewave Radio Telescope).</li> <li>➤79 nos. foundations and 60 nos. towers will be scrapped due to route diversion by GMRT.</li> <li>➤Resolution of GMRT issue.</li> <li>➤Prohibitory order from Collector Thane for filed cases.</li> <li>Constraints:</li> <li>There is huge unrest among land owners due to non payment of land compensation.</li> <li>Presently work is in progress only in forest area at Loc. No. 177,179,185.</li> </ul>

# **<u>Critical Transmission Projects in Western Region(WR)</u></u>**

Sr. No.	Transmission Corridor	Scheduled Commissio ning	•	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
		Date	Date					
1.b	<ul> <li>a) 220 kV MC LILO on 220kV Kolshet</li> <li>Wada line at 400kV Kudus S/s - 6.2 kms</li> <li>b) 220 kV LILO on 220kV Padghe</li> <li>Wada line at 400kV Kudus S/s by stringing 3rd &amp; 4thCkt on M/C towers at (a) above- 6.2 kms.</li> </ul>	Nov'18	Dec,19	Downstream network at Kudus s/s.	Maharashtra State Electricity Transmission Company limited (MSETCL)	LGH:31.62Ckm TL: 46 nos. FDN: 11 nos. TE: 2 nos. STG: 0 Ckm	<ul> <li>Forest: Area involved 11 ha</li> <li>Online submission of proposal:</li> <li>FP/ MH/TRANS/30180/2017 dt</li> <li>9.11.2017.</li> <li>ROW: As per GR dated</li> <li>31.05.2017 there is provision for</li> <li>2 times compensation, however, revenue department informed 4 times compensation.</li> </ul>	<ul> <li>➢ Forest: Online queries raised on dt 9.11.2017 are compiled on 20.11.2017. Joint inspection carried out on dt 25.1.2018 with forest officer. Application for FRA submitted vide 136 dt 22.2.2018. Forest Proposal submitted to PCCF, Nagpur on 04.04.2019</li> <li>FRA forwarded by Collector thane to Tahsildar and BDO Bhiwandi on dated 16.02.19</li> <li>➢ Gram sabha resolution awaited from SDO Bhiwandi.</li> </ul>

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	ť	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
1.c	Construction of 220kV MC (Twin) line by making LILO of 220kV Tarapur – Borivali line and Boisar – Ghodbandar line at 400 kV Kudus (Padghe II) s/s – 27 km	Jul'19	Jul'19	Downstream network at Kudus s/s.	Maharashtra State Electricity Transmission Company limited (MSETCL)	LGH: 116.76 Ckm TL: 116 nos. FDN: 36 nos. TE: 0 nos. STG: 0 Ckm	<ul> <li>Forest involvement after rerouting: Area involved 2.95 Ha (Appr). Proposal is pending at DFO Dahanu.</li> <li>ROW: Facing huge opposition in vasai and Bhiwandi areas where multiple project such as Bullet train , DFCCIL, Transmission lines, Highways.</li> </ul>	<ul> <li>➢ Forest: Forest : 2.95 Ha (Appr) Proposal submted on 13.11.2017, Revised Online submission done on 22.01.19 and compliances submitted on01.02.19.</li> <li>➢ Joint inspection with forest surveyor in jawahar section carried out on 04.02.2019 and Joint inspection with ACF, dahanu in dahanu section carried out on dt. 27.02.2019.</li> </ul>
	LILO of Lonikhand (MSETCL) – Kalwa (MSETCL) 400 kV line at Navi Mumbai	Sep'10	Jun'19	For drawl of power for feeding loads in and around Navi Mumbai area	Powergrid Corporation of India Limited (PGCIL)	LGH: 16 Ckm + 1.8 km u/g cable TL: 25 nos. FDN: 25 nos. TE: 25 nos. STG: 16 Ckm	<ul> <li>A portion (1.8 Kms) of line executed using underground cable, affected due to severe ROW problem.</li> <li>In Dec'16 local miscreants burnt cable. Replacement arranged.</li> <li>Physical work completed in Mar'19 &amp; CEA clearance received on 13.05.19.</li> <li>However, State downstream system at Navi Mumbai to be implemented through TBCB.</li> </ul>	Shutdown clearance for commissioning from Maharashtra State utilities (MSETCL) is still awaited.

Sr. No	Transmission Corridor	Scheduled Commissio ning Date	Actual/Likely Commissioning Date	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
3	1200KV D/C Wardha - Aurangabad line (initially charge at 400KV)	Oct'08	Dec'19	Regional System Strengtheing in WR for Mundra (UMPP)	Powergrid Corporation of India Limited (PGCIL)	LGH: 700 Ckm TL: 961 nos. FDN: 960 nos. TE: 950 nos. STG: 547Ckm	<ul> <li>Contract terminated 1 out of 2 packages due to unsatisfactory performance.</li> <li>The package subsequently bifurcated into two parts. Ist part awarded in Dec'14 and second part in Feb'15.</li> <li>Severe ROW is being encountered.</li> <li>Due to thunderstorm &amp; cyclone in Jun'18, about 6 fdn, 11 tower erection &amp; approx. 9 ckm stringing damaged. Rectification work is under progress</li> </ul>	≻Work under progress.
	Dhule 765 kV D/C ( <b>TBCB</b> )		Uncertain	(2x660MW) NTPC thermal power project atKhargone in the state of Madhya Pradesh.	Khargone Transmission Limited (A subsidiary of Sterlite Power Transmission	LGH: 378.1 Ckm TL: 486 nos. FDN: 483 nos. TE: 479 nos. STG: 350 Ckm	➤Work has been stopped due to passing of line through submergence area of proposed Jamphal Dam in Maharastra.	A meeting was taken in CEA and DC, Dhule was requested to allow the construction of line and diversion will be taken up during construction stage of dam. But issue could not be resolved. The response from Govt. of Mahharashtra in this regard is still awaited.
4.b	Khargone TPP – Khandwa pool 400 kV D/C (Quad) line ( <b>TBCB</b> )	Jul'19	Uncertain		Khargone Transmission Limited (A subsidiary of Sterlite Power Transmission	LGH: 50.1 Ckm TL: 66 nos. FDN: 62 nos. TE: 62 nos. STG: 24 Ckm	➤KTL had to divert the route for construction of line in order to avoid interception of Line with under progress NTPC Railway line.	

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	•	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
4.c	2x1500 MVA, 765/400 kV Pooling station at Khandwa ( <b>TBCB</b> )	Jul'19	Uncertain	-Do-	Limited (A	LA: 100% CW: 78% ES: 90% EE: 35%	➤Agitation from farmers for land acquisituion and obstruction by them on Construction work.	
5	Vadinar-Amreli 400 kV D/C line (balance)	Nov, 09	Mar'20	Associated with Salaya TPS for evacuation of power and its completion would relieve over loading of Hadala - Chorania S/C line. However, interim arrangement with completed portion of Amreli- Vadinar one ckt terminated at	Gujarat Energy Trans. Corp. Limited (GETCO)	TL: 365 nos.	Progress affected due to contractual issue with M/s Jyoti and contract has been terminated and retendered on risk purchase basis.	<ul> <li>➤GETCO has taken the necessary action and invited the Risk &amp; Cost Tender.</li> <li>➤Presently work in progress since 19.07.2018</li> </ul>
6	Amreli – Kasor 400 kV D/C line.	May'12	Jun'20	It would relieve Chorania - Kasor S/C line.	Gujarat Energy Trans. Corp. Limited (GETCO)	LGH: 471 Ckm TL: 679 nos.	➢Progress affected due to severe row issues.	≻Works in progress.

## **<u>Critical Transmission Projects in Southern Region(SR)</u>**

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	Actual/Likely Commissioning Date	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
1	Edamon- Muvattupuzha (Cochin) 400kV D/C line	Nov'08	Jun'19	<ul> <li>To decongest 220kV North - South corridor of Kerala.</li> <li>It is also a part of ATS of Kundakulam APP (2x1000MW)</li> </ul>	Powergrid Corporation of India Limited (PGCIL)	LGH: 297Ckm TL: 447 nos. FDN: 447 nos. TE: 446 nos. STG: 296Ckm	Severe ROW problem (long pending). Problem being addressed progressively as per Revised G.O. of 30.07.15.	➤All fdn. Completed. 1 no. TE & 1 km stgg. held up due to ROW.1 TE (291/0- under court case) which is under court case (case reserved in HC for passing of final order).
2	Madhugiri (tumkur)- Yelhanka 400kV D/C line	Jun'14		Constraints on Import of power from New grid to SR through Raichur-Sholapur 765kV D/C line.	Powergrid Corporation of India Limited (PGCIL)	LGH: 131 Ckm TL: 178 nos. FDN: 164 nos. TE: 163 nos. STG: 80Ckm	≻Severe ROW in Karnataka.	<ul> <li>Issue are being resolved wth the help of state administration.</li> <li>Stringing progress being affected due to higher compensation demand by farmers in route of line.</li> <li>Fdn. Work almost stopped in Bangalore Urban due to higher compensation demand since Feb'19. Now with the help of administration foundation. work in Bangalore Urban area has been restarted on 03.06.19.</li> </ul>
3	Vemagiri– Chilakaluripeta 765KV D/C line	Apr'19		Improve power evacuation from 765 KV Vemagiri (PG), relieve constraints in 400 KV network at Vemagiri (PG), and may increase the transfer capability towards Southern Region. NEW – SR transfer capability will improve.	Powergrid Corporation of India Limited (PGCIL)	LGH : 558 Ckm TL : 748 nos. FDN :720 nos. TE : 689 Nos. STG : 478Ckm	>ROW being faced in Krishna district.	<ul> <li>Administaration support required in ROW resolution.</li> <li>Matter to be taken up in next Pragati meeting chaired by H'ble PM, to be scheduled shortly.</li> </ul>

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	v	Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
1	Dikchu HEP- Dikchu pool 132kV D/C line.		May'19	This Line is required to evacuate power from Dikchu HEP (2x48MW), In absence of this line, the power from Dikchu HEP is being evacuated through interim arrangement of LILO of Teesta III-Rangpo 400kV line at Dikchu.	SKPPL (Sneha Kinetic Power Projects Pvt. Ltd.)	awarded by the generation company. The interim LILO arrangement has been completed for evacuation of Power.	<ul> <li>Dikchu pooling station and connecting network is covered under Comprehensive T&amp;D scheme being constructed by PGCIL. The land for Dikchu pooling station is yet to be handed over to PGCIL. Route survey of 220KV D/C Dikchu-Singhik (20 Km) line and 220KV D/C Rangpoo (Samardong) - Dikchu (to be operated initially 132KV) has been completed. Foundation work completed.</li> <li>No action has been initiated for execution of Dikchu HEP – Dikchu Pool 132 KV D/C line, supposed to be executed by SKPPL.</li> </ul>	

# **<u>Critical Transmission Projects in North Eastern Region(NER)</u>**

## **Critical Transmission Projects in Inter-Regional (IR)**

Sr. No.	Transmission Corridor	Scheduled Commissio ning Date	Actual/Likely Commissioning Date	The Transmission Constraint	Executing Agency	Progress	Reason for delay and brief detail of issues	Action required/Remedial measures taken
1	Warora (Pool) – Warangal (New) 765 kV D/C line ( <b>TBCB</b> )	Nov'19	Dec'19	To facilitate import of power to Southern region 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.	Warora Kurnool Transmission Ltd. (A subsidiary of Essel Infraproj. Ltd.)	LGH: 645.7 Ckm TL: 827 nos. FDN: 774 nos. TE: 425 nos. STG: 58.6Ckm	<ul> <li>&gt; Work in Maharashtra state is stopped completely due to RoW problem</li> <li>&gt; As per route identified by BPC (PFC) the line would traverse through coal bearing area of Western Coalfields Ltd (Maharatna)and Singareni Collieries company Ltd, Telangana. Both WCL and SCCL wants the route to be diverted to avoid coal bearing area as their mining activity are expected very soon.</li> </ul>	<ul> <li>➢ About 4 towers are falling in SCCL area and 16 towers in WCFL area. Matter need to be taken up with SCCl, WCFL and Ministry of Coal for resolution.</li> <li>➢ Meetings were taken by Chief Engineer (CEA) on 30.05.2019 and Chief Engneer (MOP) on 03.06.2019 and WKTL informed that project is adversely affected due to objection raised by WCL and SCCL. WKTLhave requested to resolve the issuesearly in discussion with MoC.</li> </ul>
2	Raigarh - Pugalur 800KV HVDC Bipole link	Nov'19	Nov'19	HVDC Bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, Tamil Nadu) - Raigarh-Pugalur 6000 MW HVDC System	Powergrid Corporation of India Limited (PGCIL)	LGH: 3530 Ckm TL: 4773 nos. FDN: 4565 nos. TE: 4375 nos. STG: 2604 Ckm	➢Progress slow in Tamil Nadu due to severe ROW. Efforts are being made to resolve the issue with the help of Distt. Admn. Huge forest involvement (432 Ha.) in WR portion. Working permission received in Oct'18. Wildlife corridor clearance awaited.	Wildlife proposal discussed in NBWL meeting held on 18.07.19, minutes awaited.