सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग- II
Power System Planning & Appraisal Division-II

सेवा में /To

As per list of Addresses

विषय: ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की इकत्तीसवीं बैठक की कार्यवृत्त ।

Subject: Minutes of the 31st Meeting of the National Committee on Transmission (NCT)-reg.

महोदया (Madam) / महोदय (Sir),

The 31st meeting of the National Committee on Transmission (NCT) was held 14th July, 2025 at New Delhi. The minutes of the meeting are enclosed herewith.

भवदीय / Yours faithfully

04.08.2025

(बी.एस.बैरवा / B.S. Bairwa)
मुख्य अभियन्ता एवं सदस्य सचिव,(एन.सी.टी.)/
Chief Engineer & Member Secretary (NCT)

प्रतिलिपि / Copy to:

Joint Secretary (Trans), Ministry of Power, New Delhi

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List of Addresses:

1.	Chairperson, Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	2.	Member (Power Systems), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.
3.	Member (Economic & Commercial), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	4.	Director (Trans), Ministry of Power Shram Shakti Bhawan, New Delhi-110001.
5.	Sh, Abhay Bakre, Mission Director, MNRE Atal Akshay Urja Bhawan Opposite CGO Complex gate No. 2, Lodhi Road, New Delhi – 110003	6.	Chief Operating Officer, CTUIL, Floors Nos. 5-10, Tower 1, Plot Nos. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana - 122001.
7.	Sh. Rajnath Ram, Adviser (Energy), NITI Aayog, Parliament Street, New Delhi – 110 001.	8.	CMD, Grid Controller of India, B-9 (1st Floor), Qutub Institutional Area, Katwaria Sarai, New Delhi – 110016
9.	Sh. Ravinder Gupta Expert Member (power System)	10	Smt. Raheela Wani, Chairperson (TCC) & Managing Director, JKPTCL, Office of Managing Director, Grid Station Complex, Janipur, Jammu/ PDD Complex Bemina Srinagar-190010
11.	Member Secretary , Western Region Power Committee 2nd Floor, Vidyut Seva Bhavan,. P.O.: Sunder Nagar, Danganiya, Raipur: 492 013	12.	Shri Shivdas.S, Chairperson (TCC) and Director (Transmission, System Operation & Planning), KSEBL Vydyuthi Bhavanam, Pattom, Thiruvananthapuram, Kerala- 695004
13.	Sh. Sabyasachi Roy, Director (Operations), WBSETCL	14.	Chairperson , North Eastern Region Power Committee Hon'ble Minister of Power, Govt. of Assam, Guwahati – 781 006

Special Invitee

1. Chief Engineer (PCD), CEA
2. CEO, RECPDCL
3. CEO, PFCCL

Table of Minutes

Minutes of the 31st meeting of National Committee on Transmission

1 Confirmation of the minutes of the 30th meeting of National Committee on Transmission.

1.1 The minutes of the 30th meeting of NCT held on 30.05.2025 were issued on 25.06.2025 vide CEA letter Nos. CEA-PS-12-13/3/2019-PSPA-II. No comments were received on the minutes.

1.2 Members confirmed the minutes.

2 Status of the transmission schemes noted/approved/recommended to MoP in the 30th meeting of NCT:

2.1 Members noted the status of transmission schemes approved/recommended in the 30th meeting of NCT as given below.

Sr. No	Name of the Transmission Scheme	Noted/ Recommended / Approved	Mode of Implementation	BPC	Award/ Gazette notification
1.	Transmission system for evacuation of power from Rajasthan REZ Ph-IV (Part-5: 6 GW) [Barmer Complex] Barmer-II: 6 GW (Solar) (LCC Configuration)	Recommended	TBCB	RECPDCL	Informed to MoP vide letter dated 25.06.2025. Gazette notification by MoP is under process
2.	OPGW installation (48F) on existing 400 kV Sikar (PG) – Agra (PG) D/c line (owned by PG) which is proposed to be LILO at 400 kV GSS Kumher (RRVPN)	Approved	RTM	Not applicable	Informed to CTUIL vide letter dated 25.06.2025 CTUIL awarded the projects to the implementing agency on 25.06.2025.
3.	OPGW installation (48F) on existing 220 kV Chittorgarh (RVPN)-RAPP B (NPCIL) D/c Line (owned by PG) which is proposed to be LILO at RRVPNLs 220 kV GSS Begun (Chittorgarh)	Approved	RTM	Not applicable	

2.2 Status of transmission schemes where modifications was suggested/approved in 30th NCT meeting:

S. Nos.	Scheme where modifications was suggested	Status
1	Change in the name of implementing agency POWERGRID	Informed to CTUIL

	Bikaner IV Transmission Limited (a 100% wholly owned subsidiary of POWERGRID)" instead of 'Bikaner A Power Transmission Limited (a 100% wholly owned subsidiary of POWERGRID)'.in the scheme "Augmentation of 2x500 MVA (7th & 8th), 400/220 kV ICTs along with 220 kV Sectionalizer bay (1 set), 220 kV BC (1 No.) bay and 220 kV TBC (1 No.) bay at Bikaner IV PS"	vide letter dated 25.06.2025

3 Modifications in the earlier approved/notified transmission schemes

3.1 Rescheduling of SCoD of 220 kV line bay at Pachora PS for RE interconnection of Purvah Green Power Private Limited

3.1.1 Representative of CTUIL stated that Transmission system for Evacuation of Power from RE Projects in Rajgarh (1500 MW) SEZ in Madhya Pradesh-Phase III and Evacuation of Power from RE Projects in Neemuch (1000 MW) SEZ in Madhya Pradesh-Phase II with estimated cost of Rs. 3472 cr. was recommended in the 26th meeting of the National Committee on Transmission (NCT) held on 6th January, 2025 under TBCB route with RECPDCL as BPC. The scheme is under bidding with SCoD of 24 months from SPV transfer. The transmission scheme inter-alia comprises of 1 No. of 220 kV bay at Pachora PS for RE interconnection of Purvah Green Power Pvt. Ltd. (PGPPL) with commissioning schedule of 31.03.2028

3.1.2 Purvah Green Power Pvt. Ltd. vide letter dated 18.06.2025 requested CTUIL for preponement of SCoD of 220 kV bay allotted to them, matching with the commissioning of the main transmission scheme while keeping start date of Connectivity same as 31/03/2028.

3.1.3 To discuss the issue, a meeting was held on 19.06.2025 under the chairmanship of Member (Power Systems), CEA. In the meeting, preponement of SCoD of 220 kV line bay of PGPPL, matching with the SCoD of the transmission scheme was agreed subject to the following:

i. BPC (RECPDCL) was directed not to extend the bid submission deadline beyond 4th July, 2025.

ii. As the terminal bay at Pachora PS (ISTS) end is required by PGPPL prior to the Start Date of Connectivity (i.e. 31/03/2028), for drawl of start-up power or injection of infirm power, in line with Regulation 10.8 of GNA Regulations, 2022 (as amended from time to time), the liability for payment of applicable transmission charges for the same shall be incident on PGPPL in terms of the extant CERC Regulations. Further, a separate agreement shall be signed between CTUIL and PGPPL in line with the above Regulations covering the commercial terms and conditions.

iii. Matter would be taken up for ratification in the forthcoming NCT meeting.

3.1.4 After deliberations, NCT noted the preponement of SCoD of 220 kV line bay allotted to PGPPL, matching with the commissioning of the main transmission

scheme.

3.2 **Modification in Time-line of 400/220 kV 500 MVA ICT (7th) at Mandsaur PS being implemented under "Augmentation of transformation capacity and Implementation of line bays at Mandsaur S/s for RE Interconnection" scheme**

3.2.1 Representative of CTUIL stated that Scheme "Augmentation of transformation capacity and Implementation of line bays at Mandsaur S/s for RE Interconnection" with estimated cost of Rs. 319 cr. was recommended in the 26th meeting of the National Committee on Transmission (NCT) held on 6th January, 2025 under TBCB route with PFCCL as BPC. The scheme is under bidding process with the scope as mentioned below:

Sl. No	Name of the Transmission Element	Scheduled COD
1	Creation of New 400 kV and 765 kV Bus Section-II through Sectionaliser arrangement	24.03.2027
2	Augmentation of Transformation capacity by 1x1500 MVA, 765/400 kV ICT (4th) (Terminated at 400 kV and 765 kV Bus Section-II)	
3	Augmentation of Transformation capacity by 1x500 MVA, 400/220 kV ICT (6th) (Terminated on 400 kV Bus Section-I and 220 kV Bus Section-II)	
4	1 No. 220 kV line bay (on 220 kV Bus Sec-II) at Mandsaur PS for interconnection of Solar project of Waaree Renewable Technologies Ltd. (WRTL) (2200001192) (300 MW)	
5	1 No. 400 kV line bay at Mandsaur PS (on 400 kV Bus Sec-II) for interconnection of Solar project of NTPC Renewable Energy Ltd. (NTPCREL) (2200001301) (300 MW)	31.03.2027
6	Augmentation of Transformation capacity by 1x500 MVA, 400/220 kV ICT (7th) (Terminated on 400 kV Bus Section-II and 220 kV Bus Section-III) at Mandsaur PS	24.03.2027
7	Creation of New 220 kV Bus Section-3 with Sectionaliser arrangement at Mandsaur PS	15.06.2027
8	1 No. 220 kV line bay at Mandsaur PS (220 kV New Bus Section-3) for interconnection of wind project of JSP Green Pvt. Ltd. (JSPGPL) (2200001356) (350 MW)	15.06.2027
9	1 No. 220 kV line bay at Mandsaur PS (220 kV New Bus Section-3) for interconnection of Hybrid project of TEQ Green Power XXII Pvt. Ltd. (TGP XXII PL) (2200001431) (250 MW)	30.03.2028

3.2.2 He further stated that POWERGRID in the bidder queries process pointed out that "SCoD for 400/220 kV ICT at Sl. No. 6 is 24.03.2027 and the 400 kV & 220kV side of the same are to be terminated on 400 kV Bus Section-II & 220 kV Bus Section-III respectively. However, SCoD for 220 kV Bus Section-III at Sl. No. 7 is 15.06.2027 which is later than 24.03.2027."

3.2.3 CTUIL proposed to revise time-line of ICT (7th) at Sl. 6 above to 15.06.2027 (i.e. same as element at Sl. 7 (i.e. 220 kV Sec-3) as ICT will get terminated on 220 kV Sec-3 which is only coming by 15.06.2027 matching with RE injection (envisaged

to come up in same time-frame).

3.2.4 After deliberations, NCT approved the revision in time-line of 400/220 kV, 500 MVA ICT (7th) at Mandsaur PS mentioned at Sl. 6 above from 24.03.2027 to 15.06.2027.

3.3 DPR Project cost variation in "Augmentation of Transformation capacity at Bhuj-II PS (GIS)" awarded under RTM

3.3.1 Representative of CTUIL stated that the transmission scheme 'Augmentation of Transformation capacity at Bhuj-II PS (GIS)' was agreed in the 16th meeting of NCT held on 30.11.2023 under TBCB route with estimated cost of Rs. 428 crores and implementation timeframe of 21 months. In the 27th meeting of NCT held on 06.02.2025, NCT approved the implementation of the scheme under RTM mode to POWERGRID Bhuj Transmission Limited with an estimated cost of Rs. 428 Cr.

3.3.2 In the 30th Meeting of NCT held on 30.05.2025 CTUIL informed that POWERGRID vide letter dated 05.05.2025 has intimated CTUIL that the DPR cost of the project "Augmentation of transformation capacity at Bhuj-II PS (GIS)" as Rs. 486.02 Cr. (December'24 price level) and requested to convey approval/ratification of NCT for the revised project cost/DPR. NCT directed CTUIL to revise the tentative cost of the scheme on present price level and intimate the same.

3.3.3 CTUIL submitted that cost estimate of the subject scheme at September 2024 price level is about Rs. 429.28 Crs.

3.3.4 It was observed that revised estimate cost of the scheme given by CTUIL is Rs. 429.28 Cr. which is almost same to the earlier estimated cost of the scheme i.e. Rs. 428 Cr.

3.3.5 NCT opined that implementing agency may approach CERC for any variation in the cost. Further, in future, NCT will not take up any agenda of cost variation for discussion.

4 New Transmission Schemes:

4.1 Transmission system for Evacuation of Power from RE Projects in Jam Khambhaliya REZ in Gujarat-Phase II (4500MW)

4.1.1 Representative of CTUIL stated that Government of India has set a target for establishing 500 GW non fossil generation capacity by 2030, out of which 1.5 GW REZ potential was identified at Jam Khambhaliya (Gujarat) for which 400/220kV Jam Khambhaliya PS was set-up. Further, MNRE has declared addl. 3.5GW potential in Jam Khambhaliya PS and 0.5 GW potential at Porbandar vide letter dated 19.07.2024. Thus, total potential in Jam Khambhaliya area now stands at 5.5 GW.

4.1.2 He further stated that applications of about 8.735 GW have been received in Jam

Khambhaliya area till Mar-25, out of which about 4 GW have been accommodated at Jam Khambhaliya PS (3 GW at 220 kV and 1GW at 400 kV) and for balance capacity received in Kalyanpur & Bhanvad areas, a new substation is required to be planned in Jam Khambhaliya area. Hence, considering receipt of applications in the area (8.735 GW against 5.5 GW potential), planning of transmission system for about 4.5 GW capacity in Jam Khambhaliya area has been carried out. It was proposed to set up a 765/400kV Substation in South-west of Jam Khambhaliya.

4.1.3 Representative of SECI stated that the work of identifying RE potential in addition to already declared potential in Gujarat is under process.

4.1.4 After deliberations, it was decided that the transmission schemes for the quantum beyond the potential already declared by MNRE/SECI will be taken up for approval only after assessment and declaration of such additional potential by MNRE/SECI.

4.2 **Transmission system for Evacuation of Power from RE Projects in Jamnagar REZ in Gujarat-Phase I (1000MW)**

4.2.1 Representative of CTUIL stated that MNRE has declared 3 GW potential in Jamnagar vide letter dated 19.07.2024 out of which Transmission System for 1 GW is under ISTS & 2 GW under In-STS. Further, applications for 1.856 GW have been received in Jamnagar area till Mar-25. Hence, 1 GW applications at Jamnagar have been agreed for grant till date. To cater 1 GW RE projects in the Jamnagar area, CTUIL proposed transmission scheme “Transmission system for Evacuation of Power from RE Projects in Jamnagar REZ in Gujarat-Phase I (1000MW)”.

4.2.2 Chairperson CEA enquired that whether the system studies for the subject scheme have been carried out considering the other proposed schemes in Gujarat for the quantum beyond the declared potential. Representative of CTUIL stated that the comprehensive planning has been carried out for the whole system in Gujarat and therefore, for evacuation of Power from RE Projects in Jamnagar REZ, system studies have been carried out considering all the elements of other proposed schemes for the quantum beyond declared potential.

4.2.3 After deliberations, NCT directed CTUIL to carry out separate system studies for evacuation of Power from RE Projects in Jamnagar REZ without considering the elements corresponding to the quantum beyond declared potential and bring the agenda in the next NCT meeting.

4.3 **Common Transmission System for evacuation of 5.5 GW RE power from Khavda area (Phase-VI), Transmission System for evacuation of 6 GW RE power from Khavda area (Phase-VII: 6GW) and 7.5GW RE power from Lakadia area (Phase-II)**

4.3.1 Representative of CTUIL stated that applications for 28.8 GW had been received in

Khavda area till Nov-24. Further, applications for 12.5 GW were received from Adani Power Ltd. in Dec-24 (KPS4: 8.75GW & KPS5: 3.75GW).

4.3.2 It was informed that only 2.2GW potential declared by MNRE till date against the 5.5 GW capacity for which transmission system has been planned in Khavda area under Phase-VI. Further, no potential has been declared by MNRE as on date against the 7.5GW capacity for which transmission system has been planned in Lakadia area**.**

4.3.3 As on date, 3 GW potential was declared in Lakadia area against which applications for more than 10.5 GW capacity have been received till Mar-25. Out of the same, 3.5 GW have been accommodated at Lakadia S/s and for balance 7.5 GW, a new substation (Lakadia-II) was required to be planned i.e. total 11 GW has been planned in Lakadia area as on date against 3 GW potential.

4.3.4 After deliberations, it was decided that the transmission schemes for the quantum beyond the potential already declared by MNRE/SECI will be taken up for approval only after assessment and declaration of such additional potential by MNRE.

4.4 Network Expansion Scheme for drawal of power at South Kalamb S/s

4.4.1 Representative of CTUIL stated that South Kalamb S/s establishment with 2x1500 MVA, 765/400 kV ICTs with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor along with LILO of Pune-III – Boisar-II 765 kV D/c line is presently under implementation by M/s WRNES Talegaon Power Transmission Limited (WRNES TPTL) (a subsidiary of Adani Energy Solutions Ltd.) with the SCOD of 01.01.2028.

4.4.2 Further, 6 GW HVDC terminal planned at South Kalamb S/s (from Barmer-II) would require minimum of 48 / 54 months (1st Bipole/2nd Bipole) for commissioning, the downstream system from South Kalamb S/s proposed in the subject transmission scheme may be implemented in reduced time-frame of 24 months, as it would provide direct in feed of power into Mumbai area and would help increase ATC of the area.

4.4.3 CTUIL also informed that loading on Pune (AIS)(PG)-South Kalamb-Vikhroli (MSETCL) 400 kV line is seen to be on the higher side and is not N-1 compliant. Hence, it would be essential to reconductor the line with high capacity conductor. While reconductoring of the MSETCL portion of line [from LILO point near Vikhroli to LILO point near Pune(AIS)(PG)] is being carried out by MSETCL, the ISTS portion of the line [i.e. from LILO point upto Pune(AIS)(PG) implemented by M/s WTPL] has been proposed for reconductoring under the subject scheme. Further, considering severe ROW issues in the Mumbai/MMR area, proposed LILOs under the subject scheme at South Kalamb S/s are proposed with Quad ACSR/AAAC/AL59 moose equivalent conductor.

4.4.4 After deliberations, the transmission scheme "Network Expansion Scheme for drawal of power at South Kalamb S/s: Part A" was recommended for implementation under TBCB mode while "Network Expansion Scheme for drawal of power at South Kalamb S/s: Part B (WTPL line reconductoring) and Network Expansion Scheme for drawal of power at South Kalamb S/s: Part C (POWERGRID Bay Upgradation)" were approved for implementation under RTM mode as follows:

4.4.5 Summary of the scheme is given below:

Sl. No.	**Name of the scheme and tentative implementation timeframe**	**Estimated Cost (₹ Crore)**	**Remarks**
1.	Network Expansion Scheme for drawal of power at South Kalamb S/s :**Part A**	901 Cr.	Recommended under TBCB with PFCCL as BPC
2.	**Part B** (WTPL line reconductoring)	5 Cr.	Approved under RTM through Western Transco Power Ltd (WTPL) (a subsidiary of AESL)
3.	**Part C** (POWERGRID Bay Upgradation)	11 Cr.	Approved under RTM through POWERGRID
	Tentative implementation timeframe: Part A: 24 months from the date of SPV transfer Part B & Part C: 24 months from the date of allocation (All Parts B & C would be implemented in matching time-frame of Part A)		

Detailed scope of the scheme is given below:

Sl. Nos.	**Description of Transmission Element**	**Scope of work** **(Type of Substation/Conductor capacity/km/Nos. of bays etc.)**
Part A		
1	• Creation of New 765 kV Bus Sections-II & III & 400 kV Bus Sections-II & III through 765 kV Sectionalization bay: 2 set & 400 kV Sectionalization bay: 2 set along with 2x330 MVAR, 765 kV bus reactor & 2x125 MVAR, 420 kV bus reactor on Section-III. 400 kV Sectionaliser between Sections-I & II & between sections-II & III to be normally open. Further, 765 kV sectionaliser between Sections-I & II & between II &	• 765/400 kV 1500 MVA ICTs- 3 Nos. • 765 kV ICT bays- 3 Nos. (at bus section-III) • 400 kV ICT bays- 3 Nos. (at bus section-III) • 330 MVAr Bus Reactor-2 Nos. (at bus section-III) • 765 kV Bus reactor bays- 2 Nos. (at bus section-III)

Sl. Nos.	Description of Transmission Element	Scope of work (Type of Substation/Conductor capacity/km/Nos. of bays etc.)
	III shall be kept normally closed. The 400 kV sectionalisers can be closed under contingency conditions. • Installation of 3x1500MVA, 765/400 kV ICTs at South Kalamb S/s (400 kV Sec-III & 765 kV Section-III) • All space provisions on 400 kV & 765 kV Bus Sections-I & II of South Kalamb S/s as per RfP document of *"Network Expansion scheme in Western Region to cater to Pumped storage potential near Talegaon (Pune)"* scheme shall be kept while implementing this scheme. TSP of *"Network Expansion scheme in Western Region to cater to Pumped storage potential near Talegaon (Pune)"* scheme shall provide necessary space free of cost for above bus extension / sectionalisation / augmentation works.	• 125 MVAr Bus Reactor-2 Nos. (at bus section-III) • 400 kV Bus reactor bays- 2 Nos. (at bus section-III) • 765 kV Sectionalization bay: 2 sets • 400 kV Sectionalization bay: 2 sets
2	LILO of Nagothane – Padghe 400 kV D/c line at South Kalamb with Quad ACSR/AAAC/AL59 moose equivalent conductor	LILO route length~10 km.
3	LILO of Pune(AIS) – Navi Mumbai 400 kV line at South Kalamb with Quad ACSR/AAAC/AL59 moose equivalent conductor	LILO route length~10 km.
4	LILO of Pune(AIS) – Vikhroli 400 kV line at South Kalamb with Quad ACSR/AAAC/AL59 moose equivalent conductor	LILO route length~10 km.
5	8 Nos. 400 kV bays at South Kalamb S/s for LILO lines at Sl. 2, 3 & 4	400 kV line bays – 8 Nos. (Sec-III)
	Note: *1. TSP of South Kalamb S/s shall provide space for above scope of work at South Kalamb S/s free of cost*	

Part-B:		
6	Reconductoring of the balance line section of Pune(AIS) – Vikhroli 400 kV line (upto LILO point of LILO of Lonikand-Kalwa 400 kV line at Pune(AIS)) of Western Transco Power Ltd. (a subsidiary of AESL) with conductor having capacity of 2100 MVA per ckt at nominal voltage *[MSETCL shall reconductor the balance line portion from above LILO point upto Kalwa (excl. LILO portion at Vikhroli which is already implemented with high capacity conductor) with conductor having capacity of 2100MVA per ckt at nominal voltage in matching time-frame]*	1.707 km. reconductoring (under ownership of WTPL)
Part-C:		
7	Upgradation of 400 kV bay at Pune (AIS) of POWERGRID (associated with Pune (AIS) – Vikhroli 400 kV line) commensurate with the reconductoring capacity of 2100MVA at nominal voltage.	Upgradation of the Complete Dia 6 (Vikroli Line Main Bay, Tie Bay & 315 MVA ICT3 Main Bay) to be carried out

4.5 Transmission System for providing connectivity to RE applicant(s) at Navinal (Mundra)(GIS)

4.5.1 Representative of CTUIL stated that “Network Expansion Scheme in Navinal (Mundra) area of Gujarat for drawal of power in the area” involves Establishment of 765/400 kV (4x1500 MVA) Navinal (Mundra) S/s (GIS) with the LILO of Bhuj-II – Lakadia 765 kV D/c line at Navinal (Mundra) (GIS) S/s. The scheme is presently under implementation by Navinal Transmission Limited [a subsidiary of M/s Adani Energy Solutions Limited (AESL)] with SCOD of 14/07/2026. The scheme shall cater to supply of 3000 MW power to Bulk consumers and for meeting 1500 MW demand for Green Hydrogen/Ammonia projects.

4.5.2 Further, “Transmission System for supply of power to Green Hydrogen/Ammonia manufacturing potential in Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)” scheme includes Augmentation of Transformation capacity at 765/400 kV Navinal (Mundra) S/s (GIS) by 2x1500 MVA ICTs and Navinal (Mundra) (GIS) – Bhuj 765 kV D/c line along with ±300MVAr STATCOM & 2x125MVAr MSC & 1x125MVAr MSR at 400 kV Bus sections- I & II of Navinal (Mundra) (GIS). The above scheme has been planned for meeting additional 3000 MW drawal requirement of Green Hydrogen/Ammonia projects (cumulative up to

7500 MW drawal in Mundra area).

4.5.3 Representative of CTUIL further stated that an application was received from M/s Adani Wind Energy Kutchh Three Ltd. 300 MW Wind Project for injection of power at Navinal (Mundra) (GIS) S/s at 220 kV level. This shall entail Creation of 220 kV switchyard (Bus Sec-I) at Navinal (Mundra) S/s (GIS) along with installation of 1x500MVA, 400/220 kV ICT at Navinal (Mundra) S/s (GIS) along with 1 Nos. 220 kV line bay (GIS) (on 220 kV Bus Sec-I) for interconnection of Wind project of Adani Wind Energy Kutchh Three Ltd.

4.5.4 Since, Navinal/Mundra area is not a declared REZ by MNRE, the works w.r.t. Creation of 220 kV switchyard (Bus Sec-I) at Navinal (Mundra) S/s (GIS) along with installation of 1x500MVA, 400/220 kV ICT at Navinal (Mundra) S/s (GIS) was agreed as part of Associated Transmission System. In-principle intimation was issued to M/s Adani Wind Energy Kutchh Three Ltd. (300 MW) vide letter dated 08.01.2025 along with estimated cost of ATS (including cost of 220 kV bay) of Rs. 83.06 Cr. at Mar-24 price level towards which acceptance for ATS was received on 23.01.2025. Subsequently, Conn-BG2 dated 16.06.2025 of Rs. 83.06 Cr. has been received from applicant. The cost has later been updated based on additional inputs received from TSP dated 08.05.2025 (regarding Bus Ducts/220 kV cable requirement, etc.) on Sep-24 price level to Rs. 105.09 Cr.

4.5.5 Grid-India stated that a significant quantum of GH2 / Bulk load in Navinal area [9250MW out of 15000 MW (Kandla: 3GW, MUL: 12 GW)] has been considered in service while planning of transmission system for RE in Khavda complex. In case of any delay in commissioning of this load, there would be severe overloading of the transmission system planned for RE evacuation. He suggested that the commissioning of this load may be monitored proactively and additional system, in case of any delay in commissioning of these loads, may be planned timely.

4.5.6 After deliberations, the transmission scheme “Transmission System for providing connectivity to RE applicant(s) at Navinal (Mundra)(GIS)” was approved for implementation as mentioned below:

4.5.7 Summary of the scheme is given below:

Sl. No.	**Name of the scheme and tentative implementation timeframe**	**Estimated Cost (₹ Crore)**	**Remarks**
1.	Transmission System for providing connectivity to RE applicant(s) at Navinal (Mundra)(GIS) Tentative implementation timeframe: 24 months from date of allocation	105.09	Approved under RTM through Navinal Transmission Limited [a subsidiary of M/s Adani Energy Solutions Limited (AESL)] i.e. the

			TSP of Navinal (Mundra) (GIS)

Detailed scope of the scheme is given below:

Sl. Nos.	**Description**	**Scope of work** **(Type of Substation/Conductor capacity/km/Nos. of bays etc.)**
1.	Creation of 220 kV switchyard (Bus Sec-I) at Navinal (Mundra) S/s (GIS) along with installation of 1x500MVA, 400/220 kV ICT at Navinal (Mundra) S/s (GIS).	• 400/220 kV ICT – 1 No. • 400 kV ICT bay – 2 Nos. (Including 1 Nos. for Diameter completion in GIS)* • 220 kV ICT bay – 1 No. • 220 kV BC – 1 No. • 400 kV GIS Bus Duct (m)~ 62m (approx.) • 220 kV GIS Bus Duct (m)~ 62m (approx.) • 400 kV Air Bushing for connecting GIS to AIS -3 Nos. • 220 kV Air Bushing for connecting GIS to AIS -3 Nos. • 220 kV Cable (m) ~ 600m (approx.) • 220 kV Cable Termination Kit -1 Set ***** *ICT Bay-Tie Bay- Line Bay configuration has been considered for complete diameter of one & half breaker scheme*
2.	1 No. 220 kV line bay (GIS) (on 220 kV Bus Sec-I) for interconnection of Wind project of Adani Wind Energy Kutchh Three Ltd. (2200001083) (300 MW)	• 220 kV line bay–1 No.

4.6 **Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW), Bellary (2.75 GW) and Tumkur-II (1.5 GW)**

4.6.1 Representative from CTUIL stated that based on the earlier identified potential by MNRE as the part of 500 GW RE by 2023, transmission system was identified for integration of Davanagere / Chitradurga (4 GW), Bellary (1.5 GW) and Tumkur-II (1.5 GW). However, the transmission system was to be implemented in phased manner, accordingly, transmission system for 2 GW at Davanagere / Chitradurga, 1.5 GW at Bellary and 1.5 GW at Tumkur-II was agreed for implementation and is

under various stages of implementation.

4.6.2 In addition to the under implementation transmission system at Davangere / Chitradurga, Bellary and Tumkur-II, additional transmission system augmentation was identified at these locations based on receipt of large number of Connectivity applications and was submitted to 28th NCT meeting held on 06.03.2025 for recommendation / approval as , "Transmission system for integration of additional RE capacity in Davanagere and Bellary REZ" & "Transmission System for integration of additional RE capacity at Tumkur-II REZ". However based on the observations of Karnataka regarding development of the RE by State itself, NCT decided that the transmission system within the declared RE potential by MNRE may be recommended / approved. Accordingly, NCT approved part system at Davangere i.e. "Transmission system strengthening at Davanagere for integration of RE generation". For the other transmission system at Bellary and Tumkur-II, NCT decided to hold the proposals till finalization of the transmission Resource Adequacy (RA) plan of Karnataka. The RE capacity to be integrated to intra-state system would be factored in the RA plan and for the balance RE capacity, ISTS network may be planned.

4.6.3 Representative from CTUIL further informed that MNRE vide letter dated 25.06.2025 communicated for additional 6 GW RE potential in Karnataka. Accordingly, the transmission system for integration of additional RE potential at Davanagere (0.25 GW), Bellary (2.75 GW) and Tumkur-II (1.5 GW) have been proposed. It was also informed that the transmission system for additional potential at Bijapur is under finalization.

4.6.4 CTUIL representation also informed that the total cumulative RE potential declared at Davanagere (4.25 GW) and Bellary (4.25 GW) is 8.5 GW. However, Davanagere PS was initially identified with 6x1500 MVA, 765/400kV ICTs for evacuation of 7.5 GW RE generation including RE generations at Bellary PS under N-1 contingency. With the additional 1x1500 MVA (7th), 765/400kV ICT at Davanagere PS, entire 8.5 GW declared RE potential can be integrated & evacuated with optimal utilization of the transmission system. However, installation of the 7th ICT is beyond the general guidelines prescribed under Transmission Planning Criteria. On the other hand with the identification of the 7th ICT, additional transmission system along with additional pooling station is being avoided for 1 GW of additional RE potential. It was also informed that with the grant of Connectivity for above total RE potential of 8.5 GW, both the pooling stations (Davanagere / Chitradurga and Bellary) shall be closed for further grant of Connectivity. Accordingly, 1x1500 MVA, 765/440kV ICT (7th) has been proposed at Davanagere PS.

4.6.5 Grid-India suggested that in place of installing 7th ICT of 1x1500 MVA, 765/400 kV, which is beyond the limit prescribed in CEA Manual on Transmission Planning Criteria 2023, storage may be planned at Davangere. CTUIL further clarified that considering the optimization & utilization of transmission

infrastructure, Connectivity for storage may be considered at Davanagere/Bellary.

4.6.6 It was opined that as a special case the 1x1500 MVA, 765/400kV 7th ICT may be considered at Davanagere for optimal utilization of transmission system.

4.6.7 After deliberations, the transmission schemes "Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW) and Bellary (2.75 GW)" and "Transmission system strengthening at Tumkur-II for integration of additional RE potential (1.5 GW)" were recommended for implementation under TBCB mode as follows:

A. Summary of the scheme "Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW) and Bellary (2.75 GW)" is given below:

Sl. No.	**Name of the scheme and tentative implementation timeframe**	**Estimated Cost (₹ Crore)**	**Remarks**
1.	Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW) and Bellary (2.75 GW) Tentative implementation timeframe: 24 months from the date of SPV transfer	1111	Recommended under TBCB mode with RECPDCL as BPC

Detailed scope of the scheme "Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW) and Bellary (2.75 GW)" is given below:

Sl. No.	***Scope of the Transmission Scheme***	***Capacity /km***
1.	Augmentation of transformation capacity by 2x1500 MVA, 765/400kV ICTs (6th & 7th) at Davanagere PS	• 765/400kV, 1500 MVA, ICTs – 2 Nos. • 765kV ICT bays – 2 Nos. • 400kV ICT bays – 2 Nos. • 400kV Bus Sectionalizer : 1 set
2.	4 Nos. of 220kV line bays and 1 No. of 400kV line bay at Davanagere PS for termination of dedicated transmission lines of RE generation projects.	• 400kV line bays – 1 No. • 220kV line bays – 4 Nos.
3.	Augmentation of Bellary PS by 400/220kV, 6x500 MVA ICTs	• 400/220kV, 500 MVA, ICTs – 6 Nos. • 400kV ICT bays – 6 Nos. • 220kV ICT bays – 6 Nos. • 220kV Bus Sectionalizer : 2 set • 220 kV Bus Coupler (BC) Bay – 2 Nos. • 220 kV Transfer Bus Coupler (TBC) Bay – 2 Nos.
4.	Bellary – Davanagare 2nd 400kV (Quad) D/c line (~ 80 km)	~ 80 km • 400kV line bays – 2 Nos. (at Bellary PS) • 400kV line bays – 2 Nos. (at Davanagere

		/ Chitradurga PS)
5.	5 Nos. of 220kV line bays at Bellary PS for termination of dedicated transmission lines of RE developers	• 220kV line bay – 5 Nos.

Note:

i. TSP of Davanagere PS to provide space (free of cost) for above augmentation works at Davanagere PS

ii. TSP of Bellary PS to provide space (free of cost) for above augmentation works at Bellary PS

iii. TSP of Bellary PS and Davanagere PS to provide space (free of cost) for 2 Nos. of 400kV line bays each at Bellary PS and Davanagere PS for termination of Bellary – Davanagare 2nd 400kV (Quad) D/c line

B. Summary of the scheme "Transmission system strengthening at Tumkur-II for integration of additional RE potential (1.5 GW)" is given below*:*

Sl. No.	**Name of the scheme and tentative implementation timeframe**	**Estimated Cost (₹ Crore)**	**Remarks**
1.	Transmission system strengthening at Tumkur-II for integration of additional RE potential (1.5 GW) Tentative implementation timeframe: 24 months from the date of SPV transfer	1051	Recommended under TBCB mode with PFCCL as BPC

Detailed scope of the scheme "Transmission system strengthening at Tumkur-II for integration of additional RE potential (1.5 GW)" is given below:

Sl. No.	***Scope of the Transmission Scheme***	***Capacity /km***
1.	Augmentation of Tumkur-II PS by 400/220 kV, 3x500 MVA ICTs (5th to 7th)	• 400/220kV, 500 MVA, ICTs – 3 Nos. • 400kV ICT bays – 3 Nos. • 220kV ICT bays – 3 Nos. • 220kV Bus Sectionalizer: 2 set • 220 kV Bus Coupler (BC) Bay – 2 Nos. • 220 kV Transfer Bus Coupler (TBC) Bay – 2 Nos.
2.	Tumkur-II – Madhugiri 400kV (Quad) D/c line (~ 100 km)	~ 100 km • 400kV line bays – 2 Nos. (at Tumkur-II PS) • 400kV line bays – 2 Nos. (at Madhugiri)
3.	± 300 MVAR STATCOM at Tumkur-II PS with switching arrangement of under implementation 2x125 MVAr bus reactors.	• ± 300 MVAR STATCOM at Tumkur-II PS with switching arrangement of under implementation 2x125 MVAr bus reactors. • 400 kV bay – 1 No.

4.	2 Nos. of 220kV line bay at Tumkur-II PS for termination of dedicated transmission lines of RE developers	• 220kV line bays – 2 Nos.

Note:

i. TSP of Tumkur-II PS to provide space (free of cost) for STATCOM and above augmentation works at Tumkur-II PS

ii. TSP of Tumkur-II PS to provide space (free of cost) for 2 nos. of 400kV line bays at Tumkur-II PS for termination of Tumkur-II – Madhugiri 400kV (Quad) D/c line

iii. POWERGRID to provide space (free of cost) for 2 nos. of 400kV line bays at Madhugiri for termination of Tumkur-II – Madhugiri 400kV (Quad) D/c line

4.7 North Eastern Region Expansion Scheme-XXIII (NERES-XXIII)

4.7.1 The scheme was discussed in the 30th meeting of NCT held on 30.05.2025 in which CTUIL informed that the scheme was awarded to POWERGRID for implementation under RTM mode vide CTU OM dated 14-06-2024 with an estimated cost of Rs.73.47 Cr.

4.7.2 Further, POWERGRID vide letter dated 14-01-2025, requested CTUIL for reviewing the approved project cost due to higher DPR cost (Rs. 200.15 Cr.) mainly due to RoW compensation. CTUIL did the revised costing based on September 2024 Price level which works out to be 117.65 Cr.

4.7.3 NCT in its 30th meeting expressed concern over the time gap of 7 months' between the award of the scheme to POWERGRID and POWERGRID's letter to CTUIL informing higher project cost. NCT opined that this time gap should be minimum. It was also opined that there may not be implications of RoW as there is stringing of second circuit only on the existing line with double circuit towers

4.7.4 CTUIL was directed to obtain clarification from POWERGRID regarding RoW compensation and verify the difference in the cost calculation and to bring the agenda with revised cost (at latest price level) in the next NCT meeting.

4.7.5 Accordingly, Representative of CTUIL presented the cost comparison sheet and compensation summary. It was noted that the revised costing done by CTUIL based on September 2024 Price level works out to be 117.65 Cr . However, the higher DPR cost (Rs. 200.15 Cr.) by POWERGRID is mainly due to RoW compensation.

4.7.6 After deliberations, NCT approved the scheme "North Eastern Region Expansion Scheme-XXIII (NERES-XXIII)" for implementation under RTM mode as mentioned below:

4.7.7 Summary of the scheme is given below:

Sl. No.	**Name of the scheme and tentative implementation timeframe**	**Estimated Cost (₹ Crore)**	**Remarks**

1.	North Eastern Region Expansion Scheme-XXIII (NERES-XXIII) Tentative implementation timeframe: 30 months from the date of allocation	117.65	Approved under RTM mode through POWERGRID

Detailed scope of the scheme is given below:

Sl. No.	**Scope of the Transmission Scheme**	**Capacity/km**	**Estimated Cost (₹ Cr.)**
(a)	Stringing of 2nd circuit of Pasighat (Arunachal Pradesh) – Roing (POWERGRID) 132kV S/c on D/c line with ACSR Panther conductor commensurate with rating and maximum operating temperature of 1st circuit	103km	35.23
(b)	Stringing of 2nd circuit of Roing (POWERGRID) – Tezu (POWERGRID) 132kV S/c on D/c line with ACSR Panther conductor commensurate with rating and maximum operating temperature of 1st circuit	73km	24.97
(c)	Stringing of 2nd circuit of Tezu (POWERGRID) – Namsai (POWERGRID) 132kV S/c on D/c line with ACSR Panther conductor commensurate with rating and maximum operating temperature of 1st circuit	95.24km	32.57
(d)	Extension at Pasighat (DoP, Arunachal Pradesh)@: 1 no. 132kV AIS line bay for termination of 2nd circuit of Pasighat (Arunachal Pradesh) – Roing (POWERGRID) 132kV D/c line	132kV AIS line bay: 1 No.	4.15
(e)	Extension at Roing (POWERGRID) S/s: 2 no. 132kV AIS line bay for termination of 2nd circuit of Pasighat (Arunachal Pradesh) – Roing (POWERGRID) 132kV D/c line and 2nd circuit of Roing (POWERGRID) – Tezu (POWERGRID) 132kV D/c line	132kV AIS line bay: 2 Nos.	8.29
(f)	Extension at Tezu (POWERGRID) S/s: 2 no. 132kV AIS line bay for termination of 2nd circuit of Roing (POWERGRID) – Tezu (POWERGRID) 132kV D/c line and 2nd circuit of Tezu (POWERGRID) – Namsai (POWERGRID) 132kV D/c line	132kV AIS line bay: 2 Nos.	8.29
(g)	Extension at Namsai (POWERGRID) S/s: 1 no. 132kV AIS line bay for termination of 2nd circuit of Tezu (POWERGRID) – Namsai (POWERGRID) 132kV D/c line	132kV AIS line bay: 1 No.	4.15
		Total	**117.65**

Note: @DoP, Arunachal Pradesh shall provide space for 1 no. 132kV AIS line bay at Pasighat (DoP, Arunachal Pradesh) S/s to the ISTS licensee at no cost.

5 Communication schemes:

5.1 OPGW installation on 765kV Sasan – Vindhyachal PS 2 x S/c Lines which are proposed to be bypassed at Vindhyachal PS.

5.1.1 Representative of CTUIL stated that Transmission scheme "Inter-regional (NR-WR) Transmission System strengthening to relieve the loading of 765 kV Vindhyachal-Varanasi D/c line" was approved in the 27th meeting of NCT. In the scheme it has been proposed to construct 765 kV Vindhyachal Pool - Prayagraj D/c line and Bypassing of both ckts of 765 kV Sasan – Vindhyachal Pool 2xS/c line at Vindhyachal Pool and connecting it with 765 kV Vindhyachal Pool - Prayagraj D/c line, thus forming 765 kV Sasan - Prayagraj D/c line.

5.1.2 It was further mentioned that One 765 kV Sasan – Vindhyachal Pool S/c line is owned by M/s POWERGRID and other 765 kV Sasan – Vindhyachal Pool S/c line is owned by M/s Adani. OPGW on 765 kV Sasan – Vindhyachal Pool 2xS/c line is not available, hence it is proposed to install 24F OPGW along with required approach cables, accessories etc. on both S/c lines owned by M/s POWERGRID and M/s Adani to facilitate the redundant SCADA data communication and tele-protection. One spare STM-16 port is available in existing FOTE (owned by POWERGRID) at Control Room of Sasan S/s which shall be utilised for the connectivity of Prayagraj-Sasan line. Further M/s Adani will provide one Nos. of STM-16 FOTE at Sasan.

5.1.3 After deliberations, the communication scheme "OPGW installation on 765kV Sasan – Vindhyachal PS 2 x S/c Lines proposed to be bypassed at Vindhyachal PS" was approved for implementation under RTM mode as mentioned below:

5.1.4 Summary of the scheme is given below:

Sl. No.	Name of the scheme and tentative implementation timeframe	Estimated Cost (₹ Crore)	Remarks
1.	OPGW installation on 765kV Sasan – Vindhyachal PS 2 x S/c Lines proposed to be bypassed at Vindhyachal PS (Part A & Part B) Tentative implementation timeframe: 24 months or matching timeframe of Vindhyachal - Prayagraj transmission line, whichever is earlier	1 Cr. { Part A: Rs. 0.35 Cr Part B: Rs. Rs. 0.65 Cr}	Approved under RTM mode through Part A: POWERGRID Part B: M/s Adani (Chhattisgarh WR transmission Limited)

Detailed scope of the scheme is given below:

S.N.	Scope of the scheme	Implementing Agency
1	**Part A.** For OPGW on POWERGRID owned 765kV Sasan – Vindhyachal PS S/c Line (approx.6 km)	POWERGRID

	1. Supply and installation of 24F along with required approach cables, accessories etc. on POWERGRID's 765kV Sasan – Vindhyachal PS S/c Line (6 km approx.) by replacing the existing one no. earthwire by Live Line installation. 2. Integration of this OPGW on 765kV Sasan – Vindhyachal PS S/c Line with OPGW of proposed 765 kV Vindhyachal Pool - Prayagraj D/c line.	
	Part B. For OPGW on Adani (Chhattisgarh WR transmission Limited) owned 765kV Sasan – Vindhyachal PS S/c Line (approx.6 km) 1. Supply and installation of 24F along with required approach cables, accessories etc. and required STM-16 FOTE at Sasan for Adani's (Chhattisgarh WR transmission Limited) 765kV Sasan – Vindhyachal PS S/c Line (6 km approx.) by replacing the existing one no. earthwire by Live Line installation. 2. Integration of this OPGW on 765kV Sasan – Vindhyachal PS S/c Line with OPGW of proposed 765 kV Vindhyachal Pool - Prayagraj D/c line.	M/s Adani (Chhattisgarh WR transmission Limited)

Note: 2 Nos. of fibers each from POWERGRID and Adani owned 765kV Sasan – Vindhyachal PS S/c Line will be used as main & standby fiber for commissioning of Sasan – Vindhyachal link to maintain redundancy of OPGW in the Sasan – Vindhyachal section.

5.2 **Supply and installation of AMR compatible 5 min Interface Energy Meter along with AMR Systems- For all five regions NER, ER, NR, WR & SR as PAN India**

5.2.1 Representative of CTUIL stated that in the last few years the need for implementing 5-minute meters along with AMR system for regional energy

accounting and settlement at the Inter State level has been discussed and deliberated in various apex level forums & Committees. A pilot project on 5-minute metering was implemented as per the directive from Hon'ble CERC in 2018. A report on the pilot project covering implementation aspects, challenges and suggested way forward has been submitted by Grid-India for perusal of the Hon'ble Commission

5.2.2 Representative of CTUIL stated that in line with 15th meeting of NPC and minutes, DPR for the pan-India AMR & meter replacement Project has been prepared by POWERGRID in consultation with CTUIL, all RPCs and GRID INDIA.

5.2.3 Representative of Grid-India stated that the AMR system would operate as a standalone IT system. The associated servers may require future expansion and are also susceptible to cyber threats. Therefore, housing the AMR server in MEITY data entre or any other location like UNMS server locations needs deliberations. Which would ensure both compliance with cybersecurity norms and scalability. Also a centralised architecture with (DC+DR) with a similar architecture for MDP software being developed by Grid-India needs to be looked into.

5.2.4 Chairperson, CEA opined that the scheme should be formulated to ensure that communication system shall be able to communicate in a secured manner and to implement a dedicated communication network by identifying the links and prioritizing the system storage security.

5.2.5 After deliberations NCT directed CTUIL, Grid India and Cyber Security Division (CEA) to carry out detailed deliberations on the above mentioned issues and bring comprehensive agenda in the NCT.

6 Status of the bids under process by BPCs

6.1 The BPCs (RECPDCL and PFCCL) have made presentations on the status of under bidding schemes. Summary of the same is given below:

S.N.	Region(s)	RECPDCL	PFCCL
1	LoI issued and SPV to be transferred	0	4
2	Bids Under Evaluation	1	0
3	RfP issued and bids to be submitted	5	8
4	RfP yet to be issued	2	0
5	RfP bid submission on hold	1	0
6	TOTAL	9	12

6.2 Members noted the status of the schemes under bidding.

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Summary of the deliberations of the 31st meeting of NCT held on 14th July, 2025

I. Modification in the earlier approved/notified communication schemes:

A. Modification in Time-line of 400/220 kV 500 MVA ICT (7th) at Mandsaur PS being implemented under "Augmentation of transformation capacity and Implementation of line bays at Mandsaur S/s for RE Interconnection" scheme

NCT approved the revision in time-line of 400/220 kV, 500 MVA ICT (7th) at Mandsaur PS mentioned at Sl. 6 from 24.03.2027 to 15.06.2027

Sl. No	Name of the Transmission Element	Scheduled COD	Revised COD
1	Creation of New 400 kV and 765 kV Bus Section-II through Sectionaliser arrangement	24.03.2027	24.03.2027
2	Augmentation of Transformation capacity by 1x1500 MVA, 765/400 kV ICT (4th) (Terminated at 400 kV and 765 kV Bus Section-II)		
3	Augmentation of Transformation capacity by 1x500 MVA, 400/220 kV ICT (6th) (Terminated on 400 kV Bus Section-I and 220 kV Bus Section-II)		
4	1 No. 220 kV line bay (on 220 kV Bus Sec-II) at Mandsaur PS for interconnection of Solar project of Waaree Renewable Technologies Ltd. (WRTL) (2200001192) (300 MW)		
5	1 No. 400 kV line bay at Mandsaur PS (on 400 kV Bus Sec-II) for interconnection of Solar project of NTPC Renewable Energy Ltd. (NTPCREL) (2200001301) (300 MW)	31.03.2027	31.03.2027
6	Augmentation of Transformation capacity by 1x500 MVA, 400/220 kV ICT (7th) (Terminated on 400 kV Bus Section-II and 220 kV Bus Section-III) at Mandsaur PS	24.03.2027	15.06.2027
7	Creation of New 220 kV Bus Section-3 with Sectionaliser arrangement at Mandsaur PS	15.06.2027	15.06.2027
8	1 No. 220 kV line bay at Mandsaur PS (220 kV New Bus Section-3) for interconnection of wind project of JSP Green Pvt. Ltd. (JSPGPL) (2200001356) (350 MW)	15.06.2027	15.06.2027
9	1 No. 220 kV line bay at Mandsaur PS (220 kV New Bus Section-3) for interconnection of Hybrid project of TEQ Green Power XXII Pvt. Ltd. (TGP XXII PL) (2200001431) (250 MW)	30.03.2028	30.03.2028

II. ISTS Transmission schemes, costing greater than ₹ 500 Crore, recommended by NCT to MoP under TBCB:

The ISTS transmission schemes recommended by NCT to MoP are given below:

Sl.	Name of Transmission	Impleme	Tentative	BPC	Estimated

No.	Scheme	ntation Mode	Implementation timeframe		Cost (₹ Crs.)
1.	Network Expansion Scheme for drawal of power at South Kalamb S/s: **Part A**	TBCB	24 months from the date of SPV transfer	PFCCL	901
2.	Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW) and Bellary (2.75 GW)	TBCB	24 Months from the date of SPV transfer	RECPDCL	1111
3.	Transmission system strengthening at Tumkur-II for integration of additional RE potential (1.5 GW)	TBCB	24 Months from the date of SPV transfer	PFCCL	1051

The broad scope of the above ISTS schemes to be notified in Gazette of India is as given below:

Sl. No.	Name of Scheme & Tentative implementation timeframe	Broad Scope	Bid Process Coordinator
1.	Network Expansion Scheme for drawal of power at South Kalamb S/s: **Part A** **Implementation Timeframe:** 24 months from the date of SPV transfer	• Creation of New 765 kV Bus Sections-II & III & 400 kV Bus Sections-II & III through 765 kV Sectionalization bay: 2 set & 400 kV Sectionalization bay: 2 set along with 2x330 MVAR, 765 kV bus reactor & 2x125 MVAR, 420 kV bus reactor on Section-III. 400 kV Sectionaliser between Sections-I & II & between sections-II & III to be normally open. Further, 765 kV sectionaliser between Sections-I & II & between II & III shall be kept normally closed. The 400 kV sectionalisers can be closed under contingency conditions. • Installation of 3x1500MVA, 765/400 kV ICTs at South Kalamb S/s (400 kV Sec-III & 765 kV Section-III) • All space provisions on 400 kV & 765 kV Bus Sections-I & II of South Kalamb S/s as per RfP document of “Network Expansion scheme in Western Region to cater to Pumped storage potential near Talegaon (Pune)” scheme shall be kept	PFCCL

		while implementing this scheme. TSP of "Network Expansion scheme in Western Region to cater to Pumped storage potential near Talegaon (Pune)" scheme shall provide necessary space free of cost for above bus extension / sectionalisation / augmentation works • LILO of Nagothane – Padghe 400 kV D/c line at South Kalamb with Quad ACSR/AAAC/AL59 moose equivalent conductor • LILO of Pune(AIS) – Navi Mumbai 400 kV line at South Kalamb with Quad ACSR/AAAC/AL59 moose equivalent conductor • LILO of Pune(AIS) – Vikhroli 400 kV line at South Kalamb with Quad ACSR/AAAC/AL59 moose equivalent conductor • 8 Nos. 400 kV bays at South Kalamb S/s for LILO lines at Sl. 2, 3 & 4 **(Detailed scope as approved by 31st NCT and subsequent amendments thereof)**	
2.	Transmission system strengthening for integration of additional RE potential at Davanagere (0.25 GW) and Bellary (2.75 GW) **Implementation Timeframe:** 24 Months from the date of SPV transfer	• Augmentation of transformation capacity by 2x1500 MVA, 765/400kV ICTs (6th & 7th) at Davanagere PS • 4 Nos. of 220kV line bays and 1 no. of 400kV line bay at Davanagere PS for termination of dedicated transmission lines of RE generation projects. • Augmentation of Bellary PS by 400/220kV, 6x500 MVA ICTs • Bellary – Davanagare 2nd 400kV (Quad) D/c line (~ 80 km) • 5 Nos. of 220kV line bays at Bellary PS for termination of dedicated transmission lines of RE developers **(Detailed scope as approved by 31st NCT and subsequent amendments thereof)**	RECPDCL
3.	Transmission system strengthening at Tumkur-II for integration of additional RE potential (1.5 GW) Implementation Timeframe: 24 Months from the date of SPV transfer	• Augmentation of Tumkur-II PS by 400/220 kV, 3x500 MVA ICTs (5th to 7th) • Tumkur-II – Madhugiri 400kV (Quad) D/c line (~ 100 km) • ± 300 MVAR STATCOM at Tumkur-II PS with switching arrangement of under implementation 2x125 MVAr bus reactors. • 2 No. of 220kV line bay at Tumkur-II PS for termination of dedicated transmission lines of RE developers	PFCCL

		(Detailed scope as approved by 31st NCT and subsequent amendments thereof)	

III. ISTS Transmission schemes, costing between Rs 100 Crore to Rs 500 Crore, approved by NCT:

The transmission schemes approved by NCT under RTM route is given below:

Sl. No.	Name of Transmission Scheme	Implementation Mode	Implementation timeframe	Estimated Cost (₹ Cr)
1.	Network Expansion Scheme for drawal of power at South Kalamb S/s: **Part B** (WTPL line reconductoring)	RTM through Western Transco Power Ltd (WTPL) (a subsidiary of AESL)	24 months from the date of allocation	5
2.	Network Expansion Scheme for drawal of power at South Kalamb S/s: **Part C** (POWERGRID Bay Upgradation)	RTM through through POWERGRID	24 months from the date of allocation	11
3.	Transmission System for providing connectivity to RE applicant(s) at Navinal (Mundra)(GIS)	RTM through Navinal Transmission Limited [a subsidiary of M/s Adani Energy Solutions Limited (AESL)] i.e. the TSP of Navinal (Mundra) (GIS)	24 months from the date of allocation	105.09
4.	North Eastern Region Expansion Scheme-XXIII (NERES-XXIII)	RTM through POWERGRID	30 months from the date of allocation	117.65

The broad scope of above schemes are given below

Sl. No.	Name of Scheme & Tentative implementation timeframe	Broad Scope
1.	Network Expansion Scheme for drawal of power at South Kalamb S/s: **Part B** (WTPL line reconductoring) Implementation Timeframe: 24 months	Reconductoring of the balance line section of Pune(AIS) – Vikhroli 400 kV line (upto LILO point of LILO of Lonikand-Kalwa 400 kV line at Pune(AIS)) of Western Transco Power Ltd. (a subsidiary of AESL) with conductor having capacity of 2100MVA per ckt at nominal voltage **(Detailed scope as approved by 31st NCT and subsequent amendments thereof)**

	from the date of allocation	
2.	Network Expansion Scheme for drawal of power at South Kalamb S/s: **Part C** (POWERGRID Bay Upgradation) Implementation Timeframe: 24 months from the date of allocation	Upgradation of 400 kV bay at Pune(AIS) of POWERGRID (associated with Pune(AIS) – Vikhroli 400 kV line) commensurate with the reconductoring capacity of 2100MVA at nominal voltage. **(Detailed scope as approved by 31st NCT and subsequent amendments thereof)**
3.	Transmission System for providing connectivity to RE applicant(s) at Navinal (Mundra)(GIS) Implementation Timeframe: 24 months from the date of allocation	• Creation of 220 kV switchyard (Bus Sec-I) at Navinal (Mundra) S/s (GIS) along with installation of 1x500MVA, 400/220 kV ICT at Navinal (Mundra) S/s (GIS). • 1 Nos. 220 kV line bay (GIS) (on 220 kV Bus Sec-I) for interconnection of Wind project of Adani Wind Energy Kutchh Three Ltd. (2200001083) (300 MW) **(Detailed scope as approved by 31st NCT and subsequent amendments thereof)**
4.	North Eastern Region Expansion Scheme-XXIII (NERES-XXIII) Implementation Timeframe: 30 months from the date of allocation	• Stringing of 2nd circuit of Pasighat (Arunachal Pradesh) – Roing (POWERGRID) 132kV S/c on D/c line with ACSR Panther conductor commensurate with rating and maximum operating temperature of 1st circuit • Stringing of 2nd circuit of Roing (POWERGRID) – Tezu (POWERGRID) 132kV S/c on D/c line with ACSR Panther conductor commensurate with rating and maximum operating temperature of 1st circuit • Stringing of 2nd circuit of Tezu (POWERGRID) – Namsai (POWERGRID) 132kV S/c on D/c line with ACSR Panther conductor commensurate with rating and maximum operating temperature of 1st circuit • Extension at Pasighat (DoP, Arunachal Pradesh)@: 1 no. 132kV AIS line bay for termination of 2nd circuit of Pasighat (Arunachal Pradesh) – Roing (POWERGRID) 132kV D/c line • Extension at Roing (POWERGRID) S/s: 2 no. 132kV AIS line bay for termination of 2nd circuit of Pasighat (Arunachal Pradesh) – Roing (POWERGRID) 132kV D/c line and 2nd circuit of Roing (POWERGRID) – Tezu (POWERGRID) 132kV D/c line • Extension at Tezu (POWERGRID) S/s: 2 no. 132kV AIS line bay for termination of 2nd circuit of Roing (POWERGRID) – Tezu (POWERGRID) 132kV D/c line and 2nd circuit of Tezu (POWERGRID) – Namsai (POWERGRID) 132kV D/c line • Extension at Namsai (POWERGRID) S/s: 1 no. 132kV AIS line bay for termination of 2nd circuit of Tezu (POWERGRID) – Namsai (POWERGRID) 132kV D/c line

		(**Detailed scope as approved by 31st NCT and subsequent amendments thereof)**

IV. Communication schemes approved by NCT

Sl. No.	Name of Transmission Scheme	Implementation Mode	Tentative Implementation timeframe	Implementing Agency	Estimated Cost (Rs. Crs)
1.	OPGW installation on 765kV Sasan – Vindhyachal PS 2 x S/c Lines which are proposed to be bypassed at Vindhyachal PS (Part A & Part B)	RTM	24 months or matching timeframe of Vindhyachal - Prayagraj transmission line, whichever is earlier	Part A: POWERGRID Part B: M/s Adani (Chhattisgarh WR transmission Limited)	1 Cr. { Part A: Rs. 0.35 Cr Part B: Rs. Rs. 0.65 Cr}

Annexure-I

List of participants of the 31st meeting of NCT

CEA:

1. Sh. Ghanshyam Prasad, Chairperson, CEA & Chairman, NCT
2. Sh. Ajay Talegaonkar, Member (E&C)
3. Sh. V. K. Singh, Member (PS)
4. Ms. Ammi R Toppo, Chief Engineer (PSPA-I)
5. Sh. S.K. Maharana, Chief Engineer (PCD)
6. Sh. Farooque Iqbal, Director (PSPA-II)
7. Sh. Ganeshwar Rao Jada, Director (PSPA-I)
8. Sh. Pranay Garg, Deputy Director (PSPA-II)
9. Sh. Kanhaiya Singh Kushwaha, Deputy Director (PSPA-I)
10. Sh. Manish Kumar Verma, Assistant Director (PSPA-II)

MoP:

1. Sh. Om Kant Shukla, Director (Trans.)

RPCs:

1. Sh. K.B. Jagtap, MS (NERPC)
2. Sh. N.S. Mondal, MS(ERPC)
3. Sh. Sivadas, Director (Transmission) KSEBL
4. Commercial, WRPC
5. Veerendranath M
6. Praveen, EE (NRPC)

MNRE:

1. Sh. Tarun Singh, Scientist E

SECI:

1. Sh. Vineet Kumar, DGM
2. Sh. R. K. Agarwal, Consultant

NITI AYOG:

1. Sh. Manoj Kumar Upadhyay, Dy. Adviser

CTUIL:

1. Sh. Ashok Pal, COO
2. Sh. Vikas Bagadia, CGM
3. Ms. Nutan Mishra, Sr, GM
4. Sh. K.K. Sarkar, Sr. GM
5. Sh. P.S. Das, Sr. GM
6. Sh. Anil Kumar Meena, GM
7. Sh. Shiv Kumar Gupta, Sr. DGM
8. Sh. Bhaskar Wagh, DGM
9. Sh. T. P. Verma, DGM

10. Sh. Venkatesh Gorli, Chief Manager
11. Sh. Shashank Shekhar, Manager

GRID India:

1. Sh. S.C. Saxena, CMD
2. Sh. Rajiv Porwal, Director (SO)
3. Sh. Vivek Pandey, CGM (SO)
4. Sh. Priyam Jain, Chief Manager (SO)

RECPDCL

1. Sh. Vijay Kulkarni Sr. GM
2. Sh. Anil Kumar Parela, Chief Manager

PFCCL

1. Sh. Naveen Phougat, GM
2. Sh. Nirmala Meena, Chief Manager
3. Sh. Dharmender, AM

Expert Member

1. Sh. Ravinder Gupta, Ex Chief Engineer, CEA