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भारत सरकार केंद्रीय विद्युत प्राधिकरण दक्षिण क्षेत्रीय विद्युत समिति 29, रेसकोर्स क्रास रोड बेंगलूर- 560 009	सत्यमेव जयते	Government of India Central Electricity Authority **Southern Regional Power Committee** 29, Race Course Cross Road Bengaluru-560 009	सुरक्षा है जहां खुशियां हैं वहां
Email:mssrpc-ka@nic.in		Phone: 080-22287205	
सं/No.	SRPC/MS/MIN-58 /2026/4113 - 198	दिनांक/ Date	**03.09.2026**

सेवा में / To:

(वितरण सूची के अनुसार / *As per the distribution list)*

विषय : एसआरपीसी की 58 वीं और टीसीसी के 55 वीं बैठकों कार्यवृत के संबंध में

Subject: Minutes of the 58th Meeting of SRPC and 55th Meeting of TCC -reg.

महोदया /महोदय,

Madam/Sir,

एसआरपीसी की 58वीं बैठक 28.07.2026 और टीसीसी के 55 वीं 24.07.2026 को अनलाईन माध्यम से आयोजित की गई बैठकों के कार्यवृत संगलग्न है ।

The Minutes of the **58th** SRPC and **55th** TCC Meetings held on **28.07.2026 and 24.07.2026** respectively through online mode is enclosed.

धन्यवाद / Thanking you,

भवदीय/Yours faithfully,

संगलन /**Enclosure:** यथोपरि /**as above.**

(**असित सिंह /Asit Singh**)

सदस्य सचिव/Member Secretary

Distribution List:

A. Members of SRPC:

1) **Dr V Arun Roy, Chairperson SRPC and CMD, TNEB LTD, Chennai**
2) Shri Hemant Jain, Member (GO & D), CEA, New Delhi.
3) Shri K Vijayanand, CMD, APTRANSCO, Vijayawada
4) Ms Naga Lakshmi, Managing Director, APGENCO, Vijayawada
5) Shri AKV Bhaskar, Director (Grid &Tr. Mgmt), APTRANSCO, Vijayawada
6) Sri Prudhvitej Immadi, CMD, APEPDCL, Vishakapatnam
7) Shri Rajendra Cholan P, MD, KPCL, Bengaluru
8) Dr Ram Prasath Manohar. V, Managing Director, KPTCL, Bengaluru
9) Shri K P Rudrappaiah, Managing Director, PCKL, Bengaluru
10) Director (Projects & Op), KPTCL, Bengaluru
11) Shri Rangaraju S, Chief Engineer (E), SLDC, KPTCL, Bengaluru
12) Dr M G Rajamanickam, CMD, KSEBL, Thiruvananthapuram
13) Shri Sivadas S, Director (T, SO & P), KSEBL, Thiruvananthapuram
14) Shri Rajeev KR, Director (HRM, S, W, S & QA), KSEBL, Thiruvananthapuram
15) Shri Rajan M P, Director (Gen –Elec & Civil, REES, SOURA), KSEBL, Thiruvananthapuram
16) Shri P N Sridhar, Managing Director, TNGECL, Chennai
17) Shri M Govind Rao, Managing Director, TNPGCL, Chennai
18) Ms I S Mercy Ramya, Managing Director, TANTRANSCO, Chennai
19) Ms G K Kanchana, Director (Operation), TANTRANSCO, Chennai
20) Shri D Krishna Bhaskar, CMD, TGTRANSCO, Hyderabad
21) Shri S Harish, CMD, TGGENCO, Hyderabad
22) Shri G Sampath Kumar, Director(G&TM), TGTRANSCO, Hyderabad
23) Shri Jitesh V Patil, CMD, TGSPDCL, Hyderabad
24) Ms A Muthamma, Secretary (Power), Govt. of Puducherry, Puducherry
25) Shri Naveen Srivastava, Director (Operation), PGCIL, Gurugram
26) Shri K K Gupta, COO, CTUIL, Gurugram
27) Shri Jayakumar Srinivasan, Director (Finance), NTPC, New Delhi
28) Shri Rajesh Pratap Singh Sisodia, Director (Power), NLCIL, Neyveli
29) Shri Sonal Bajaj, Director (Finance), NPCIL, Mumbai
30) Shri Ahmad Kaunain Raza, CEO, NTECL, Vallur
31) Shri Sudip Nag, COO (O&M), APL-Udupi, Udupi
32) Shri Jyotiprakash Panda, Head-Regulatory & Power Sales, JSWEL, New Delhi
33) Shri T A Aravind Raja, CEO, NTPL, Tuticorin
34) Shri J Mahapatra, CEO, SEIL, Gurugram
35) Shri Arun Kumar Subramanyam, AVP and Head – Power Sales & Regulatory, ITPCL, Chennai
36) Shri K S Nagendra, CEO, HNPCL, Hyderabad
37) Shri Manoj Kumar Jhawar, CMD, PTC India Ltd., New Delhi
38) Shri Sanil Namboodiripad, COO, IndiGrid Limited, Noida
39) M/s Adani Enterprises Limited, Ahmedabad
40) Shri Adiseshu Gopalam, Director (Projects), Greenko Power, Hyderabad
41) Shri B Jagannadham, Head, Development Power Evacuation, Suzlon Energy Limited, New Delhi
42) Shri Sivaprasad M, Group President, Renew Power, Gurugram
43) Ms S Usha, Director (MO), Grid India, New Delhi
44) Shri T Srinivas, Executive Director, SRLDC, Grid India, Bengaluru

B. Members of TCC:

1) **Ms I S Mercy Ramya, Chairperson TCC & Managing Director, TANTRANSCO, Chennai**
2) Shri AKV Bhaskar, Director (G &TM), APTRANSCO, Vijayawada
3) Shri P Ashok Kumar Reddy, Director (Thermal), APGENCO, Vijayawada
4) Shri T V Surya Prakash, Director(O), APEPDCL, Vishakapatnam
5) Director (Projects & Op), KPTCL, Bengaluru
6) Shri Rangaraju S, Chief Engineer (E), SLDC, KPTCL, Bengaluru
7) Shri Venkatesh P K, Additional Director (Projects), PCKL, Bengaluru
8) Shri M R Gangadhar, Technical Director, KPCL, Bengaluru
9) Shri Sivadas S, Director (T, SO & P), KSEBL, Thiruvananthapuram
10) Shri Rajeev KR, Director (HRM, S, W, S & QA), KSEBL, Thiruvananthapuram
11) Shri Rajan M P, Director (Gen –Elec & Civil, REES, SOURA), KSEBL, Thiruvananthapuram
12) Ms G K Kanchana, Director (Operation), TANTRANSCO, Chennai
13) Shri J E John Dalton, Director (Technical), TNPGCL, Chennai
14) Ms J Prema, Director (Technical), TNGECL, Chennai
15) Shri G Sampath Kumar, Director(G&TM), TGTRANSCO, Hyderabad
16) Ms D Latha Vinod, Director (Projects), TGTRANSCO, Hyderabad
17) Shri Y Rajasekhara Reddy, Director (Thermal & Projects), TGGENCO, Hyderabad
18) Shri Ch Chakrapani Director(C, HRD, IR&M , DPE&A),TGSPDCL, Hyderabad
19) Shri G Kaniyamuthan, Superintending Engineer-cum-HOD, Elec. Dept., Puducherry
20) Shri Ajay Sharma, Regional Executive Director, (SR), NTPC, Secunderabad
21) Shri Vikas Bagadia, Dy. COO, CTUIL, Gurugram
22) Shri Doman Yadav, Executive Director (SR- I), PGCIL, Secunderabad
23) Shri Mukund Hejib, Executive Director (SR- II), PGCIL, Bengaluru
24) Shri V Rajasekaran, Executive Director (Thermal), NLCIL, Neyveli
25) Ms Jyoti Thakur, AGM(Trans), NPCIL, Mumbai
26) Shri Bimal Kumar Saha, GM (O&M), NTECL, Vallur
27) Shri Shrikant Vaidya, Head of Plant, JSWEL
28) Shri Manoj Taunk, Associate VP, Endorse (Prot & Metering), APL, Ahmedabad
29) Shri Gugan S, Plant Head, IL&FS Tamil Nadu Power Company Limited
30) Shri T A Aravind Raja, CEO, NTPL, Tuticorin
31) Shri Milind Nigudkar, Sr. GM (Comml), SEIL, Gurugram
32) Shri S Mukharjee, Sr VP (O & M), & Plant Head, HNPCL, Hyderabad
33) Shri Bikram Singh Guram, Executive Director (Marketing), PTCIL, New Delhi
34) Shri Lokendra Ranawat, Head Regulatory, IndiGrid Limited, Noida
35) M/s Adani Enterprises Limited, Ahmedabad
36) Shri Venkateswarlu Ande, Joint Senior VP, Greenko Power, Hyderabad
37) Shri Srikrishna, Lead, Power System Studies, Suzlon Energy Limited, New Delhi
38) Shri S Vinod, Senior VP, Renew Power, Gurugram
39) Shri Subhro Paul, Chief Engineer (GM), CEA, New Delhi
40) Ms Rishika Sharan, Chief Engineer (NPC), CEA, New Delhi
41) Shri Manoj Agarwal, Head, NLDC, New Delhi
42) Shri T Srinivas, Executive Director, SRLDC, Grid India, Bengaluru

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CONTENTS

SOUTHERN REGIONAL POWER COMMITTEE

Minutes of the 55th Meeting of TCC & 58th Meeting of SRPC

1. INTRODUCTION

The **55th** Meeting of TCC and **58th** Meeting of SRPC were held on **24.07.2026** and **28.07.2026** respectively, through Video Conference. The list of participants is attached at **Annexure-1A**.

TCC Introduction

a) **Ms I S Mercy Ramya, Chairperson, TCC & Managing Director, TANTRANSCO** welcomed all the members and participants to the 55th Meeting of the Technical Coordination Committee (TCC).

She expressed confidence that the deliberations would uphold the objectives of the TCC and provide a constructive platform for meaningful discussions and consensus building. She looked forward to the active participation, cooperation and collective wisdom of all the members during the meeting.

She appreciated the coordinated efforts of all the Southern Region utilities in maintaining the load-generation balance during the recent summer season and acknowledged that the commitment and cooperation extended by all utilities had played a vital role in ensuring the secure, reliable and stable operation of the Southern Grid despite challenging demand conditions.

She observed that the agenda for the meeting encompasses several significant issues requiring careful consideration and expressed confidence that the deliberations would facilitate constructive discussions and contribute towards equitable, pragmatic and mutually acceptable resolutions. She further expressed confidence that the recommendations emerging from the meeting would contribute to further strengthening the efficiency, reliability and resilience of the Southern Region power system.

She invited Member Secretary, SRPC to kindly commence the proceedings of the 55th TCC Meeting.

b) **Shri Asit Singh, Member Secretary, SRPC,** extended a warm welcome to Ms I S Mercy Ramya, Chairperson, TCC, Managing Director, TANTRANSCO and all participants attending the 55th Meeting of the Technical Coordination Committee (TCC). He expressed his gratitude to the delegates for their presence. He expressed confidence that the meeting would facilitate meaningful and constructive deliberations, culminating in well-reasoned recommendations for submission to the Southern Regional Power Committee (SRPC).

c) TCC welcomed the new members:

i Ms I S Mercy Ramya, Chairperson TCC & Managing Director, TANTRANSCO

ii Ms G K Kanchana, Director (Operation), TANTRANSCO

iii Ms J Prema, Director (Technical), TNGECL

iv Shri T V Surya Prakash, Director(O), APEPDCL

v Shri Ch Chakrapani, Director (C, HRD, IR&M, DPE&A), TGSPDCL

vi Shri Rajeev K R, Director (HRM, S, W, S & QA), KSEBL

vii Shri Rajan M P, Director (Gen –Elec & Civil, REES, SOURA), KSEBL,

viii Shri V Rajasekaran, Executive Director (Thermal), NLCIL, Neyveli

ix Shri T A Aravind Raja, CEO NTPL

x Shri Ajay Sharma, Regional Executive Director (S) & ED(Engg), NTPC

xi Ms Jyoti Thakur, AGM (Transmission), NPCIL

xii Shri Lokendra Ranawat, Head Regulatory, IndiGrid Limited

xiii Shri Gugan S, Plant Head, IL&FS Tamil Nadu Power Company Limited

xiv Shri Srikrishna, Lead, Power System Studies, Suzlon Energy Limited

xv Shri S Vinod, Senior VP, Renew Power

xvi Shri T Srinivas, Executive Director, SRLDC, Grid India

d) TCC acknowledged the services of the following outgoing members and placed on record the services of:

i Shri T Shivkumar, Chairperson TCC & Managing Director, TANTRANSCO

ii Shri A Krishnavel, Chairperson TCC & Managing Director, TANTRANSCO

iii Shri C Mangalanathan, Director (Technical), TNGECL

iv Shri K Guravaiah, Director (Technical), APSPDCL

v Shri T Madhusudhan, Director (O) TGNPDCL

vi Shri Saji Paulose, Director (Distribution & SCM), KSEBL

vii Shri Sajeev G, Director (HRM, REES, SOURA, S&W), KSEBL

viii Shri Arindam Sinha, Regional Executive Director, (SR & ER2), NTPC

ix Shri Choudhary Nitin R, OS & ED(C), NPCIL

x Shri T Vanchinathan, Executive Director (Thermal) I/c, NLCIL

xi Shri K Anandaramanujam, CEO, NTPL

xii Shri Abhishek Kukreja, DGM, IndiGrid Limited

xiii Shri M K Ramesh, Executive Director, SRLDC, Grid India

SRPC Introduction

e) Member Secretary, SRPC welcomed the Chairperson, SRPC, SRPC and TCC Members and delegates to the meeting. He detailed that the TCC forum had undertaken detailed deliberations on several important and critical matters and, after due consideration, had arrived at appropriate recommendations on these issues. He

stated that the recommendations of the TCC would be placed before the SRPC Forum for its consideration, guidance and advice, and for approval, wherever required.

f) **Dr V Arun Roy, Chairperson, SRPC, CMD, TNPDCL, TNEB Ltd. and Chairman, TANTRANSCO, TNPGCL & TNGECL** extended a warm welcome to all the distinguished members of the Southern Regional Power Committee, and other participants to the 58th Meeting of the SRPC. He stated that the Southern Region has consistently demonstrated exemplary coordination in maintaining grid security, reliability, and operational excellence. The spirit of cooperation among all stakeholders has played a significant role in addressing emerging operational challenges and ensuring uninterrupted power supply to millions of consumers across the region.

He highlighted a few noteworthy achievements of Tamil Nadu, reflecting the State's continued commitment towards strengthening the power sector and accelerating the clean energy transition. During July 2026, Tamil Nadu recorded a maximum demand of 21,724 MW on 14th July 2026 and achieved its highest-ever daily energy consumption of 475.4 MU on 17th July 2026. The State continued to maintain its leadership in renewable energy, recording the highest-ever wind generation of 6,511 MW and 124.34 MU during July 2026. In the solar sector, Tamil Nadu also achieved a maximum generation of 7,919 MW and 60.44 MU during the month. Further, it was highlighted that renewable energy contributed 82% of the State demand instantaneously on 15th August 2025, demonstrating the successful integration of renewable energy while maintaining system reliability and operational security.

He acknowledged that these achievements had been made possible through the coordinated efforts of the Ministry of Power, Central Electricity Authority (CEA), Grid-India, SRPC, SRLDC, Central and State utilities, generating companies, transmission licensees, and distribution utilities. Appreciation was conveyed to all the stakeholders for their continued support and collaboration.

It was further observed that the Southern Region continues to witness sustained growth in electricity demand while successfully integrating the highest share of renewable energy in the country. The achievements of the constituent States, namely Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu, and Puducherry, were stated to reflect the collective commitment towards ensuring reliable, secure, sustainable, and affordable power supply to consumers. It was also noted that the Southern Region has consistently maintained grid frequency within the limits specified under the IEGC through coordinated system operation by all the regional constituents. The region has also been effectively managing high solar generation during daytime and steep evening demand ramps through coordinated scheduling and reserve management.

He further stated that continuous efforts are being made to strengthen the Green Energy Corridor and the 765 kV transmission network to facilitate renewable energy evacuation. It was also highlighted that increasing emphasis is being placed on the development of Battery Energy Storage Systems (BESS) and Pumped Storage Projects (PSPs) to address the variability associated with renewable energy generation.

The coordinated efforts of SRPC, SRLDC, SLDCs, CTUIL, transmission utilities, generating companies, and distribution utilities have enabled secure grid operation despite the rapid growth in electricity demand and renewable energy capacity.

He expressed confidence that the deliberations and decisions of the 58th SRPC Meeting would further strengthen regional coordination, enhance grid resilience, facilitate greater integration of renewable energy, and improve the overall efficiency and reliability of the power system. He hoped that the collective and constructive discussions during the meeting would lead to meaningful decisions benefiting not only the Southern Region but also contributing significantly to the growth of the national power sector. Thereafter, the proceedings of the meeting were handed over to the Member Secretary, SRPC, to commence the agenda items.

g) SRPC welcomed the following new members:

i. Dr V Arun Roy, CMD, TNPDCL, TNEB Ltd. and Chairman, TANTRANSCO, TNPGCL & TNGECL
ii. Dr P N Sridhar, Managing Director, TNGECL
iii. Ms I S Mercy Ramya, Managing Director, TANTRANSCO
iv. Ms G K Kanchana, Director (Operation), TANTRANSCO
v. Ms Naga Lakshmi, Managing Director, APGENCO
vi. Sri Prudhvitej Immadi, CMD, APEPDCL
vii. Shri K P Rudrappaiah, Managing Director, PCKL
viii. Dr M G Rajamanickam, CMD, KSEB Ltd.
ix. Shri Jitesh V Patil, CMD, TGSPDCL
x. Shri Rajeev KR, Director (HRM, S, W, S & QA), KSEBL
xi. Shri Rajan M P, Director (Gen –Elec & Civil, REES, SOURA), KSEBL
xii. Shri Jayakumar Srinivasan, Director (Finance), NTPC
xiii. Shri Rajesh Pratap Singh Sisodia, Director (Power), NLCIL
xiv. Shri Ahmad Kaunain Raza, CEO, NTECL,
xv. Shri T A Aravind Raja, CEO, NTPL
xvi. Shri Sanil Namboodiripad, COO, IndiGrid Limited
xvii. Shri B Jagannadham, Head, Development Power Evacuation, Suzlon Energy Limited
xviii. Shri Sivaprasad M, Group President, Renew Power
xix. Shri T Srinivas, Executive Director, SRLDC, Grid India

h) SRPC placed on record the services of the following outgoing members:

i. Dr J Radhakrishnan, Chairperson, SRPC, CMD, TNPDCL, TNEB Ltd. and Chairman, TANTRANSCO, TNPGCL & TNGECL
ii. Dr Aneesh Sekhar, Managing Director, TNGECL
iii. Shri Pogaku Pulla Reddy, Managing Director, APGENCO

iv. Shri Siva Sankar Lotheti, CMD, APSPDCL
v. Shri D Kodandapani, Managing Director, PCKL
vi. Shri Minhaj Alam, CMD, KSEB Ltd.
vii. Shri T Shivkumar, Managing Director, TANTRANSCO
viii. Shri A Krishnavel, Managing Director, TANTRANSCO
ix. Shri A Krishnavel, Director (Operation), TANTRANSCO
x. Shri Varun Reddy, CMD, TGNPDCL
xi. Shri Jayakumar Srinivasan, Director (Finance), NTPC
xii. Shri Saji Paulose, Director (Distribution & SCM), KSEBL
xiii. Shri Sajeev G, Director (HRM, REES, SOURA, S&W), KSEBL,
xiv. Shri S K Sinha, CEO, NTECL
xv. Shri M Venkatachalam, Director (Power), NLCIL
xvi. Shri K Anandaramanujam, CEO, NTPL
xvii. Shri Lokendra Ranawat, Head Regulatory, IndiGrid Limited
xviii. Shri M K Ramesh, Executive Director, SRLDC, Grid India

2. CONFIRMATION OF THE MINUTES OF 54th TCC AND 57th SRPC

The Minutes of 54th Meeting of TCC and 57th Meeting of SRPC held on 16.03.2026 & 17.03.2026 were circulated vide SRPC letter dated 20.04.2026.

✓ **The minutes of the 54th TCC and 57th SRPC meetings were approved.**

3. ACTION TAKEN REPORT ON THE DECISIONS IN THE 57th MEETING OF SRPC HELD ON 17.03.2026

S. No.	Item No. in MoM / Decision	Action Taken	Remarks
1	**30. Issues with ISGS Stations** **A** Issues in exemption of FGD for Category 'C', Thermal Power Plants (TNPGCL agenda) **TCC/SRPC Decision:** ✓ *It was decided that the matter may be referred to the Ministry of Power (MoP) for taking an appropriate decision, through wider consultation with all concerned stakeholders, including MoEF&CC,*	Chairperson, SRPC, vide letter dated 30.03.2026, had taken up the matter with the Secretary (Power), requesting the MoP to bestow its kind attention in the matter. It was proposed that appropriate decision may be arrived at through wider consultation with all stakeholders, including MoEF&CC, CEA, generating companies and beneficiaries, to arrive at an equitable and balanced resolution.	Copy of the letter from Chairperson, SRPC is at **Annexure-ATR1A**

	CEA, generating companies and beneficiaries, to arrive at an equitable and balanced resolution.		
2	**38 APPCC AGENDA** **D** Financial implications arising out of coal quality and quantity assessment at mine-end instead of generating station delivery point ***Decision***: *SRPC approved the TCC's recommendation that the Chairperson, SRPC may take up the matter directly with the Secretary, Ministry of Power.*	Vide communication dated 31.03.2026, Chairperson, SRPC requested the Ministry of Power to formulate suitable guidelines/mechanisms to ensure fairness in coal billing, rationalization of power procurement costs, and protection of the interests of beneficiaries/consumers as well as thermal generating companies. Considering the significance of the issue for the power sector, an early and favourable consideration was also requested.	Copy of the letter from Chairperson, SRPC is at **Annexure-ATR2**
3	**12 CTUIL Agenda** **12.1** Comprehensive Scheme for OPGW installation on the existing lines of ISTS in Southern Region **Conclusion** *CTUIL's ISTS OPGW implementation scheme covering 357.57 km of transmission lines at an estimated cost of ₹20.90 crore, comprising PGCIL RTM works (₹15.81 crore; 30-month implementation) and TBCB (Kudgi Transmission Ltd.) works (₹5.09 crore; 24-month implementation). TCC recommended the ISTS portion of the OPGW scheme, and SRPC concurred with the recommendation.* 12.2 Replacement of 12 no. of FOTE at critical ISTS location **Conclusion**	MS, SRPC, vide letter dated 22.04.2026, communicated SRPC's concurrence to CTUIL for the ISTS portion of the OPGW proposal submitted by CTUIL. MS, SRPC, vide letter dated	Copy of the letter is at **Annexure-ATR3A** Copy of the letter is at

	TCC recommended the replacement of 12 Nos. of Fiber Optic Terminal Equipment (FOTE) at critical ISTS locations, which was subsequently approved by SRPC.	22.04.2026, communicated SRPC's approval for the proposed scheme for *replacement of 12 Nos. of Fiber Optic Terminal Equipment (FOTE) at critical ISTS locations*	**Annexure-ATR3B**
4	**40 ISTS NETWORK EXPANSION SCHEME FOR VIEWS OF SRPC** CTUIL, vide letter dated 10.03.2026, proposed an ISTS Network Expansion Scheme comprising augmentation of ICTs at Karur, associated transmission lines and bays, and a 230 kV bay for M/s Subramaniyapuram Wind Park Pvt. Ltd. The scheme would also enhance the reverse transfer capability of the Raigarh–Pugalur HVDC link from 3000 MW to 6000 MW, with a marginal ATC impact of only 0.1962%. ***Conclusion*** *TCC observed that the proposed scheme would strengthen the Southern Region transmission system and facilitate enhanced reverse power flow through the Raigarh–Pugalur HVDC link following strengthening of the Western Region. Accordingly, TCC recommended the proposal, which was subsequently approved by SRPC.*	MS, SRPC, vide letter dated 08.04.2026, communicated SRPC's views for implementation of the proposal and requested that the scheme be considered as a National Component.	Copy of the letter is at **Annexure-ATR4**

SRPC/TCC noted the above

For discussion in SRPC through TCC

4. MONTHLY SUBMISSION OF GENERATION DATA OF CPPS, OPEN ACCESS AND ROOFTOP SOLAR

a) The matter relating to the collection of monthly generation data pertaining to Captive Power Plants (CPPs), Open Access transactions and Rooftop Solar generation has been under continuous review by the Ministry of Power (MoP) and the Central Electricity Authority (CEA) to facilitate realistic assessment of electricity consumption, preparation of national energy statistics and policy planning.

b) The issue was deliberated in the 57th SRPC Meeting, wherein the following was decided:

- States shall reconcile discrepancies in the CEA Captive Power Plant database and furnish the updated details to CEA with a copy to SRPC.
- SLDCs/CEIGs shall ensure timely submission of monthly CPP generation data in the prescribed format.
- CEIGs shall facilitate registration of all eligible captive generators on the CEA Captive Power Portal.
- States shall improve data quality, completeness and adherence to the prescribed reporting timelines.

c) The reporting timelines are as follows:

Reporting Entity	Timeline
CPPs → State Nodal Agency (SLDC/CEIG)	By 5th of the succeeding month
State Nodal Agency → SRPC	By 10th of the succeeding month

d) The chronology of deliberations on the subject is provided below. The table captures the key issues deliberated in various meetings and the corresponding decisions and action points arising therefrom.

Sl. No.	Meeting / Communication	Major Issues Discussed	Key Decisions / Action to be taken
1	**Meeting chaired by Member (GO&D), CEA (09.12.2025)**	Need to capture CPP, Open Access, Rooftop Solar and other embedded generation data for realistic assessment of electricity consumption and Energy statistics.	Stakeholder consultation with RPCs, SLDCs, CEIGs and CPPs initiated for development of a monthly reporting mechanism.
2	**Meeting chaired by Secretary (Power), MoP (17.12.2025)**	Finalization of roles and responsibilities of stakeholders for monthly collection of CPP data.	State CEIG/SLDC designated as nodal agencies; RPCs entrusted with regional consolidation and submission to CEA. Monthly reporting timelines finalized.
3	**Follow up meeting by Secretary (Power), MoP on 15.01.2026**	Review of MoP directions.	Review of MoP directions.
4	**Meeting chaired by Member (GO&D), CEA,**	It was observed that discrepancies exist between PDM&LF General Review	It was decided that RPCs shall submit the consolidated captive generation data to the **Grid Management**

	on 06.03.2026, with Grid Management Division, Chief Electrical Inspectorate Division, and the Regional Power Committees (RPCs).	(GR) data and RPC-compiled captive generation data, as the former is collected directly from captive generators while the latter is sourced through SLDCs/State CEIs, which largely cover EHV (132 kV and above) installations. It was further noted that some generating units reported under the GR do not strictly qualify as Captive Generating Plants (CGPs) under the Electricity Act and are primarily standby/DG-based generation sources, with around 18 GW of DG sets included in the reported captive fleet.	**Division, CEA** by the **10th of the succeeding month**. In case of coordination issues with States, the **Chief Electrical Inspectorate Division, CEA** shall facilitate coordination. Further, **PDM&LF Division** would advise RPSOs to collect captive generation data through the IT Division-developed Captive Power Portal on a monthly basis.
5	**Special Meeting by SRPC secretariat with all SR Constituents (13.03.2026)**	Practical issues in data collection were deliberated, including fragmented data availability among SLDCs/CEIGs/DISCOMs, mismatch with CEA database, rooftop solar visibility, standby DG sets, different billing cycles and collection methodology across States.	Clarified that standby DG generation data may not be furnished in cases where it is not available. However, installed capacity of standby DGs be clearly identified and explicitly indicated in the monthly reports. States were advised to reconcile databases with CEA for resolution States were advised to streamline data collection, and align reporting timelines with MoP requirements.
6	**57th SRPC / 54th TCC (March-2026)**	Comprehensive review of State-wise preparedness for monthly CPP reporting. Significant mismatch observed between CEA database and State records. Importance of accurate CPP/Open Access/Rooftop Solar data highlighted by CEA.	States were directed to reconcile CPP database with CEA, ensure registration of CPPs on the CEA's Captive Power Portal, improve coordination among SLDC/CEIG/DISCOMs and adhere to monthly reporting timelines.
8	**Review meeting chaired by JS(Distribution), MoP on 03.06.2026**	MoP sought FY 2025-26 State-wise CPP data. SRPC requested all States (CEIG/SLDC) to furnish the data in a prescribed uniform format, shared by CEA.	States were instructed to furnish pending FY 2025-26 data in the standardized format for compilation at National level.

9	**238th OCC (May-2026) & 239th OCC (June-2026)**	• Detailed scrutiny of State submissions revealed inconsistencies in reporting formats, missing generation parameters, unit mismatches, incomplete monthly information and delays in submission.	• States were requested to reconcile pending discrepancies, furnish consumer database (CD ≥500 kVA), nominate nodal officers, improve portal registration and continue monthly data submission to SRPC by 10th of every month. • Adoption of a uniform reporting format, timely monthly submissions, improved coordination among SLDCs/CEIGs/DISCOMs and accelerated onboarding of eligible consumers on the CEA Captive Power Portal.
10	**Meeting chaired by JS (Distribution), MOP on 24.06.2026**	The status of Captive Generation Data for FY 2025-26, including comparison of the data with respect to 2024-25, was reviewed	• AP & TG were requested to furnish replies to the discrepancies wrt Gross and Net generation for FY 25-26. • TN was requested to resolve the captive consumption data of RE generators & reason behind total captive consumption of FY 25-26 which is 3 times (nearly) of FY 24-25 data. • KA, AP, KL & PDY – Verify the data already furnished and intimate any discrepancy noticed.

e) Present Status of SR states (as per OCC) as below:

In this regard, the following details were requested from the states:

i. **Andhra Pradesh** and **Telangana** were requested to examine and furnish replies to the discrepancies highlighted by GM Division, CEA vide email dated 25.06.2026, as detailed below follows:

S No	Name of State/UTs	Region	Remarks	Update
1	Andhra Pradesh	SR	Why there is high difference in Gross Generation and Net Generation i.e. 61.1%?	Resolved by AP CEIG
2	Telangana	SR	Why there is high difference in Gross Generation and Net Generation i.e. 14.4%?	Clarified by TG that the difference is due to Auxiliary Consumption.

ii. **Tamil Nadu:** With respect to the data furnished, the following issues are requested to be resolved:
   - In the Captive Consumption data of RE generators, for Oct-24 to Mar-25, the Captive Consumption is greater than Net Generation or Gross Generation
   - The total Captive Consumption as per the furnished data is 24245.87 MU for FY 2025-26(Non-RE - 2863 MU + RE - 21383 MU). While the captive consumption for FY 2024-25 was observed to be 7963 MU as per Captive Power Plant data for FY 2024-25 shared by PFC (Slide 12) which was displayed in the last meeting taken by JS (Distribution). As per comparison, it is an increase of 204.48% which needs further analysis.

iii. **Telangana:** Verification of the data furnished and provide observations regarding the reasons for the 38.40% reduction in captive consumption compared to the previous year.

Status of CPP data submission for FY 2026-27

	Andhra Pradesh	Telangana	Karnataka	Kerala	Tamil Nadu	Puducherry
Apr-26	Received	Received	Pending	Only Gross Generation received. Net Generation, Exchange with Grid and Captive Consumption data is pending	Non-RE CPP data received. RE CPP data is pending	Report sent. But data is not fully furnished
May-26	Received	Received	Pending	Shared by CEIG but not in format	Pending	Pending
Jun-26						

- ***States/UT to ensure the veracity of captive data furnished by Discoms to PFC for the year 2024- 2025 and by SLDC/CEIGs for 2025-26 as there were large differences observed.***
- ***SLDC/CEIGs to furnish the past month details by 5th of next month in the specified format.***
- ***Ensure registration of CPPs on the CEA's Captive Power Portal.***
- ***States/UT to reconcile the Installed Capacity of CPPs with CEA records.***

TCC Deliberations

a) MS, SRPC informed the forum that considerable follow-ups are being undertaken at the highest level for timely collection and reporting of captive power data in power sector. Series of meetings had been held under the chairmanship of Secretary (P), Member (GO&D), CEA and Joint Secretary (Distribution), MOP to review the matter, as detailed in the agenda. The issue involves coordination among multiple entities including CEIGs, SLDCs, Discoms, RPCs and CEA to ensure accurate and timely reporting of captive power data.

He emphasized the importance of adhering to the prescribed timelines and requested all concerned entities to ensure timely compliance. The reporting timelines are as follows:

Reporting Entity	Timeline
CPPs → State Nodal Agency (SLDC/CEIG)	By 5th of the succeeding month
State Nodal Agency → SRPC	By 10th of the succeeding month

b) The following issues were brought to the notice of the forum:

i. ***With respect to the FY 2025-26 data, the reconciliation from Tamil Nadu and Telangana is pending. In response, TN informed that the data of FY 25-26 was reconciled and the reconciliation of FY 24-25 data was taken up in co-ordination with TNGECL.***

ii. ***States/UT were requested to ensure the veracity of captive data furnished by Discoms to PFC for the year 2024- 2025 and by SLDC/CEIGs for 2025-26 as significant variations had been observed between the two datasets. The states were requested to reconcile the difference to ensure consistency.***

iii. ***Reconciliation of Installed Capacity of Captive Power Plants records of states with records maintained by RPSO (S), Bangalore and CEA.***

iv. ***Ensure registration of CPPs on the CEA's Captive Power Portal (https://intranet.cea.gov.n/captiveNew/) by CEIG/DISCOM/SLDCs.***

c) The Status of CPP data submission for FY 2026-27 was reported as follows:

Month	Andhra Pradesh	Telangana	Karnataka	Kerala	Tamil Nadu	Puducherry
Apr-26	Received	Received	Received	Received	Received	Received
May-26	Received	Received	Received	Received	Received	Received
Jun-26	Received	Received	Received	Received	Pending	Received

d) Tamil Nadu was requested to provide the data pertaining to June-2026.

SRPC Deliberations

e) MS, SRPC briefed the forum on the status of monthly submission of Captive Power Plant (CPP) data and the follow-up being undertaken for timely and accurate reporting. The forum was apprised of the pending reconciliation of FY 2025-26 data and the need for reconciliation of CPP installed capacity with CEA/RPSO records. Tamil Nadu was requested to furnish the pending June-2026 CPP data and complete the reconciliation of the relevant data at the earliest**.**

f) TN SLDC assured that the CPP data for **June-2026 and July-2026** would be furnished shortly.

SRPC noted the above for compliance

5. OPERATIONAL ISSUES RAISED BY SRLDC

SRLDC vide mail dated 09.07.2026 had furnished the agenda (**Annexure-5A**).

I. Persistent overloading of critical ISTS corridors in Tamil Nadu under High RE injection scenario

a) The above issue was deliberated in 239th /240th OCC meetings of SRPC wherein it was decided that a special coordination meeting involving TANTRANSCO, TNSLDC, CTUIL, SRLDC and SRPC shall be convened by TNSLDC, to examine the issue in detail and identify suitable medium and long-term mitigation measures.

b) SRLDC has observed that during high Renewable Energy (RE) generation scenarios, continuous N-1 violations are being observed on the following critical ISTS corridors:

- 400 kV Madurai–Udumalpet S/c
- 400 kV Tirunelveli–Udumalpet D/c
- 400 kV Madurai–Pugalur D/c

c) Detailed analysis indicates that the overloading is primarily due to heavy RE power injection from the Tamil Nadu intra-state network into the ISTS network through the 400/230 kV ICTs at Madurai, Tirunelveli, Udumalpet, Pugalur and Trichy substations. In addition, substantial power flow is also being observed from 400 kV Kanarpatty towards Tirunelveli through the 400 kV Tirunelveli–Kanarpatty S/c line.

d) Further, low voltage conditions are also being observed at several substations where significant RE power is being injected from the 230 kV network to the 400 kV network, mainly due to high MVAr drawal by RE plants. The excessive reactive power consumption by RE generators is aggravating voltage profile issues in the Southern Region grid, particularly during high RE generation periods.

e) It is observed that nearly 2935 MW of additional RE capacity has been integrated into the Tamil Nadu system during FY 2025-26, as per MNRE installed capacity data dated 30.03.2026. However, as per the CEA transmission progress report dated 30.03.2026, no corresponding 400 kV / 765 kV transmission infrastructure appears to have been commissioned for evacuation of this additional RE capacity.

f) The above network condition is resulting in persistent stress on key ISTS corridors and is significantly impacting secure grid operation. Further, due to the overloading of the above lines, SRLDC may not be able to operate the Raigarh–Pugalur HVDC link in reverse power flow mode (SR → WR), thereby adversely affecting the export TTC/ATC of the Southern Region.

g) In view of the above, TANTRANSCO/TNSLDC/TNGECL is requested to furnish the following details:

(i) Details and locations of the additional 2935 MW RE capacity integrated during FY 2025-26.

(ii) **The identified transmission system and evacuation scheme planned for the above RE capacity, including associated 230 kV/ 400 kV / 765 kV infrastructure with commissioning timelines.**

(iii) **Measures proposed by TNSLDC to mitigate persistent ISTS overloading and N-1 violations under high RE scenarios. Whether RE integration is being allowed by TANTRANSCO/TNSLDC without matching evacuation system?**

(iv) **Whether any generation regulation / curtailment mechanism is being implemented to maintain secure loading on ISTS corridors during high RE injection conditions?**

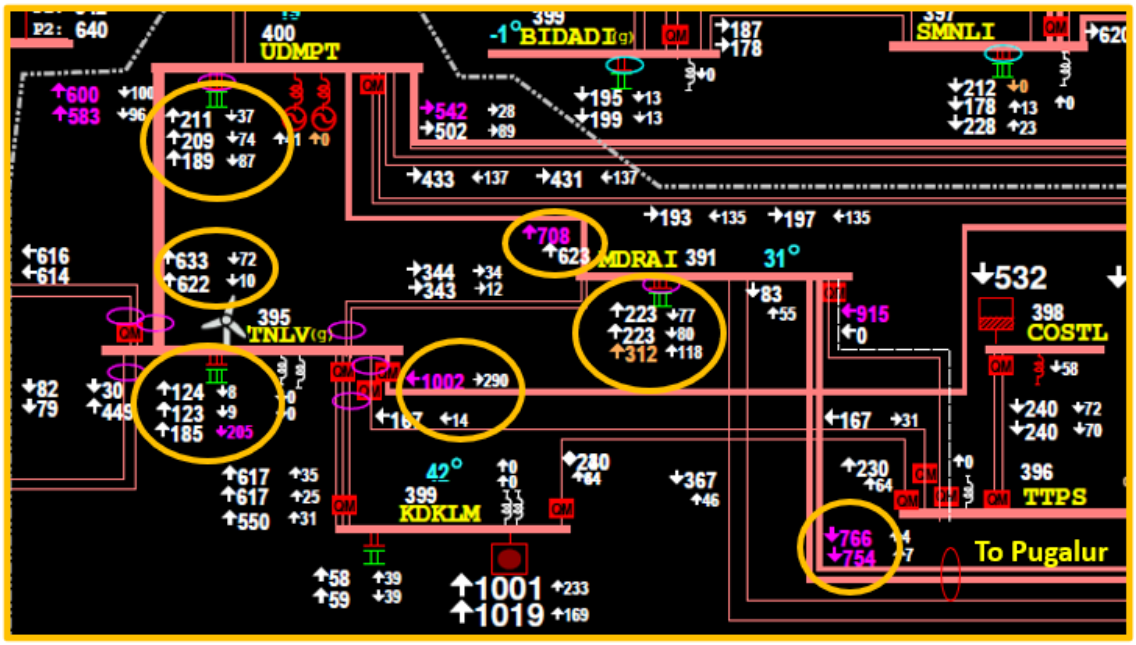
(v) **Actions taken / proposed by TANTRANSCO/TNSLDC to mitigate low voltage conditions at substations experiencing high RE injection, including installation of shunt capacitors/reactors, implementation of dynamic reactive compensation, enforcement of RE plant reactive power support, and voltage control measures at pooling stations and generating stations.**

TCC Deliberations

a) SRLDC presented **(Annexure-5B)** the below with regard to high RE injection into ISTS network by Tamil Nadu & Karnataka**:**

i SRLDC highlighted the impact of heavy injection of Intra-State RE generation at the 230 kV level into the ISTS network at the 400 kV level, particularly in situations where RE integration has increased significantly without commensurate augmentation of the transmission network within the respective States. SRLDC observed that the rapid growth in Intra-State RE connectivity, without adequate transmission system augmentation studies at the State level prior to granting connectivity, is resulting in overloading of the State transmission network, increased power flow into the ISTS network and encroachment on the available inter-State transmission capacity. This is also leading to depletion of the available transfer margins of the ISTS network and may adversely affect secure grid operation during high RE generation conditions.

ii The grid snapshotbelow of Tamil Nadu network at 13.07.2026 showcased the high injection of Intra State RE generation to ISTS network.



Grid snap of Tamil Nadu network at 13-07-2025 12:43 Hrs showing injection of Intra State Renewable Generation to ISTS network by TN

iii The injection was mainly observed at Tirunelveli S/S, Udumalpet S/S, Madurai S/S, Kudankulam S/S & Kanarpatty-Tirunelveli S/c Transmission line. Further, N-1 violations were observed at 400 kV Madurai-Udumalpet S/C, 400 kV Tirunelveli-Udumalpet D/C, 400 kV Madurai-Pugalur D/C, 400 kV Udumalpet-Salem D/C.

iv Overloading of lines and S/S was observed in the month of May 2026. To control the over loading of other lines, SRLDC has forced to open the ISTS line.

v Increase in RE (Wind & Hydro) generation during peak monsoon period (June-Sept) was observed, causing the injection of 230 kV towards 400 kV ISTS network.

vi **ICT Loadings**: SRLDC presented the loading pattern of the 400/230 kV ICTs for FY 2025-26, comparing solar (daytime) and non-solar (night time) periods.

- ✓ The analysis indicated that the ICTs at Madurai, Tirunelveli and Pugalur experience significant loading predominantly during daytime due to high solar-based renewable energy injection into the ISTS network.
- ✓ In contrast, the Udumalpet ICTs remain heavily loaded during both daytime and night time, primarily owing to sustained wind generation and its evacuation through the ISTS.
- ✓ Further, the Karaikudi ICTs exhibited a notable increase in daytime injection, with power flow reaching about 250 MW, compared to the corresponding period of the previous year, indicating a growing trend of renewable energy injection into the ISTS network.

vii **Loading on 400kV Kanarpatty-Tirunelveli S/C**: SRLDC highlighted that the maximum power flow from Kanarpatty towards Tirunelveli has increased from around 1500 MW during the previous year to 2000 MW during the current year, due to increased RE injection, resulting in overloading of the ISTS transmission lines, particularly during periods of high RE generation.

viii **Summary of Injection of RE Power to ISTS**:

ICT	April-2025 to May-2026			June-2025 to August-2025			June-2026 to July-2026		
	Non-Solar Hours (%)	Solar Hours (%)	Entire Day (%)	Non-Solar Hours (%)	Solar Hours (%)	Entire Day (%)	Non-Solar Hours (%)	Solar Hours (%)	Entire Day (%)
400/230kV Tirunelveli ICTs (2x315+500 MVA)	6	30	18	24	74	49	0	44	22
400/230kV Madurai ICTs (2x315+500 MVA)	1	42	22	5	73	39	0	67	34
400/230kV Pugalur ICTs (2x315+500 MVA)	1	14	8	6	44	25	1	46	23
400/230kV Udumalpet ICTs (3x315 MVA)	21	26	23	82	89	85	18	59	38
400/230kV Karaikudi ICTs (2x315+500 MVA)	1	26	14	0	22	11	0	40	20

The above table indicates a progressive increase in the duration of reverse power flow through the ICTs over the years, particularly during solar hours

SRLDC further explained that the comparatively lower reverse power flow observed at certain ICTs during the current monsoon period is attributable to the El Niño effect, which resulted in reduced hydro generation, together with changes in the demand pattern. Nevertheless, the year-wise analysis indicates an overall increasing trend in the utilisation of the ISTS for evacuation of intra-state renewable energy, reflecting the growing penetration of renewable generation in Tamil Nadu.

ix SRLDC further observed significant VAR absorption at the 230 kV network, leading to low voltage conditions at several locations in the Tamil Nadu intra-state system. The issue was highlighted as one of the operational challenges associated with the increasing renewable energy penetration in the State network.

x **Increase in RE Injection at Kayathar, Ottapidaram and Kanarpatty**

A comparative analysis of the renewable energy injection pattern at 400 kV Kayathar, 400 kV Ottapidaram and 400 kV Kanarapatty by comparing the peak solar day of 16.02.2025 with 01.07.2026 was carried out. It was observed that renewable energy injection into the ISTS has increased significantly at all the three locations during the corresponding period. The peak injection at Kayathar increased from around 100 MW to about 600 MW, at Ottapidaram from around 280 MW to about 580 MW, and at Kanarapatty from around 520 MW to over 800 MW. SRLDC further observed that, with the addition of renewable energy generation at the 230 kV level, substantial reverse power flow from the intra-state network into the ISTS has increased, resulting in higher loading of the associated ISTS transmission corridors.

xi CE, TNSLDC informed that all the observations and queries raised by SRLDC had already been communicated to the NCES/Transmission Wing of TANTRANSCO

for necessary action. He further stated that renewable energy generation is presently being curtailed on a rotational basis to avoid overloading and transmission constraints on the ISTS corridors.

He requested SRLDC to communicate, in writing, the element-wise transmission limits (permissible loading/current limits) to be maintained under various system conditions so that the same could be disseminated to the concerned RE generators and sub–Load Despatch Centres, facilitating coordinated and effective RE curtailment.

He also requested PGCIL to expedite the completion of the Abhishekpatti bay, stating that the concerned solar developers had expressed their willingness to extend support to PGCIL, including assistance in procurement of materials, deployment of manpower, or financial support through mutual understanding, to facilitate early commissioning of the bay.

He also assured that meanwhile TANTRANSCO will strengthen their state network so that no RE will be injected into ISTS corridor.

xii MS, SRPC observed that during periods of high renewable energy generation, the export Available Transfer Capability (ATC) of the Southern Region is significantly reduced due to transmission constraints, thereby limiting the export of surplus power despite the availability of generation. He stated that this has adversely affected the utilisation of key interstate transmission corridors, including the Raigarh–Pugalur HVDC link, and consequently the overall export capability of the Southern Region. He emphasized that strengthening of the Tamil Nadu transmission network, coupled with appropriate InSTS generation curtailment, is essential to mitigate these constraints. It was also stated that future renewable energy integration within the State network should be with adequate transmission evacuation system to ensure secure and reliable grid operation.

xiii ED, SRLDC stated that ensuring secure grid operation is the collective responsibility of all the concerned entities. He advised TNSLDC to proactively monitor prevailing grid conditions and take appropriate operational measures to avoid transmission constraints. He further informed that whenever N-1 security violations are observed, SRLDC would communicate the same through violation messages, and TNSLDC should take timely corrective action. He emphasized that effective management of the transmission constraints requires close coordination among TNSLDC, TNGECL and TANTRANSCO.

xiv CE, TGSLDC recalled that a similar issue had been deliberated in an earlier SRPC meeting, wherein it was suggested that CEA may formulate a Standard Operating Procedure (SoP)/guidelines for planning and integration of renewable energy. He stated that the procedure should clearly define the planning criteria to be adopted while designing the State transmission network, the extent to which State renewable energy can utilise the ISTS for evacuation, the mechanism for monitoring and controlling such utilisation, and the sharing of associated transmission charges. He emphasized that these aspects should be clearly addressed at the stage of granting connectivity itself. He further observed that, in recent times, the export transfer capability of the Southern Region has been constrained, resulting in limitations on

power trading, and that transmission constraints have necessitated revisions in the scheduled allocation of traded power after market clearance.

xv MS, SRPC informed that the issue has already been included as an agenda item for the forthcoming CERC Stakeholders' Meeting. He observed that, at present, no specific regulatory mechanism exists to proactively regulate intra-state energy injections into the ISTS before transmission congestion occurs, with congestion management being implemented only after constraints are observed. He emphasized the need for a suitable regulatory framework to enable preventive measures for managing intra-state injections into ISTS.

xvi CE, TNSLDC stated that, at present, no regulatory provisions exist to address non-compliance by RE developers with respect to connectivity requirements and submission of operational data. He further observed that the loading philosophy of the STU and ISTS networks differ, stating that the ISTS network is generally governed by Surge Impedance Loading (SIL).

In response, it was clarified that the operational limits of the ISTS are determined based on thermal loading, stability limits and voltage criteria, and not on SIL.

xvii CE, TNSLDC further informed that the current GoTN has restricted new RE connectivity beyond the available transmission capacity. He stated that suitable regulations are being formulated by the State and that load flow studies, transmission constraints and the impact on the ISTS network will be duly considered before granting any new RE connectivity to the STU network.

xviii GM, PGCIL informed that, with regard to the Abhishekpatti bay construction, the issues pertaining to the supply of materials raised by the contractor have been resolved by PGCIL. He further stated that civil works are presently in progress, and the bay is tentatively expected to be commissioned by January 2027.

TCC Conclusion

- ***TANTRANSCO assured that it would formulate a long-term transmission strengthening plan to minimise intra-state renewable energy injection into the ISTS. TNSLDC shall continue to undertake appropriate InSTS curtailment, wherever required, to ensure that there is no inadvertent injection from the intra-state network into the ISTS resulting in transmission constraints.***
- ***SRLDC shall prepare and share a Standard Operating Procedure (SOP) covering the operational limits of critical transmission lines/transformers, N-1 security and voltage management, enabling TNSLDC to take proactive operational measures.***
- ***TANTRANSCO assured to look into new renewable energy connectivity applications only after ensuring adequate evacuation infrastructure and based on comprehensive transmission system studies, considering the impact on both the STU and ISTS networks.***
- ***TNSLDC/TANTRANSCO shall coordinate with POWERGRID and the concerned renewable energy developers to explore the possibility of extending necessary support for expediting the completion of the Abhishekpatti bay works, so as to facilitate the early commissioning of the Kanarpatty–Tirunelveli Line-II.***

SRPC Deliberations

MS SRPC briefed the forum on the deliberations and recommendations of the TCC forum. SRPC forum noted the same and approved the recommendations of TCC forum and reiterated the following actionable points for immediate consideration:

SRPC Conclusion

- ✓ ***PGCIL and TANTRANSCO shall jointly examine and implement a suitable solution to expedite the completion of the pending bay works at Abhishekpatti Substation at the earliest, considering its significance for reliable grid operation.***
- ✓ ***SRLDC shall prepare and circulate a generalized Standard Operating Procedure (SoP) outlining the operational limits, system constraints, and corresponding operational actions to facilitate TNSLDC in undertaking timely and proactive system operation measures under various grid conditions.***

II. Persistent overloading of critical ISTS corridors in Karnataka under High RE injection scenario

a) The above issue was deliberated in 239th /240th OCC meeting of SR, the following action points were decided:
   - KAR SLDC shall furnish the location-wise details of the RE capacity integrated during FY 2025-26, along with the associated evacuation arrangements and network connectivity details.
   - KAR SLDC shall ensure implementation of appropriate reactive power management measures and monitor the effectiveness of reactive energy accounting and billing introduced from April 2026.

b) SRLDC has observed that during high Renewable Energy (RE) generation scenarios, N-1 violations are being observed on the following critical ISTS substations:
   - 765/400kV Raichur (PG) ICTs
   - 400/220kV Kudgi (NTPC) ICTs
   - 400/220kV Narendra ICTs
   - 400/220kV Munirabad ICTs
   - 400/220kV Hiriyur ICTs

c) Detailed analysis indicates that the overloading is primarily due to heavy RE power injection from the Karnataka intra-state network into the ISTS network. These injections are affecting SR Export TTC/ATC.

d) It is observed that nearly 878 MW of additional RE capacity has been integrated into the Karnataka system during FY 2025-26, as per MNRE installed capacity data dated 30.03.2026. However, as per the CEA transmission progress report dated 30.03.2026, no corresponding 220kV/ 400 kV / 765 kV transmission infrastructure appears to have been commissioned for evacuation of this additional RE capacity. The above network condition is resulting in persistent stress on key ISTS corridors and is significantly impacting secure grid operation.

e) In view of the above, KPTCL/KAR SLDC are requested to furnish the following details:

(i) **Details and locations of the additional 878 MW RE capacity integrated during FY 2025-26.**

(ii) **The identified transmission system and evacuation scheme planned for the above RE capacity, including associated 220 kV/ 400 kV / 765 kV infrastructure with commissioning timelines.**

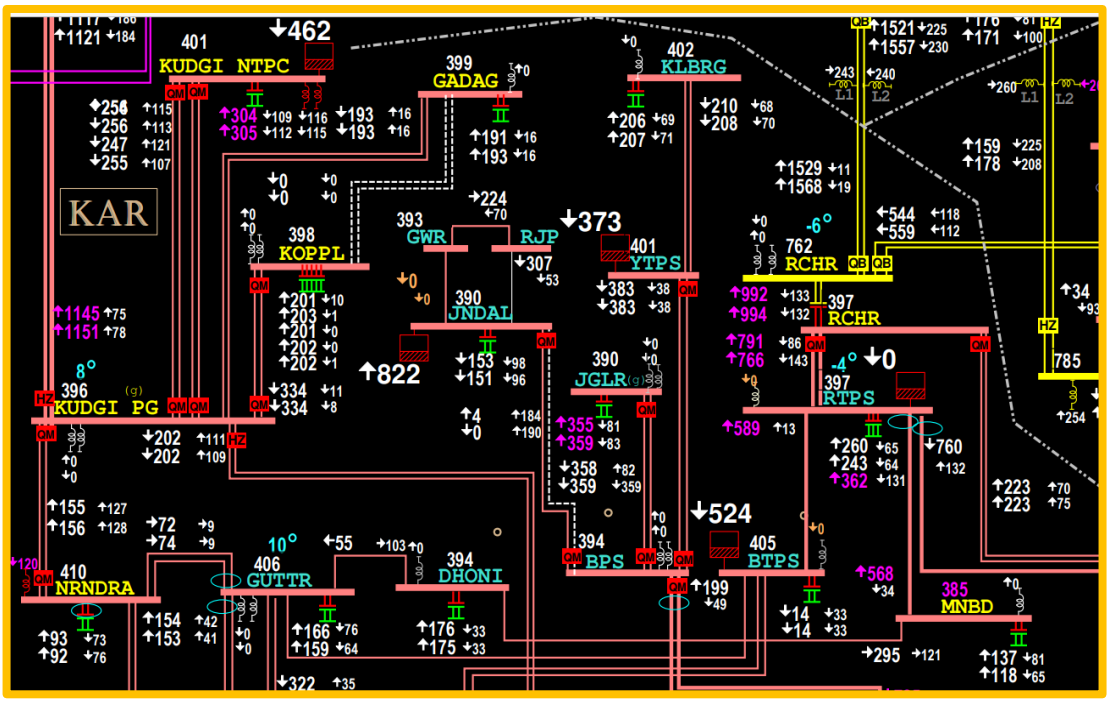
(iii) **Measures proposed by KAR SLDC to mitigate persistent ISTS overloading and N-1 violations under high RE scenarios. Whether RE integration is being allowed by KAR SLDC/KPTCL without matching evacuation system?**

(iv) **Whether any generation regulation / curtailment mechanism is being implemented to maintain secure loading on ISTS corridors during high RE injection conditions?**

(v) **Actions taken / proposed by KAR SLDC to mitigate low voltage conditions at substations experiencing high RE injection, including installation of shunt capacitors/reactors, implementation of dynamic reactive compensation, enforcement of RE plant reactive power support, and voltage control measures at pooling stations and generating stations.**

TCC Deliberations

a) SRLDC presented on the significant renewable energy injection from the 220 kV and below Karnataka State network



It was stated that the absence of adequate intra-state evacuation corridors, substantial renewable energy is being evacuated through the ISTS via the 400/220 kV Kudgi ICTs, 765/400 kV Raichur (PG) ICTs, 400/220 kV Narendra ICTs and 400/220 kV Munirabad ICTs. As a consequence, N-1 violations were predominantly observed at

the 400/220 kV Kudgi ICTs, 400 kV Kudgi–Kolhapur D/C corridor and 765/400 kV Raichur (PG) ICTs.

SRLDC further explained that, during the monsoon season, the simultaneous increase in hydro and wind generation results in sustained high-power injection from the Karnataka State network into the ISTS.

b) **ICT Loadings:**

- ✓ **Kudgi ICT:** SRLDC observed that during the monsoon period, reverse power flow of around 600–700 MW was recorded during both day and night, with the entire-day reverse power flow into the ISTS increasing from 31% during Apr'25–May'26 to 77% during the peak monsoon period of Jun'25–Aug'25, indicating substantial dependence on the ISTS network for RE evacuation. During Jun'26–Jul'26, the reverse power flow reduced to 22%, which SRLDC attributed to the El Niño effect and the resultant reduction in hydro generation; however, the ICTs continued to experience 600–700 MW of reverse power flow during both day and night, indicating sustained reverse power flow conditions.
- ✓ **Raichur ICT**: SRLDC observed that due to increased injection from the RTPS ICTs, N-1 security violation was observed, with the flow reaching as high as 1400 MW on each ICT. The high RE injection from the 220 kV network towards the 400 kV side was also observed to result in increased loading of the 765 kV Raichur ICTs. Further, the reverse power flow increased from 56% to 86% during the 2025 monsoon period and remained significantly high at around 80% during Jun'26–Jul'26, indicating sustained evacuation of renewable energy through the ISTS network despite a marginal reduction during the current year.
- ✓ **Narendra ICT**: During day time of monsoon period, injection of 600 MW from 220 kV to 400 kV side was observed. Even during night time in monsoon period, injection of RE power was observed. Only during peak month, drawl was observed from Narendra ICT. Further, the reverse power flow increased from 16% to 35% during the 2025 monsoon period but reduced significantly to 3% during Jun'26–Jul'26, indicating lower utilisation for RE evacuation in the current year.
- ✓ **Hiruyur ICT**: SRLDC observed that injection from the Hiriyur ICTs reached as high as 600 MW during the day, while 100–200 MW of injection was observed during the night. The reverse power flow showed a consistent year-on-year increase, rising from 37% to 68% and further to 84%. During solar hours, power was injected into the ISTS for 93% of the time during Jun'26–Jul'26, making Hiriyur the most significant RE injection point among the Karnataka ICTs.
- ✓ **Munirabad ICT**: During June-August period, almost 300 MW of injection was observed from 220kV to 400kV level. The reverse power flow increased steadily from 33% to 56% and further to 62%, indicating increasing utilisation of the ISTS for evacuation of renewable generation.

ICT	April-2025 to May-2026			June-2025 to August-2025			June-2026 to July-2026		
	Non-Solar Hours (%)	Solar Hours (%)	Entire Day (%)	Non-Solar Hours (%)	Solar Hours (%)	Entire Day (%)	Non-Solar Hours (%)	Solar Hours (%)	Entire Day (%)
400/220kV Kudugi ICTs(2x500 MVA)	37	26	31	81	73	77	21	24	22
400/220kV Narendra ICTs(2x500 MVA)	24	9	16	41	29	35	3	3	3
400/220kV Hiriyur ICTs(2x315+500 MVA)	23	51	37	54	81	68	76	93	84
400/220kV Munirabad ICTs(2x315 MVA)	15	50	33	39	74	56	51	74	62
765/400kV Raichur ICTs (2x1500 MVA)	51	61	56	88	84	86	85	76	80

Table: Percentage of time power is injected to ISTS by Karnataka

c) **Transmission Line Loadings:**
SRLDC highlighted that the 400 kV Kudgi–Kolhapur D/C transmission corridor is the most critical transmission constraint under high renewable generation conditions. The significant reverse power flow from the Karnataka intra-state network into the ISTS through the Kudgi ICTs results in heavy loading of the 400 kV Kudgi–Kolhapur D/C line, with N-1 security violations being observed during periods of peak monsoon renewable generation.

d) Director (Projects), KPTCL informed that several transmission strengthening projects are under implementation and planning to mitigate the transmission constraints arising from the rapid growth of renewable energy generation and the consequent increase in power injection into the State transmission network. The status of the major projects is as follows.

- **Kudgi (NTPC) ICTs**: A new 400 kV Kushtigi Substation is under implementation and is targeted for March 2027. One of the Kushtigi transmission lines is proposed to be extended to Yalwar, where a 400/220 kV substation along with associated 220 kV transmission lines is planned, with commissioning targeted for August 2027. He stated that commissioning of the Kushtigi and Yalwar substations is expected to substantially mitigate the North Karnataka transmission constraints, particularly the loading on the 400 kV Kudgi–Kolhapur corridor.

- **Raichur (PG) ICTs:** A new 400 kV Mallat Substation has been planned to facilitate evacuation of renewable energy towards the Bengaluru load centre. The scheme has been approved under the Tariff Based Competitive Bidding (TBCB) route, and the Grant of Authorisation (GoA) has been issued with PFC designated as the Bid Process Coordinator (BPC).

- **Narendra ICTs**: A new 400 kV Mekhali Substation is being implemented under the TBCB route. The Letter of Award (LoA) has been issued by REC Power Development and Consultancy Limited (RECPDCL) and the project is presently under survey. The substation is expected to be commissioned by March 2028.

- **Munirabad ICTs**: A new 400 kV Lingapur Substation has been planned, utilising the land available at the existing Lingapur Switching Station. The proposal has been approved by CEA, and the GoA has been issued to RECTPCL as the Bid Process Coordinator. In addition, strengthening of the network through the proposed 765 kV Kushtigi–Hiriyur–Doddaballapur corridor is under planning through the TBCB route. He explained that Kushtigi and Hiriyur would facilitate evacuation of

renewable energy generation, while the 765 kV Doddaballapur Substation would cater to the growing demand in the Bengaluru region. He further informed that all these proposals have been approved by the State Board.

- **Hiriyur ICTs:** A new 400 kV Holalkere Substation has been proposed for strengthening the network. The proposal has been approved by both the CEA and the State Board, and the GoA has been issued to RECTPCL as the Bid Process Coordinator (BPC).

e) ED, SRLDC emphasized that until the planned transmission strengthening projects are commissioned, the responsibility of maintaining grid security rests with the State utilities. He informed that, recently, constraints at the Mysore ICTs resulted in the loss of around 1200 MW of load, with 6–8 substations stations remaining blacked out, thereby posing a risk to secure grid operation.

f) CTUIL observed that the rapid addition of renewable energy generation may outpace the assumptions considered in the existing transmission planning studies, resulting in continued reverse power flow and overloading even after the planned transmission strengthening works. In this regard, CTUIL informed that reverse power flow at the Kudgi ICTs is likely to persist during the FY 2029–31 horizon, notwithstanding the commissioning of the Kushtigi Substation and other planned transmission strengthening schemes. Director (Projects), KPTCL assured that adequate transmission strengthening measures are being planned to facilitate evacuation of about 11 GW of renewable energy from North Karnataka, thereby minimising injection into the ISTS corridors.

g) MS, SRPC reiterated the concerns raised by CE, TGSLDC regarding the need for a proactive regulatory mechanism to manage intra-State injection into the ISTS before transmission congestion develops. He observed that uncontrolled InSTS injection into the ISTS leads to inter-regional transmission constraints, curtailment of exports and impacts the rights of GNA consumers. In this regard, he informed that SRPC Chairperson, vide communication dated 13.01.2026, had already taken up the matter with the Chairperson, CERC, highlighting the issue of InSTS power injection into the ISTS and the equitable sharing of transmission charges, with the following suggestions:

   i. Introduction of a framework for separate Import GNA and Export GNA for States to facilitate appropriate transmission planning and mitigate congestion.
   ii. Development of a suitable regulatory mechanism to address large-scale seasonal and intra-day InSTS power injection into the ISTS, including examination of total drawal for RTDA, as net drawal may not adequately reflect ISTS utilisation.
   iii. Consideration of the commercial implications of InSTS power injection into the ISTS, including its impact on GNA consumers, while deliberating the matter at the appropriate forum.
   iv. Consideration of the ISTS impact of bulk loads, such as Data Centres and Green Ammonia plants connected through the STU network, through appropriate connectivity provisions or a suitable transmission cost recovery mechanism.

h) Chairperson, TCC observed that Tamil Nadu and other Southern Region States with high renewable energy penetration should formulate a comprehensive long-term transmission plan to ensure adequate evacuation infrastructure and avoid transmission constraints arising from increasing RE generation.

TCC Conclusion

- ***KPTCL shall expedite the implementation of the planned transmission strengthening projects for renewable energy evacuation in Karnataka, with the Senior Management closely monitoring their progress to ensure timely completion. KPTCL further assured that adequate transmission infrastructure would be developed to facilitate evacuation of about 11 GW of renewable energy from North Karnataka, without causing significant reverse power flow into the ISTS***
- ***KAR SLDC shall proactively monitor the prevailing grid conditions and undertake appropriate operational measures, including renewable energy curtailment wherever required, to manage N-1 security, thermal loading, voltage profile and other operational constraints, particularly before Grid-India initiates congestion management measures.***
- ***All Southern Region States shall undertake advance transmission planning in line with the anticipated growth in renewable energy capacity over the next 5-10 years, so that adequate transmission infrastructure is commissioned before generation addition and transmission congestion occurs.***

SRPC noted the above

6. UPCOMING ENERGY STORAGE PLANTS IN SR

a. The following status had been noted in the 55th Meeting of TCC/ 58th Meeting of SRPC for upcoming PSPs**:**

Sl. No.	State	Name of Project	Probable IC (MW)	Indicated Agency
1	Karnataka	**Varahi**	700/1500	JV with KPCL and THDCIL
	55th TCC: KPCL had informed that there was delay in preparation of Detailed Project Report (DPR) by WAPCOS, the contract awarded to them was cancelled. They are in the process of finding new agency for which the tendering process has been initiated.			
2	Karnataka	**Belgaum**	700	Awarded to Greenko
	55th TCC: • PCKL informed that the project works are currently in progress and is expected to be completed by December 2027. • Greenko informed that the project works are expected to be completed by December 2027. The company has applied for connectivity of 700 MW to the STU network and 900 MW to the ISTS network. A meeting in this regard was held by CEA during the previous week regarding the dual connectivity. The connectivity is expected to be finalized in the next CEA meeting. **58th SRPC:**			

	• PCKL informed that around 14% works are completed in the 700 MW project awarded to Greenko.			
3	Karnataka	**Vijayanagara**	300	Awarded to JSW Group
	55th TCC: PCKL informed that the project is expected to be commissioned by the end of 2028.			
4	Karnataka	**Nethravathi Stage-I**	1500	
	55th TCC: KPCL informed that the Pre-Feasibility Report (PFR) had been submitted to the Government of Karnataka, with a request for allocation of the project to KPCL. Approval from the Government of Karnataka was awaited.			
	Note: KPTCL/PCKL had informed there are no updates on the additional projects.			
5	Kerala	**Ponmudi (**Muthirapuzha)	100	
	55th TCC: KSEBL informed that the proposal has been dropped.			
6	Kerala	**Kakkayam**	800	
	55th TCC: KSEBL informed that DPR preparation by TCS is in progress and is expected to be completed in 2 years i.e. by 2027.			
7	Kerala	**Poringalkuthu**	1000	
	55th TCC: KSEBL informed that DPR preparation by TCS is in progress and is expected to be completed in 2 years i.e. by 2027.			
8	Kerala	**Idukki**	700	
	55th TCC: KSEBL informed that DPR preparation by TCS is in progress and is expected to be completed in 2 years i.e. by 2027. **58th SRPC:** KSEBL stated some of the projects are expected to be commissioned by 2029 – 30.			
9	Tamil Nadu	**Upper Bhavani**	1000	NTECL/NTPC
	55th TCC: • TANTRANSCO informed that the drilling work at the site had been stopped by the Forest Department on 04.10.2025. They are actively pursuing the matter with the Forest Department for early resumption of work. • TNGECL observed that based on the discussion with PCCF/Chennai, M/s NTECL have been addressed on 01.07.2026 requesting whether any drift works are to be carried out for the preparation of DPR and any tree falling/ forest cutting is involved in project site.			
10	Tamil Nadu	**Sillahala Stage-I & II**	1000 & 1000	Proposed on PPP basis
	55th TCC:			

	TNGECL informed that Sillahalla Stage – I work has been temporarily stopped based on the direction of Chief Secretary/GoTN, due to public agitation. On obtaining approval from GoTN, for Stage-I, Stage - II would be simultaneously taken up for development under the Public-Private Partnership (PPP) mode.			
11	TNGECL	**Aliyar**	2400	Proposed on PPP basis
	55th TCC: TNGECL had informed that the pre–Detailed Project Reports (Pre-DPR) are submitted to TNIDB by M/s AFRY. M/s SBI cabs has been appointed as Transaction advisory for Aliyar PSP by TNIDB. Bidding process will be commenced by TNGECL after finalization of transactional structure of Aliyar PSP by TNIDB.			
12	TNGECL	**Velli Malai**	1100	Proposed on PPP basis
	55th TCC: TNGECL informed that the bidding process for the Velli Malai PSP project had been initiated, and the bids were scheduled to close by August 2026 (as on 05.08.2026). However, due to certain pre-bid queries, the bid submission deadline may be extended to the mid/end of August 2026. Following the opening of the tender, the Developer will be identified, and the project works will be taken up thereafter. IFC has been appointed as Transaction Advisor by TNIDB.			
13	Telangana	**Khammam District**	1500	
	55th TCC: TGTRANSCO informed that draft DPR is under review for 1500 MW PSP at Khammam district. TGGENCO approached MoEF & CC for getting Environment Clearance and Forest Clearance. Final DPR preparation is in progress.			
14	Telangana	**Other locations**	2500	**53rd TCC:** Under consideration
	55th TCC: TGTRANSCO informed that the development of 2,500 MW of PSP capacity across 3 locations is under consideration. However, no significant progress has been achieved so far. Govt. of Telangana may take a decision to proceed for preparation of DPR.			

SRPC noted the above

b. **The status of ongoing projects is given below**

State	Status of PSP Scheme (54th TCC/57th SRPC)
Karnataka	**Sharavathy (8x250=2000 MW):** Upper Reservoir at Talakalale, Shivamogga District and Lower reservoir at Gerusoppa, UK District, Karnataka. **55th TCC:** KPCL informed that a 3-member committee from the Ministry of Environment, Forest and Climate Change (MoEF&CC) visited the project site at the end of December 2025. The Committee sought certain clarifications, which were furnished to MoEF&CC through the consultant (NIAS) as well as through the PARIVESH portal. KPCL further informed

	that a Public Interest Litigation (PIL) pertaining to the project has been filed before the High Court. The next public hearing is scheduled to be held in October 2026.
Tamil Nadu	**Kundah (4x125 =500MW):** Unit-1 expected to be commissioned by **June 2027** **55th TCC:** TNGECL informed that due to the onset of Monsoon, the works in the Emerald Reservoir (Lower Intake Works) have been suspended again from 25.05.2026. Also, the erection of steel liners in the 50° inclined pressure tunnels are challenging due to dearth of working space. Hence, after the issuance of Line Clearance of TANTRANSCO wing (Grid Operations) for depletion of water in the Emerald reservoir, which is expected by end of August 2026, the lower intake works are expected to be resumed by Mid-September 2026 so as to complete the Lower Intake works by April 2027. Hence the commissioning of first Unit is expected by June 2027. Subsequently, the commissioning of the other units is planned in a phased manner.

SRPC noted the above

c. **CTUIL: PSP planned at ISTS are as follows:**

Sl	Applicant	Location	Injection / Drawl Quantum (MW)	Start Date of Conn.
1.	Greenko	Kurnool New S/s	565 260	Commissioned
2.	Greenko KA01 IREP Pvt. Ltd.	Gadag-II	640 260	30.06.2027 30.06.2027
3.	Adani Renewable Energy Forty Two Ltd. & Adani Renewable Energy Fifty One Ltd.	Kurnool-III PS	500/600 1200/1450	31.12.2026 01.01.2028
4.	Akaya Energy Private Limited	NP Kunta	600/660	31.01.2031
5.	Adani Renewable Energy Fifty One Limited	Kadapa-II	600/720	31.12.2028
6.	Adani Hydro Energy Eleven Limited	Kadapa-II	2250/2600	31.12.2031
		Total	**6875**	

CTUIL stated the following:

- 3 new applications were received (Sl. Nos. 4, 5 and 6) in addition to the earlier

approved applications (Sl. No. 1,2 and 3). The applications at Sl. Nos. 4, 5 and 6 are under process.

- Due to the delay in the commissioning of the 765 kV Narendra–Pune transmission line, the operationalization of connectivity for Adani Renewable Energy Forty-Two Ltd. (600 MW) has also been delayed. The Kurnool PS is ready, RE commissioning is pending, Interconnection studies (Conn4 study) results furnished by the utility is under scrutiny.

d. The status of APGENCO and ANGEL projects is given below:

	APGENCO and APGENCO NHPC GREEN ENERGY LIMITED (ANGEL)						
S. No.	**Project name**	**Location**	**Quantum (MW)**	**Present Status**	**Start of Construction Date**	**Commissioning Date**	**Connectivity**
	APGENCO						
1	Upper Sileru Pumped Storage HEP	Alluri Sitarama Raju Dt	9x150 =1,350 MW		28.02.2024 (Zero date)	28.02.2029 (60 months from zero date)	STU
55th TCC: APGENCO informed the following: • EPC contract was awarded to M/s Megha Engineering & infrastructures Limited on 28.02.2024 with completion period of 60 months. • Stage-I Forest clearance was received on 24th October 2025. • Environmental Clearance received on 24.11.2025 • Stage-2 Forest clearance received on 14.07.2026. • APPCB issued consent for establishment on 08.02.2026 • APERC consent issued on 28.04.2026. • Guest House construction works, Batching plant foundation works, Audits excavation works, tree cutting works (plot-A), approach road to coffer dam are in progress. • Design & engineering works are in progress.							
2	Kamalapadu PSP HEP	Ananthapur Dt	3x 238 + 2x118 = 950 MW	Final DPR submission is expected by the end of October 2025.	31.03.2026	31.09.2029 (42 months)	STU
55th TCC: APGENCO informed the following: • Environmental clearance received on 14.10.2025. • APPCB issued consent for establishment on 02.05.2026. • Term Loan: Sanctioned by M/s REC • Tender finalized and proposal submitted to GoAP for according for the revised project cost and permission to issue of LOI to L1 bidder.							

	Sub Total		**2300**				
	APGENCO						
3	Yaganti PSP	Nandyal Dt	6 x 250 =1500 MW		01.06.2026	30.11.2030 (54 months)	STU
	55th TCC: APGENCO informed the following: • In principle approval for 1,500 MW received on 25.06.2026, duly enhancing the earlier approved capacity of 1,000 MW. • Application is being filed with MoEF & CC for Terms of Reference (ToR) approval for further processing of environmental clearance. • DGPS survey for forest land is being taken up. Application is being submitted to the DFO, Banaganapalli for approval to conduct DGPS survey. • Pre-Feasibility Report submitted to APGENCO on 22.07.2026.						
4	Rajupalem PSP	Prakasam Dt	4 x 200 =800 MW		01.06.2026	30.11.2030 (54 months)	STU
	55th TCC: APGENCO informed the following: • TCFR Prepared • Layout finalization to be taken up. • DPR activities are under progress.						
	Sub Total: 1800 MW						
	Joint Venture- ANGEL						
5	Deenepalli PSP	YSR Dt	5 x 150 =750 MW	Techno Commercial Feasibility report completed. DPR activities to be initiated.	01.06.2026	31.05.2030 (48 months)	STU
	55th TCC: APGENCO informed the following: • TCFR Prepared • Layout finalization to be taken up. • Consulting Agency to be finalized for DPR activities.						
6	Aravetipalli PSP	YSR Dt	6 x 220 = 1,320 MW	DPR activities to be initiated	01.06.2026	31.05.2030 (48 months)	STU
	55th TCC: APGENCO informed the following:						

	• Layout finalization is in progress. • Feasibility study completed • Consulting Agency to be finalized for DPR activities						
7	Gadikota PSP	Annamaya Dt	4 x 240 + 2 x 120 = 1,200 MW		01.01.2027	31.12.2031 (60 months)	STU
	55th TCC: APGENCO informed the following: • Feasibility study completed. • Layout finalized. • DPR activities are in progress.						
	Sub Total		**3270 MW**				
	TOTAL		**7370 MW**				

SRPC noted the above

e. The following was noted wrt BESS:

State / UT	Status / Remarks
Andhra Pradesh (AP)	**55th TCC:** 1. APTRANSCO informed that, under the first tranche, two Developers have been awarded 500 MW/1000 MWh projects across three locations. It was stated that one of the Developers, M/s ACME, has filed a petition before the High Court on a trivial issue and intends to withdraw from the project. APTRANSCO informed that necessary action would be initiated against the Developer. The work relating to the other project is under progress; however, the Developer has sought additional incentives, which have not been agreed to. 2. Regarding the second tranche (1000 MW/2000 MWh), APTRANSCO informed that, except for one Developer, all others have entered into agreement with the DISCOMs. Procurement of materials is under progress. It was further informed that the tariff discovered through the tender is the lowest recorded in the country. 3. It was informed that one Developer with a capacity of **75 MW/150 MWh** has not yet entered into the agreement. **58th SRPC:** 1. Phase-I (1st Tranche): It was informed that an issue has arisen with M/s ACME in respect of the 225 MW project. The matter has been taken up with the Secretary (Power), Ministry of Power (MoP) to facilitate early re-tendering of the project so that its implementation can proceed in coordination with APTRANSCO. 2. Phase-II (2nd Tranche): It was informed that, except for one Developer, all other Developers have entered into the Right of Way (RoW) Agreement.

	Relaxation has also been provided with respect to the Bank Guarantees (BGs) for connectivity. 3. It was further informed that the BESPAs for both phases have already been executed. On the infrastructure side, APTRANSCO has awarded the works for nine locations, while the remaining one location is being re-tendered due to a lack of response.
Karnataka (KA)	**55th TCC:** KPTCL informed about the BESS planned, with the following details: 1. 400 kV Guttur - 100 MW/ 200 MWhr. 2. 220 kV Madhuvanahalli - 50 MW / 100 MWhr. 3. 220 kV Aheri - 50 MW / 100 MWhr. 4. 220 kV Humnabad - 50 MW / 100 MWhr 5. 220 kV Shahpur - 50 MW / 100 MWhr 6. 220 kV Mallat - 50 MW / 100 MWhr 7. 400 kV Doni - 150 MW / 300 MWhr **[Total KPTCL stations 500 MW / 1000 MWhr]** KPTCL informed that work has commenced on all above seven projects, and their commissioning is expected during the period from November 2026 to January 2027. **KREDL** Two different projects: • KPTCL informed that the 250 MW/1100 MWh Solar + BESS project has been awarded and is currently under implementation. The project is scheduled to be commissioned by September 2027. • It was further informed that 900 MWh of Battery Energy Storage System (BESS) capacity is proposed under two projects: 200 MW/400 MWh at Huliyudurga and 250 MW/500 MWh at Kushtagi. Approval from KERC has been obtained, and the tendering process through the TBCB route is expected to commence shortly. **58th SRPC:** • KPTCL informed that the works are under progress. Out of the seven projects, six projects are expected to be completed by January 2027. The Doni project is likely to require additional time and is expected to be commissioned by February/March 2027. • **KREDL:** 900 MWh of BESS capacity has already been tendered.
Kerala (KL)	**55th TCC:** KSEBL furnished the following information: a) **Pothencode 40 MW:** Work awarded to NTPC Green Energy Ltd. i. Land handed over. ii. Expected to be commissioned by **December 2026.** b) **Mylatty 125 MW /500 MWh BESS**: Work awarded to JSW, under State Component VGF Scheme. i. Foundation construction complete. ii. LOA was issued. iii. Land handed over. iv. Tariff adopted by KSERC on 31.07.2025. v. Construction in progress and expected to be commissioned by **October 2026.** c) **Mulleriya 15 MW:** Work awarded to Opera Energy Pvt Ltd.

	i. LoA issued. ii. Land handed over. iii. Expected to be commissioned by **October 2026**. d) **Sreekandapuram 40 MW:** Work awarded to NTPC Green Energy Ltd. i. Agreement Executed. ii. Land handed over. iii. Expected Commissioning by **December 2026**. **e) Areakode 30 MW:** Work awarded to TATA Power Renewable Energy Ltd. i. Agreement Executed. ii. Land handed over. iii. Expected to be commissioned by **November 2026** **f) Brahmapuram 250 MW * 2 hr/ 500 MWh:** i. Agreement Executed. ii. Land handed over. iii. Expected to be commissioned by **September 2027**. • KSEBL informed that it is planning to implement distributed Battery Energy Storage Systems (BESS) at the LT level under the Viability Gap Funding (VGF) scheme of the State Government. It was further informed that rooftop solar capacity has reached approximately 2,200 MW. The Business Model has been finalized and is expected to be issued shortly. • KSEBL highlighted the issues related to power injection from the LT side into the 11 kV and 33 kV network that were observed during the studies. To better understand the substation-level BESS planning approach adopted by Tamil Nadu, KSEBL requested TNPDCL to share the substation scheme and relevant planning data. TNPDCL and KPTCL were requested to furnish the required details to facilitate further studies and planning in Kerala. **58th SRPC:** • Stated that 250 MW Brahmapuram project is expected to be commissioned in 2026. • KSEBL informed that a technical issue has been observed, as all rooftop solar systems are connected at the LT level and power injection into the 11 kV network is not taking place. Proposal has been made to store the energy at the 440/230 V level and discharge it during the evening peak hours. A technical team is working on the implementation strategy, which is expected to be finalized and rolled out shortly. A pilot project has already been commissioned at three locations, each comprising a 100 kWh BESS integrated with a 250 kVA distribution transformer. The scheme may be scaled up in the future. • KSEBL has put forth a proposal for the utilization of six PGCIL substations for the establishment of Battery Energy Storage Systems (BESS). KSEBL has approached PGCIL in this regard, and a meeting with the senior officials of PGCIL is expected to be held shortly. It was informed that approximately 5–10 acres of land are available at each location. The proposal envisages the installation of a 250 MW BESS with a storage duration of around four hours at this location, which is expected to be beneficial for the internal generation.
Telangana (TG)	**55th TCC:** TGTRANSCO had stated that 500 MWh (250MW x 2hrs) BESS Tender is cancelled. 1. Also, it was informed that one vendor has requested extension.

	2. Bidding for 1500 MWH BESS capacity under VGF scheme supported through PSDF was conducted for the following locations ➢ 750 MWH at 400 KV Choutuppal SS-LoA issued to Coal India Ltd, Kolkata on 28.03.2026. ➢ 750 MWH at 400 KV Maheshwaram SS-LoA issued to Sarus Infrastructure Pvt Ltd, Hyderabad on 28.03.2026. 3. TGGENCO signed BESPA for 750 MWH for 15 years on 30.04.2026 for Choutuppal SS. 4. Signing of BESPA by TGDISCOMS is under progress. 5. Sarus Infrastructure Pvt Ltd, Hyderabad requested for extension of signing BESPA.
Tamil Nadu (TN)	**55th TCC:** 1. TNPDCL informed that, under the first tranche, 500 MW/1000 MWh of BESS capacity is being implemented through State VGF across six TANTRANSCO substations through three private developers. BESPA was signed on 30.06.2025, and the projects are expected to be commissioned by 31 December 2026. 2. Regarding the second tranche, TNPDCL informed that 375 MW/1500 MWh of BESS capacity is being implemented through State VGF across 11 TANTRANSCO substations. The projects have been awarded to three private developers. Land has been allotted, the BESPA has been signed, and the Letter of Award (LoA) has been issued. The project work has commenced and is expected to be completed by September 2027. **58th SRPC** • **1st Tranche:** The project comprises six locations. At five locations, the bays have already been handed over, while at one location, the bay handover is pending due to land-related issues. BESPA has been signed, and the works are under progress. The projects are expected to be completed by December 2026 or January 2027. • **2nd Tranche-** The project comprises 11 locations. Financial closure is expected by September 2026. The bay handover process is currently under progress. Upon completion of the bay handover, the project works will commence.
Puducherry (PY)	**55th TCC** PED informed that a total of 50 MW of BESS capacity is planned across 10 substations, with 5 MW at each substation. Government approval for 35 MW of the project is currently awaited. Certain clarifications sought by the Government have already been submitted, and the works will be awarded upon receipt of the approval. It was further informed that the remaining 15 MW of BESS capacity will be taken up after approval of the initial 35 MW project.
NTPC	**55th TCC** 1. Kudgi 240 MW / 480 MWhr 2. Ramagundam Stage III 50 MW / 100 MWhr 3. Simhadri 145/290 MWhr (5600 MW through VGF being planned all over India) NTPC informed that the EPC contract has been awarded, and the civil works are under progress. The project execution timeline is 15 months. It was further informed that, for all the three projects listed below, the projects are expected to

<table>
<tr><td></td><td>be commissioned by June 2027.
58th SRPC:
The projects have been awarded, and the works are under progress. Materials have been ordered. The projects are expected to be commissioned by June 2027.</td></tr>
<tr><td>NTECL</td><td><u>ADDITIONAL AGENDA:</u>
55th TCC:
Awarded to M/s MKC Infrastructure Ltd. (MKC), with a Capacity of 150 MW/300 MWh under the VGF scheme on 30.04.2026.
58th SRPC:
The projects have been awarded, and the works are under progress. The commissioning is expected to take longer due to the GIS substation works. The projects are expected to be commissioned by October 2027.</td></tr>
<tr><td>Grid-India</td><td>55th TCC
Yet to update on the BESS Projects.</td></tr>
<tr><td>ISTS Connected</td><td>55th TCC
CTUIL informed that the details of the application status of BESS projects proposed under the ISTS in the Southern Region are as presented below. It was further informed that BESS applications aggregating approximately 15.3 GW have been received from various locations across the Southern Region.
<table>
<tr><th colspan="2">Granted / Agreed for Grant</th><th colspan="2">Under Process</th></tr>
<tr><th>No. of Applications</th><th>MW</th><th>No. of Applications</th><th>MW</th></tr>
<tr><td>57</td><td>11363</td><td>24</td><td>5205.5</td></tr>
</table>
58th SRPC
Forum noted that a substantial BESS capacity is being developed in the Southern Region. All SR entities may explore the opportunities for utilizing the available BESS capacity.</td></tr>
</table>

SRPC noted the above

7. BESS GUIDELINES

a) In 54th TCC, it was observed that a committee comprising field experts could be formed to formulate Guidelines for Battery Energy Storage System (BESS) covering operational, protection and telemetry aspects.

b) Consequently, a Special Meeting of stakeholders to discuss guidelines for BESS was held on 15.05.2026 at Idukki in Hybrid mode. (Record Notes is attached as (**Annexure-7A**). The Guidelines for Integration and Operation of BESS by States finalized by the committee is attached at **Annexure-7B**.

c) The key recommendations which emerged from the meeting are as follows:

- For States with multiple BESS installations, centralized dispatch through a BESS Optimizer at the SLDC is recommended to avoid counter-dispatch, optimize multi-objective operation, and schedule BESS considering limiting constraints.
- Cycle counting shall be based on cumulative energy throughput, without restricting the number of charge-discharge operations in a day.
- All BESS shall be equipped with Grid-forming Inverter (GFM) capability and Black Start capability.

- BESS shall maintain State of Charge (SoC) within the permissible band (20-80%) and maintain adequate reserves for frequency response and contingency support.
- BESS shall provide Primary/Fast Frequency Response as mandated under the CEA Connectivity Regulations.
- The possible use cases by states were identified for BESS are as follows:
  - Frequency response (PFR/FFR)
  - Reserve management
  - DSM/ACE management
  - Peak demand management
  - Market participation (DAM/RTM)
  - Congestion management
  - Transmission/evacuation constraint management
  - Reactive power support
  - Black Start support
  - Manual dispatch by the System Operator
- Protection requirements to be complied
- SCADA and Communication requirements were compiled such as telemetry, remote control, AGC compatibility, PMU integration, cybersecurity, and communication architecture
- Signal list as required by NLDC for SRAS were identified
- Compliance of Safety requirements
- Compliance of First Time Charging (FTC)

d) The views of States/UT are given below:

- APSLDC: Supported development of a common platform with provisions for State-specific customization to meet individual operational requirements.
- KPTCL: Favoured development of a common BESS optimization platform through a third-party solution provider.
- KSEBL: Favoured a project-specific approach, stating that the choice of optimization platform should depend on the BESS deployment architecture and operational requirements. Also suggested evolving a standardized Protection and Communication framework, while keeping a centralized EMS optional and leveraging SAMAST for BESS scheduling and optimization.
- TNSLDC: Supported a centralized BESS optimization platform at the SLDC for coordinated scheduling and dispatch of multiple BESS installations, enabling optimal utilization while considering technical, operational, grid security, and regulatory constraints.
- PED: Supported the development of a standardized Protection and Communication framework and opined that implementation of a centralized EMS may be kept optional.

TCC Deliberations

e) MS, SRPC appraised that based on the recommendation of the 54th SRPC meeting, a committee comprising of field experts was constituted to frame Guidelines for BESS covering operational, protection and telemetry aspects. A stakeholders'

meeting was held on 15.05.2026 and the guidelines were finalized. The forum was also appraised that the guidelines identified multiple use cases for states as follows:

i. Frequency response (PFR/FFR)
ii. Reserve management
iii. DSM/ACE management
iv. Peak demand management
v. Market participation (DAM/RTM)
vi. Congestion management
vii. Transmission/evacuation constraint management
viii. Reactive power support
ix. Black Start support
x. Manual dispatch by the System Operator

MS, SRPC observed that BESS optimization platforms are already available from third-party solution providers and may either be leveraged by the states collectively or developed independently by individual SLDCs based on their respective requirements.

f) APTRANSCO appreciated the guidelines and observed that practical operational issues may emerge after commissioning of BESS projects, which could be deliberated in the forum as and when they arise. APTRANSCO further suggested constitution of a committee to study the operational aspects and challenges associated with Grid-Forming (GFM) capabilities.

g) MS, SRPC observed that CEA and Grid-India are taking the lead on Grid-Forming technologies and opined that the matter may be pursued through them. SRLDC further informed that NLDC is leading the initiative on GFM and suggested NLDC may be consulted.

h) KAR SLDC stated that BESS Developers themselves are providing optimization solutions through the SAMAST platform.

i) KSEBL informed that it would develop its own BESS optimization platform with centralized control from the SLDC through integration with SAMAST.

j) PED stated that, considering the relatively small BESS capacity in the UT, it also intends to develop its own centralized control solution through SLDC.

k) TNSLDC observed that, with increasing deployment of BESS across states, simultaneous injection during peak hours may become a concern. TN SLDC suggested for a centralized optimization platform with merit-order based dispatch and optimized charge-discharge scheduling. However, considering the presently limited BESS capacity, it was opined that such an optimizer may not be immediately necessary. It was further stated that, as BESS deployment increases, Tamil Nadu would take an appropriate decision on adopting a third-party optimizer or developing an in-house solution.

l) TGSLDC informed that centralized control of all BESS projects from the SLDC is presently envisaged. It further requested that, if any proven control logic is developed by any State, the same may be shared to help initiate the development.

m) The forum concluded that the Guidelines already provide the operational framework and possible use cases for BESS. It was observed that most of the States are planning centralized optimization through their respective SLDCs. It was further noted that the choice of use case would depend upon the location of the BESS installation and its intended purpose. States may develop optimization solutions based on their individual requirements, while any common issues requiring technical guidance or coordination may be taken up through the forum.

n) KSEBL shared a knowledge sharing presentation on use-cases of BESS (attached as **Annexure-7C**)

SRPC Deliberations

o) MS, SRPC highlighted the use-cases identified in the guidelines. He observed that while most BESS installations are presently intended for peak demand management, they could also be optimally utilized for several other grid support services based on system requirements. BESS could be deployed for maintaining secondary and tertiary reserves, managing DSM/ACE violations, market participation based on economic principles under DAM and RTM markets, mitigating transmission congestion and evacuation constraints, providing reactive power support and facilitating black start operations.

p) TGTRANSCO informed that similar provisions had already been incorporated in its 600 MWhr BESS such as peak demand management, managing DSM and Reserves. GFM capabilities are also incorporated.

TGTRANSCO further enquired whether the proposed 16 GW ISTS-connected BESS projects were tied to specific beneficiaries or would be available for open access arrangements. CTUIL informed that the beneficiary tie-up details of the proposed projects were not available with them. It was further informed that part of the proposed capacity pertains to RE developers who are required to provide energy storage systems along with wind or solar projects. Hence, the proposed capacity would not consist entirely of stand-alone BESS projects.

q) The forum concluded that a meeting may be organized involving the commercial and operation wings of States and developers to explore possible storage tie-ups in Southern Region. CTUIL agreed to share the details of the developers

SRPC Conclusion

- ✓ ***States may develop BESS optimization solutions based on their individual system requirements or with centralised control from SLDC. Common issues requiring technical guidance, coordination or further deliberation may be taken up through the SRPC forum.***
- ✓ ***CTUIL shall share the details of the proposed ISTS-connected BESS developers/projects. Based on the details received, SRPC secretariat shall organize a meeting of the States and the concerned Developers to explore possible storage tie-up opportunities in the Southern Region.***

8. ISSUES WITH RESPECT TO RE GENERATORS

A. Non-Participation/Non-compliance of regulations by RE generators

a. Renewable Energy (RE) has emerged as a major contributor to the Indian power sector, accounting for 282.78 GW out of the total installed capacity of 542.35 GW (52.13%) at the National level and 85.83 GW out of 151.27 GW (56.73%) in the Southern Region. The Southern Region has also witnessed a maximum instantaneous RE penetration of 68.27%, recorded on 19.08.2025, underscoring the increasingly critical role of RE generators in ensuring reliable real-time grid operation, system security, and grid stability.

b. Despite the significant and growing operational footprint of RE generation, persistent instances of non-participation by RE developers in the meetings of the Protection Coordination Committee (PCC), Communication Sub-Committee (COMSR), and Renewable Energy Sub-Committee have been observed. In addition, several concerns relating to non-compliance with applicable regulatory provisions and technical requirements continue to persist. These include, but are not limited to, the following:

- CEA (Technical Standards for Connectivity to the Grid) Regulation.
- CEA (Technical Standards for Communication System in Power System Operations) Regulations, 2020.
- CERC (Communication System for inter-State transmission of Electricity) Regulations, 2017.
- CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022.
- CERC (Deviation Settlement Mechanism and Related Matters) Regulations - Outstanding dues and non-opening of Letter of Credit (LCs).
- Compliance of Protection Audit requirements under IEGC.
- Delays in furnishing mandatory operational data and disturbance reports.

c. Given the high RE penetration and its direct impact on grid stability, frequency control, voltage management, and fault response, such non-participation and non-compliance pose significant operational risks.

d. Compliance of regulatory provisions and operational/protection/communication issues needs to be discussed by STU/SLDCs for intrastate RE generators.

TCC Deliberations

a) MS, SRPC suggested all the Southern Region States to convene separate State-level meetings, in line with the RE subcommittee meeting at region level to review non-compliance with regulatory provisions by RE generators.

b) TG SLDC enquired about the procedure to be followed for providing grid connectivity to small Renewable Energy (RE) generators of capacity 1–2 MW which are coming up in large numbers being connected to HT level.

c) It was suggested TG SLDC to examine the applicable DGR regulations while providing connectivity to small RE generators under 33kV. TG SLDC may take up the matter with the Central Electricity Authority (CEA), if required, for appropriate regulatory provisions or clarifications.

d) Chairperson, TCC opined that the matter may be taken up with the Central Electricity Authority (CEA), as the issue pertaining to connectivity regulations of small Renewable Energy (RE) generators is common across most of the Southern Region States.

TCC Conclusion

- ***The matter shall be placed before SRPC for deliberation and, subject to the approval of SRPC the matter will be taken up with CEA for appropriate regulatory intervention and necessary action. Utilities were advised to furnish any issues relating to connectivity of small RE generators to SRPC secretariat for deliberation before the matter is taken up with CEA.***

SRPC Deliberations:

e) MS SRPC apprised that TCC Forum had observed that the existing regulatory framework does not comprehensively address the technical and operational requirements associated with large-scale integration of 1-2 MW-scale RE generating stations connected below 33 kV, resulting in varying practices being adopted by different utilities. TCC therefore, felt that there is a need for a comprehensive and uniform regulatory framework for such generating stations, particularly those connected below 33 kV, to ensure secure, reliable and consistent grid operation.

f) Chairperson, SRPC stated that the issue pertaining to the connectivity of small Renewable Energy (RE) generators (up to 2 MW) below 33 kV would be taken up with the Ministry of Power (MoP) and the Chairperson, CEA for consideration and formulation of appropriate regulations governing the connectivity and grid integration of such RE generators.

SRPC Conclusion

- ✓ ***Chairperson, SRPC to take up with MoP and Chairperson, CEA the need for a comprehensive and uniform regulatory framework for connectivity and grid integration of small RE generators connected below 33 kV.***

B. Outage of Transmission Lines due to Tower Collapse affecting RE evacuation

a. During May 2026, multiple transmission lines connected to Gadag PS tripped due to tower collapses caused by inclement weather, disrupting evacuation of renewable energy. Similar tower collapse incidents had also occurred in May 2025, leading to prolonged disruption of RE evacuation.

b. The recurrence of such incidents highlights the need to strengthen transmission system resilience through improved preventive maintenance, patrolling, and deployment of Emergency Restoration Systems (ERS). ***RE Developers may also***

explore sharing or jointly maintaining ERS facilities to facilitate early restoration of evacuation during such contingencies.

TCC Deliberations

c. MS, SRPC informed that all transmission licensees/RE Developers have been suggested to deploy adequate Emergency Restoration Systems (ERS) and maintain their readiness for timely restoration of transmission lines during contingencies.

d. Director, APTRANSCO enquired about the agency responsible for construction of the transmission towers which had collapsed. It was informed that the concerned towers had been constructed by the respective RE Developers as part of their dedicated transmission system for evacuation of renewable power.

TCC Conclusion

- ***TCC emphasized that adequate due diligence shall be carried out at the planning and design stage itself for transmission infrastructure associated with RE evacuation. Site-specific factors such as soil and foundation conditions, wind loading, extreme weather events, terrain and other environmental conditions may be appropriately considered while finalizing the tower design and associated infrastructure, so as to minimize the possibility of tower failures and prolonged outages.***
- ***TCC further observed that, considering the rapid growth of RE generation and the increasing dependence on dedicated evacuation corridors, the reliability of the associated transmission system is equally important for ensuring grid security and optimum utilization of renewable generation. Therefore, periodic inspection, preventive maintenance, pre-monsoon patrolling and structural health assessment of critical transmission lines may be strengthened, particularly in areas vulnerable to extreme weather conditions.***
- ***For existing transmission systems and projects where ERS provision was not included at the planning stage, TCC suggested that the concerned transmission licensees and RE Developers may explore joint/pooled procurement and sharing of ERS facilities among geographically proximate transmission corridors and RE projects.***

SRPC noted the above

C. Non-compliance of IEGC-2023 Regulation 40 on Periodic Testing of Non-synchronous Generators (Solar/Wind)

a) As per Regulation 40 of the IEGC, 2023, generating entities are required to undertake periodic performance testing, submit annual testing plans to the concerned RPC, and furnish test reports to the designated agencies. The prescribed tests for non-synchronous generators (Solar/Wind) include Real & Reactive Power Capability, Power Plant Controller (PPC) Function, Frequency Response, Active Power Set Point Change, and Reactive Power Set Point Change tests.

b) It is observed that a large number of generating stations are yet to complete the mandated testing, despite the matter being regularly highlighted in OCC and TCC/SRPC meetings and RE Sub Committee meetings.

TCC Deliberations

c) MS SRPC noted that periodic testing of non-synchronous generating units is required as per Regulation 40, including the requisite testing once in five years.

d) It was suggested that similar periodic testing requirements may be taken up at state level also in the interest of unit performance and grid security. TCC advised the concerned generating stations to comply with the provisions of the IEGC, 2023 and complete the mandated testing in a timely manner.

SRPC noted the above

D. Importance of PMU Data Availability from VRE Generating Stations

a) NLDC, vide letter dated 04.06.2026(**Annexure-8A**), has emphasized the critical importance of ensuring continuous availability of Phasor Measurement Unit (PMU) data from Variable Renewable Energy (VRE) generating stations for reliable real-time grid operation. RE Developers have been advised to ensure 100% PMU data availability to SLDCs, RLDCs, and NLDC.

TCC Deliberations

b) MS, SRPC highlighted the importance of PMU data for real-time grid observability, event analysis and post-event analysis, particularly for generating stations connected to the grid. The following points were deliberated:

(i) SCADA data alone may not be adequate for verifying certain technical and regulatory requirements, and PMU data is essential for assessing the dynamic response of generating units.

(ii) PMU measurements are particularly important for verifying LVRT/HVRT compliance and identifying generating units that disconnect during voltage disturbances instead of meeting the prescribed ride-through requirements.

(iii) Concern was expressed that certain generating units may be disconnecting from the grid during high- or low-voltage conditions, and that PMU data is necessary to establish the actual performance of such units.

(iv) It was informed that NLDC, vide communication dated 04.06.2026 addressed to MoP/MNRE, had highlighted the importance of PMU availability and the need for PMU data to be made available to the respective control centres, in addition to SCADA data.

(v) The existing provisions relating to PMU installation and availability under the applicable Connectivity Regulations were noted, and the need for effective enforcement of the same was emphasised.

(vi) STUs/SLDCs were advised to ensure PMU availability and compliance with the applicable regulatory requirements by the concerned generating entities and to take appropriate action wherever required.

c) TANTRANSCO informed that the existing regulatory framework does not provide for penal provisions against Variable Renewable Energy (VRE) generating stations for non-compliance with the applicable regulatory requirements.

d) It was felt that appropriate regulatory mechanisms are required to ensure compliance by VRE generating stations with the applicable CEA Regulations and grid connectivity requirements**.**

e) It was noted that cases of non-compliance may be taken up before the SERC for appropriate regulatory intervention and enforcement.

TCC Recommendations

- ***SLDCs/STUs shall ensure availability and sharing of PMU data from RE Pooling Stations with the respective control centres, in addition to SCADA to facilitate grid observability, event analysis and verification of regulatory requirements, including LVRT/HVRT compliance, and take up cases of non-compliance with the respective State Regulatory Commissions for appropriate regulatory intervention under the applicable Connectivity Regulations.***

SRPC noted the above

E. Telemetry of Good quality weather data from Renewable Energy Plants

a) NLDC vide letter dated 04.06.2026 **(Annexure-8B)**, addressed to Additional Secretary (Min of NRE), has highlighted the importance of availability of accurate and reliable weather data from Renewable Energy (RE) plants for improving forecasting accuracy, scheduling, and secure grid operation. NLDC has requested MNRE to advise RE developers to undertake the following:

i) Rectifying issues to improve the quality of weather data telemetered SLDCs/RLDCs/NLDC.

ii) Regular maintenance and calibration of weather measuring instruments.

iii) Establishment of monitoring mechanisms at RE developer end to periodically review the healthiness of the telemetry system and the quality of the data.

iv) Sharing of weather data from RE plants connected at intra state level either directly to NCMRWF through Secure File Transfer Protocol (SFTP) or through SLDCs/RLDC/NLDC.

v) Installation of Automatic Weather Station (AWS) in new RE plants of capacity greater than 10 MW.

TCC Deliberations

b) MS, SRPC highlighted the importance of real-time weather data as a key input for renewable energy forecasting, noting that the accuracy of forecasting directly influences generation schedules and consequently other system schedules. The following points were deliberated:

- The regulatory directions of CEA/MoP regarding availability and sharing of real-time weather data were noted.

- The need for a clearly defined mechanism for transfer of weather data to SLDCs and subsequently to the concerned regional/national forecasting and scheduling centres was highlighted.
- The importance of installation and availability of Automatic Weather Stations (AWS) in accordance with the guidelines issued by CEA was emphasised.
- ***States were advised to take up the matter at the appropriate level to ensure compliance with the requirements relating to real-time weather data and AWS installation.***

SRPC noted the above

F. Requirement of First Time Charging (FTC) procedure at Intra-State level

SRLDC vide mail dated 09.07.2026 had furnished the agenda on FTC requirements (*Refer Annexure -5A*)

a. Due to high renewable energy penetration in Southern Region, it is important that existing and upcoming Renewable Energy Generators need to provide Grid Support services and compliance to CEA Technical Standards for Connectivity notified on 6th Feb 2019 and compliance to these regulations (Amendments) by RE generators is to be monitored at regional and state level. During First time charging of RE elements, all regulatory and technical compliance pertaining to IEGC-2023 and CEA standards for connectivity to grid need to be ensured. This is necessary to ensure grid support services from RE generators and to avoid any undesired operational challenges after integration with the grid.

b. As per IEGC 2023 clause 8 (4), SLDC shall prepare procedure for first time energization of new or modified power system elements to intra-State transmission system. In the absence of such procedure of SLDC, the NLDC procedure shall apply for the elements of 220 kV and above (132 kV and above in case of North-eastern region). Each SLDC, is requested to inform regarding the procedure for first time energization of new or modified power system elements to intra-State transmission system.

c. During the 48th SRPC and 55th SRPC meetings held in October 2023 and July 2025, respectively, SRLDC presented the First Time Energization & Integration (FTE&I) / First Time Charging (FTC) procedure being followed at the inter-state level for new or modified power system elements. Further, FTE&I workshops were conducted for all Southern States in association with respective state SLDC, for Tamil Nadu in November 2025, Telangana in December 2025, Kerala in January 2026, Andhra Pradesh in February 2026 and Karnataka in March 2026.

d. The Karnataka Electricity Regulatory Commission (KERC) approved the implementation of the FTC procedure in the State of Karnataka on 15th June 2026.

e. Under the GEC-III proposals, Telangana, Karnataka, and Andhra Pradesh have planned significant additions of RE, PSP, and BESS. Accordingly, adequate First Time Charging (FTC) procedures should be in place to facilitate smooth integration of renewable energy into the grid.

TCC Deliberations

f. MS, SRPC informed the forum that the First Time Charging (FTC) procedures are being duly followed at the ISTS level by CTUIL and Grid-India. He suggested all the Southern Region States/UTs to establish and strictly follow FTC procedures at the State network level.

g. SRLDC mentioned that Karnataka state has implemented its own FTC procedure and advised all the states to implement their own FTC.

h. Forum advised all the Southern Region States/UTs to adopt and follow the NLDC/SRLDC First Time Charging (FTC) procedure as an interim measure until their respective State-level FTC procedures are developed and implemented.

i. Chairman, TCC also advised all the Southern Region States/UTs to strictly adhere to the prescribed First Time Charging (FTC) procedures at the State network level.

TCC Recommendations

- ***In view of the significant addition of RE, PSP and BESS capacity in the Southern Region and the need to ensure compliance with IEGC-2023 and CEA Connectivity Standards before grid integration, all Southern Region States/UTs shall develop and implement a State-level First Time Charging (FTC) procedure on priority and strictly follow the same for first energisation of new/modified intra-State elements; until such procedure is established, the NLDC/SRLDC FTC procedure shall be followed as an interim measure to ensure safe, secure and reliable integration of new generating and transmission assets into the grid.***

SRPC noted the above

9. FOLLOW UP POINTS

a) Availing of regional spare 315 MVA ICT for Kayathar 400 kV Substation

a) 240th OCC (10.07.2026)

TANTRANSCO: Regional spare would be taken from Hyderabad within 2-3 months.

PGCIL: MoU to be signed

- ***TANTRANSCO/PGCIL may update***

55th TCC deliberations

b) TANTRANSCO stated that the transportation charges for the spare ICT from PGCIL, Hyderabad to the 400 kV Kayathar Substation have been approved by Headquarters. Retendering for the transportation, erection, and commissioning works is currently in progress. The ICT is expected to be dispatched from Hyderabad by mid-August 2026.

c) SR-I, POWERGRID informed that the MoU furnished by POWERGRID to TANTRANSCO is yet to be signed by both parties.

SRPC noted the above

b) Utilisation of Yelahanka Gas Plant (YCCPP) in Synchronous Condenser mode for reactive support

54th TCC

a) KPCL: informed that the OEM's preliminary assessment indicates that the existing plant configuration does not permit mechanical separation of the gas turbine from the generator shaft, and conversion to synchronous condenser mode would require substantial investment. The matter has been referred to the higher management, and the outcome will be communicated to the forum.

b) In view of the recurring low-voltage conditions in the Bengaluru load centre, Karnataka SLDC/KPCL may update the forum on the status of the feasibility assessment and the proposed long-term roadmap for strengthening dynamic reactive power support.

- ***KPCL/KAR SLDC may update***

55th TCC deliberations

c) KPCL stated that, pursuant to the recommendation of the 57th SRPC Meeting, the matter had been taken up with the OEM (BHEL). The OEM verbally informed that arranging the coupling and bringing the unit to full speed without gas support is not feasible. The OEM also indicated that operation of the unit in synchronous condenser mode is not feasible. KPCL further informed that the official communication from the OEM is awaited and will be shared with the Committee upon receipt.

d) SRPC secretariat /SRLDC opined that operation of the unit in synchronous condenser mode would be beneficial to KPTCL/SLDC for reactive power management in the Bengaluru area.

TCC Conclusion

- ***Special meeting to be convened by KPCL involving the OEM(BHEL), KPCL, KPTCL, SRPC secretariat and SRLDC to facilitate detailed discussions on the technical aspects and limitations associated regarding utilisation of Yelahanka Gas Plant (YCCPP) in Synchronous Condenser mode for reactive support.***

SRPC noted the above

c) Capacity (MW) certification of all HVDC system by Grid-India

The matter was deliberated in 57th SRPC/54th TCC/ 66th Meeting of Commercial Sub Committee meeting held on 08.05.2026, SRLDC informed that NLDC had reiterated that the reverse power flow capability of all existing inter-regional HVDC systems had been tabulated, in Petition No. 685/TT/2020 (on remand to CERC) dated 30.10.2023.

SR Constituents once again requested that the matter be taken up with NLDC for certification of the HVDC transmission system as per Sharing Regulation 3rd Amendment

TCC Deliberations

a) ED, SRLDC informed that, as per the understanding of SRLDC/NLDC, the certification of reverse power flow capacity by NLDC, GRID-INDIA would be applicable to future HVDC transmission systems**.** In respect of existing HVDC systems, the transmission capacity and tariff had already been approved by the Commission under the applicable tariff/regulatory framework based on the design capacity of the respective HVDC systems. Accordingly, separate certification of the capacity of existing HVDC systems may not be required under the existing framework. However, in case of any clarification regarding the applicability of the certification requirement to existing HVDC systems, the concerned entity may approach CERC/MoP for appropriate guidance.

b) TNPDCL stated that, as per the provisions of the CERC (Sharing of Inter-State Transmission Charges and Losses) (Third Amendment) Regulations, 2023**,** the reverse power flow capacity of HVDC systems is required to be certified by NLDC, GRID-INDIA based on the actual power flow. TNPDCL therefore requested that the applicability of the said provision to existing HVDC systems may be clarified and a timeline for completion of the certification process, if applicable, may be indicated.

c) ED, SRLDC reiterated that the transmission capacity of the existing HVDC systems, for the purpose of the prevailing tariff framework, had already been approved by the Commission based on their design/approved capacity.

d) TNPDCL enquired whether all the commissioned HVDC systems had achieved their full rated capacity.

e) ED, SRLDC clarified that the capacity considered under the prevailing tariff framework is based on the design/approved capacity of the respective HVDC systems, and actual power transfer at any particular time would depend upon system operating conditions, availability of the HVDC system and other operational constraints.

f) TNPDCL submitted that the Raigarh–Pugalur–Thrissur HVDC system had been tested under actual reverse power-flow conditions and that its reverse power transfer capability had been established at 50%. Accordingly, 50% of the transmission charges of the HVDC system are presently being considered under the National Component**.** In this regard, referring to the Bishwanath Chariali–Agra HVDC link, TNPDCL requested that the actual reverse power transfer capability of all existing HVDC links be assessed and certified by NLDC/GRID-INDIA, based on actual power-flow conditions, so as to ensure compliance with the applicable regulatory provisions. It was particularly highlighted that, where the actual reverse power flow capability is less than 30%, the corresponding HVDC link would not qualify for consideration under the National Component.

g) ED, SRLDC stated that the Commission has already determined the treatment of the existing HVDC systems under the prevailing regulatory framework and, therefore, the existing classification cannot be modified at this stage. He also added that issues relating to the design capacity of HVDC systems may be taken up with CTUIL/PGCIL.

h) MS, SRPC clarified that the States were not seeking certification based on the designed capacity of the HVDC systems, but were requesting certification of the actual reverse power flow capability demonstrated by the systems. The following provisions have been stipulated under the *Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) (Third Amendment) Regulations, 2023*:

(a) Regional Component of HVDC (RC-HVDC) comprising of 70% of Yearly Transmission Charges of HVDC transmission systems planned to supply power to the concerned region, except HVDC transmission systems covered under sub clauses (a), (b) and (c) of Clause (3) of Regulation 5: Provided that where an inter-regional HVDC transmission system planned to supply power to a particular region is operated to carry power in the reverse direction due to system requirements, the percentage of Yearly Transmission Charges of such transmission systems to be considered in the Regional component and the National component shall be calculated as follows:

HVDCr (in %) = (MW capacity of power flow in the reverse direction / MW capacity of power flow in the forward direction) X100

Where, HVDCr (in %) is more than 30%, the Yearly Transmission Charges corresponding to HVDCr shall be considered in the National component and the balance in the regional component.

Where, HVDCr (in %) is equal to or less than 30%, 30% of Yearly Transmission Charges shall be considered in the National component and 70% in the regional component:

Provided further that the MW capacity of power flow in reverse direction shall be certified by NLDC by way of actual power flow equal to such capacity;"

i) ED, SRLDC informed that CTUIL had already furnished the reverse power transfer capability of all HVDC links in CERC Petition No. 685/TT/2020 (on remand)**.**

j) Chairperson, TCC suggested that the matter may be taken up with NLDC/Grid-India and seek clarification on the issues raised by TNPDCL. The non-participation of NLDC in the meeting was noted. Since the agenda item involved issues requiring clarification and response from NLDC, the forum observed that a representative from NLDC should have attended the meeting.

k) MS, SRPC informed the forum that the matter had already been taken up with NLDC. NLDC had clarified that the issue had been addressed in CERC Petition

No. 685/TT/2020 (on remand) and that no further certification was required in the matter. However, TNPDCL reiterated its request that the actual reverse power flow/reverse power transfer capability of all existing HVDC links be assessed and certified in accordance with the applicable provisions of the CERC Sharing Regulations.

l) TNPDCL reiterated that matter could not be resolved administratively, the stakeholders may approach the Commission through an appropriate Petition for necessary clarification. Alternatively, the matter may also be taken up by the Chairperson, SRPC with the Chairperson, CERC for appropriate clarification.

m) Director, APTRANSCO sought clarification regarding the reason for non-furnishing of certification for all existing HVDC links. He reiterated that the request of the States was limited to obtaining certification based on the actual reverse power flow/reverse power transfer capability, which, as submitted by the States, is a requirement under the Third Amendment to the CERC Sharing Regulations**.**

n) ED, SRLDC stated that, in respect of existing HVDC links for which the tariff has already been determined**,** obtaining fresh certification from NLDC would not have any consequential relevance to the present tariff determination.

o) APPCC expressed concern that stakeholders should not be required to approach the Commission for clarification on a matter that could be addressed through the applicable regulatory provisions and the relevant data available with NLDC/GRID-INDIA. APPCC therefore requested that actual power-flow data of all existing HVDC links, along with the corresponding reverse power transfer capability/certification, may be furnished by NLDC/GRID-INDIA and placed in the public domain for information and verification by all stakeholders.

p) MS, SRPC pointed out that the reverse power transfer capability of an HVDC system is dynamic in nature and may vary over time depending upon changes in the transmission network configuration and prevailing system conditions. He therefore stated that certification based on the prevailing actual reverse power flow/reverse power transfer capability would also be necessary for existing HVDC systems, as the CERC Regulations do not stipulate that such certification is applicable only to upcoming HVDC projects.

q) ED, SRLDC stated that CTUIL/PGCIL would first need to communicate the revised designed capacity of the HVDC system to SRLDC/NLDC and based on which the actual power flow/reverse power transfer capability would be examined and the certification would be updated, if required.

r) TGTRANSCO informed that PGCIL has already certified the design capacities in both the forward and reverse directions for all HVDC links.

s) PGCIL clarified that, for the Raigarh–Pugalur HVDC system, the designed power transfer capacity is 6000 MW in the forward direction and 3000 MW in the reverse direction, as per the approved design parameters. With regard to the designed reverse power transfer capability of the other existing HVDC links,

PGCIL stated that the matter would be examined in consultation with its Engineering team, and the requisite details/response would be furnished subsequently.

TCC Conclusion

- ***The matter be taken up by the Chairperson, SRPC with the Chairperson, CERC for appropriate clarification and necessary directions regarding the requirement and methodology for certification of the reverse power transfer capability of existing HVDC systems based on actual reverse power flow, in accordance with the applicable provisions of the CERC Sharing Regulations.***

SRPC Deliberations

t) ED, SRLDC stated that the Raigarh–Pugalur HVDC system is the only inter-regional HVDC link requiring such certification, as Back-to-Back HVDC systems, the Agra–BNC HVDC system, and the Mundra–Mohindergarh HVDC system is exempted under Clause (3) of Regulation 5 of the CERC Sharing Regulations. He further stated that Grid-India had already furnished the actual reverse power flow data for the Raigarh–Pugalur HVDC system to establish its reverse power flow capability. Based on the said certification, the Commission, vide Order dated 30.10.2023 in Petition No. 685/TT/2020 (on remand), determined that 50% of the transmission charges of the Raigarh–Pugalur HVDC system shall be included under the National Component. The relevant extract of the Order is reproduced below:

> *"138. ... As per the above, with 50% of reverse capacity of Raigarh-Pugalur HVDC, 50% of the charges shall be included in the National Component, and if the reverse capacity increase to 100%, then 100% of charges shall be included in the National Component, subject to certification from NLDC."*

SRLDC-Grid India presented the pole-wise and aggregated power flow data of HVDC Raigarh-Pugalur for the duration from 1st June 2025 to 30th June 2026.

Month & Year	Maximum Power flow in reverse direction
June, 2025	1500 MW
July, 2025	2700 MW
August, 2025	**3000 MW**
September, 2025	**3000 MW**
October, 2025	**3000 MW**
November, 2025 to April, 2026	No reverse power flow
May, 2026	**3000 MW**
June, 2026	1700 MW

u) With regard to the Talcher–Kolar HVDC transmission system, it was informed that a reverse power flow capability of 1900 MW has been recorded in the CERC Order dated 30.10.2023 in Petition No. 685/TT/2020 (on remand). It was further

stated that the said Order contains the following observations regarding the testing of the reverse power flow capability:

"Testing of reverse power under load has not been carried out, probably due to missing consumption at Talcher at that time. Matter has been taken up with OEM and response is awaited."

It was further informed that, due to network constraints on the Eastern Region (generation complex) side, the reverse power flow capability of the Talcher–Kolar HVDC system has not yet been tested. In this regard, reference was made to Grid-India's communication dated 10.06.2025 addressed to CEA and CTUIL on the **"Report on Requirement and Usefulness of HVDC Talcher–Kolar Bipole"**, wherein the following was highlighted:

"At present, HVDC cannot be operated in reverse direction (SR to ER) during high SR export period (high RE generation and low demand in SR). The limitation in HVDC reversal is mainly due to constrains in the AC network on ER side. Necessary system strengthening of the AC network on both ends and upgradation of HVDC, if required, shall be carried out to enable operation of the HVDC in both directions as per system conditions."

v) The details furnished by CTUIL in Petition No. 685/TT/2020 regarding the reverse power flow capability of all existing inter-regional HVDC systems were presented again in a tabulated form.

INTER-REGIONAL BI-POLE HVDC TRANSMISSION SYSTEMS IN INDIA				
Sl. No.	Name of HVDC Project	Capacity (MW)		Remarks
		Forward Direction	Reverse Direction	
1.	± 500 kV, 2000 MW Talcher-Kolar	2000 2500 (overload capacity for 10 hours in 24 hours)	1900	Testing of reverse power under load has not been carried out, probably due to missing consumption at Talcher at that time. Matter has been taken up with OEM and response is awaited.
2.	± 500 kV, 2500 MW Ballia-Bhiwadi	2500	2375	
3.	±800 kV, 6000 MW North East-Agra Multi Terminal (Biswanath Chariali–Alipurdwar-Agra)	6000	1500/1000	Reverse power facility available in Bipole-I (i.e. from Agra to Biswanath Chariali) only. 1500 MW for Bipole operation & 1000 MW for Monopolar operation.
4.	± 800 kV, 6000 MW Champa-Kurukshetra	6000	0	Reverse power has not been envisaged under Champa-Kurukshetra HVDC Project.
5.	± 800 kV, 6000 MW Raigarh-Pugalur	6000	3000	

w) SR States requested NLDC to issue certification for the reverse power flow based on actual flow of the following HVDC systems in accordance with the provisions of the CERC Sharing Regulations.

x) ED, SRLDC stated that the above could be recorded in the Minutes of the meeting and may be treated as the certification.

y) TNPDCL reiterated that, in accordance with the provisions of the CERC (Sharing of Inter-State Transmission Charges and Losses) (Third Amendment) Regulations, 2023, certification of the reverse power flow capability of HVDC systems should be based on the actual power flow rather than the designed capacity. TNPDCL further requested Grid-India to furnish the actual forward and reverse power flow achieved by all existing inter-regional HVDC systems and to issue certification based on the actual power flow.

z) ED, SRLDC informed that the actual forward and reverse power-flow data of the Raigarh–Pugalur HVDC system had already been presented and stated that the values so presented could be treated as certified.

aa) TNPDCL also observed that the Mundra–Mohindergarh HVDC system was not included in the details presented by SRLDC. SRLDC clarified that, as per the Third Amendment to the CERC Sharing Regulations, the certification requirement is applicable only to inter-regional HVDC systems.

bb) After deliberations, ED, SRLDC suggested that the information would be furnished in the Format is given below:

Sl.No	Name of HVDC Project	Capacity as defined by Transmission Licensee (MW)		Maximum Power in the HVDC link (MW)		Remarks
		Forward Direction	Reverse Direction	Forward Direction	Reverse Direction	
1						

cc) TNPDCL requested some time for internal deliberations and stated that its views would be communicated thereafter. Chairperson, SRPC and CMD, TNPDCL agreed that the matter may first be examined internally.

d) Methanol Firing in Kayamkulam GT

Methanol firing was proposed by NTPC-Kayamkulam station, which is otherwise a naphtha-based plant. NTPC Kayamkulam had informed that the proposed activity forms part of the Ministry of Power's Energy Transition initiative**.**

In the 54th TCC meeting the NTPC had informed that HSD firing was planned in the 1st week of April 2026 and Methanol firing was planned in the 2nd week of April 2026.

- ***NTPC/KSEBL may furnish update***

TCC Deliberations

NTPC informed the forum that the methanol firing at NTPC Kayamkulam Generating Station, which was originally scheduled to commence in the second week of April 2026, was deferred due to issues associated with the availability/supply of methanol. NTPC further informed that the supply-related issues were resolved and methanol firing at the generating station is now scheduled to commence in September 2026.

e) Raigarh - Pugalur HVDC Transmission System Export Capacity

In 66th Commercial Sub-Committee meeting held on 08.05.2026; CTUIL stated that CEA would place the Committee's report on the upgradation of the HVDC Raigarh–Pugalur link in the NCT meeting. CTUIL further informed that in January 2026, CEA had sought the cost estimates for shifting the WR generating system. CTUIL was preparing the same and would submit the details to CEA. Subsequently the strengthening at Karur was discussed in 42nd NCT, wherein NCT advised CTUIL to study the scheme holistically matching with Resource adequacy Plan. Further NCT advised CTUIL to bring the scheme clearly indicating that the scheme is proposed for system strengthening or evacuation scheme.

Further, it may be noted that earlier SRPC had approved for 6000 MW of export capacity and the associated upgradation of the HVDC stations at Raigarh and Pugalur.

TCC Deliberations

a) MS, SRPC appraised the forum that the Transmission System Strengthening at Karur Pooling Station for integration of Renewable Energy (RE) Generation Capacity was approved in the 42nd NCT Meeting held on 07.07.2026 for implementation through the TBCB route.

b) CTUIL informed that the Committee's report had been deliberated in the 40th NCT Meeting, wherein the transmission system requirements for reverse power flow operation in both the Southern Region (SR) and Western Region (WR) were highlighted. The required transmission system strengthening in the Western Region is already under implementation with a SCOD of June 2029, while the AC system strengthening at Karur in the Southern Region was approved in the 42nd NCT Meeting with an implementation schedule of 30 months. It was further added that another requirement in the Western Region involves the shifting of existing generating stations from Raigarh (Kotra) Substation to Raigarh (Kotra)-II Substation. In this regard, multiple meetings have been held with the generators under the chairmanship of CEA, and the modalities for shifting the generating stations are at an advanced stage of finalization. Once the modalities are finalized, the proposal will be placed before the NCT for approval.

It was concluded that the proposals relating to the HVDC upgradation and the shifting of generating stations in WR are pending approval in the NCT forum.

c) PGCIL informed that M/s Hitachi has submitted its report to the Corporate Centre. Based on the study, several modifications to the existing HVDC system have been proposed to enhance the reverse power flow capability to 6000 MW. It was further informed that the proposed modifications involve the installation of additional equipment and the reportpresently under examination at the Corporate Centre. PGCIL stated that the matter is under detailed study and that the final report would be furnished after completion of the review.

d) Forum emphasized that the upgradation works may be taken up, as the proposal had already been approved by the forum in an earlier meeting with an estimated cost of ₹1000 crore.

e) Chairperson, TCC enquired about the status of the Committee report. It was clarified that the report had been deliberated in the NCT forum; however, it had not yet been shared with all the stakeholders. Chairperson, TCC stated that a timeline be indicated for sharing the report along with the other information sought by TNPDCL.

f) Chairperson, TCC expressed concern that the matter had been pending for a considerable period and emphasized that a definite timeline for its resolution should be communicated.

TCC Conclusion

- ***The matter would be taken with the Chairperson, NCT by Chairperson, SRPC to expedite the approval process.***

SRPC Deliberations

g) MS SRPC apprised the forum that during the TCC deliberations, it was noted that enhancement of the Raigarh–Pugalur HVDC reverse power-flow capability to 6000 MW requires associated HVDC upgradation and AC transmission-system strengthening, including the shifting of generating stations in the Western Region. The HVDC upgradation and shifting proposals are presently at different stages of examination/approval in the NCT, and the TCC had expressed concern over the prolonged pendency.

h) Chairperson, SRPC accorded the recommendation of the TCC forum and stated that Chairperson, SRPC would take up the matter with Chairperson, NCT for expediting the approval process.

SRPC Conclusion

- ✓ ***Chairperson, SRPC to take up the matter with Chairperson, NCT for expediting approval of the pending proposals relating to Raigarh–Pugalur HVDC upgradation for enhancement of reverse power-flow capability to 6000 MW and the associated shifting of generating stations in the Western Region.***

f) Extension of Annual Maintenance and Support of Power System Analysis Software (PSS/E)

TGTRANSCO and SRLDC informed that the AMC for existing dongles had already been extended, while APTRANSCO was in the process of extending the same.

KPTCL, TANTRANSCO, KSEBL and SRPC Secretariat opined that joint procurement of the AMC may be explored, as it would enable better cost optimisation through collective negotiation, particularly in the absence of PSDF funding support.

SRPC advised CTUIL to examine both options, including the feasibility of PSDF funding and to place a concrete proposal with clear timelines before the next TCC/SRPC meeting.

TCC deliberations

a) CTUIL informed that based on the deliberations in the previous SRPC meeting, they have submitted an application for license, general maintenance and support of power system PSSE for five years on 30th April 2026 for PSDF funding.

b) They informed that this application was also deliberated in the 98th Techno Economic Sub-group meeting held on 22nd July 2026. During the meeting certain clarification were sought from CTUIL and CTUIL is in the process of addressing these clarifications.

SRPC noted the above

g) Implementation status of 1×125 MVAR Bus Reactor at Yeramarus TPS

54th TCC/57th SRPC

In view of the persistent high voltage conditions and the continued dependency on generating units for reactive power control, KPCL is required to ensure time-bound implementation of the 1×125 MVAr Bus Reactor at Yeramarus by expeditiously completing the ongoing tendering process.

TCC Deliberations

KPCL informed that, subsequent to the deliberations in the 57th SRPC/54th TCC Meeting, the matter was apprised to the higher management through EE, SLDC and CE (Design). Accordingly, budgetary approval of approximately ₹54 crore was accorded for installation of the 1×125 MVAR Bus Reactor at Yeramarus TPS, along with the associated bay equipment, including breakers and isolators. The proposal is required to be approved by the Technical Management Committee and subsequently by the Board. In this regard, the Head of Office (HOO) has directed negotiations with BHEL and other prospective bidders for cost optimisation, following which the proposal will be placed before the Technical Management Committee and the Board for approval and subsequent initiation of the tendering process.

TCC Conclusion

- ***KPCL shall expedite the ongoing process to finalize the project cost, subsequent initiation of tendering process and ensure timely implementation of the Bus Reactor.***

SRPC noted the above

h) Assessment of Online Dynamic Line rating-pilot scheme

- Shifting of the DLR pilot project on the 400 kV Tuticorin PS–Madurai D/C line. In the 239th OCC meeting, PGCIL SR-II informed that the concerned agency had been requested to submit its feasibility report and commercial offer. The details are awaited.
- PGCIL had initiated action for shifting and implementation of the Dynamic Line Rating (DLR) pilot project on the 400 kV Pavagada–Gooty Line-I. PGCIL informed that the Siemens make DLR sensors would be installed as a pilot project without any financial implication, and that the 400 kV Pavagada–Gooty D/C line (Twin Moose conductor) had been identified as the most suitable transmission corridor based on CEA deliberations and system studies, considering its sustained high loading during peak solar generation and its potential to demonstrate enhanced transmission capacity and renewable energy evacuation benefits through DLR implementation. Subsequently, SR II PGCIL vide email dtd 30.06.2026 informed that 14 Nos of DLR sensors were successfully commissioned, by availing S/D from 25.06.2026 to 27.06.2026.

TCC Deliberations

a) **Pavagada-Gooty**: PGCIL (SR-I) informed that, for the Pavagada–Gooty transmission line, 14 new ODLR sensors have been installed through Siemens. The dashboard has been developed and demonstrated to SRPC, SRLDC and the concerned PGCIL teams. It was informed that the loading data would be shared after sufficient operational observations.

b) **Tuticorin-Madurai**:

i. With regard to the Tuticorin–Madurai transmission line, PGCIL (SR-I) informed that the pilot project involving installation of 18 ODLR sensors had already been implemented by PGCIL at a cost of approximately ₹8 crore. However, TATA, the OEM, has now quoted ₹4.6 crore (excluding GST), vide its offer dated 23.07.2026, solely for shifting (18 sensors) and re-installation of the sensors from Tuticorin–Madurai to Pavagada–Gooty. Considering the substantial cost involved for shifting alone, PGCIL expressed its inability to bear the expenditure at its own cost and requested the SRPC Forum to deliberate on the way forward.

ii. On a query MS SRPC, PGCIL SR II clarified that the original pilot was undertaken when only a limited number of vendors/OEMs were available and the work was awarded through open bid.

iii. Since the quoted cost for shifting appeared to be on the higher side it was decided that the matter would be examined by the Sub-Committees of SRPC, and its recommendations would subsequently be placed before the TCC/SRPC for further deliberation.

SRPC noted the above

i) Implementation of Automatic Meter Reading (AMR) in Southern Region

The scheme for "*Supply & Installation of AMR-compatible ISTS Interface Energy Meters along with AMR (Automatic Meter Reading) System under the project '5-*

minute Interface Energy Meter along with AMR system' for all five regions on a PAN-India basis" under RTM mode had been approved in the 40th NCT meeting. CTUIL informed that OM was issued to PGCIL to take up the work.

TCC Deliberations

a) MS, SRPC informed that the AMR project is essential from the grid operation perspective and emphasized the need for its timely implementation. PGCIL informed that the tendering process is under progress and the NIT is expected to be issued by August 2026, with an implementation period of 18 months.

b) PGCIL highlighted the requirement for an Annual Maintenance Contract (AMC) with the agency executing the work and requested the support of the SR constituents for recovery of the AMC cost, which is comparatively higher than the prevailing CERC norms. It was noted that the matter had already been deliberated earlier and that the SR constituents had provided the necessary support/comfort for recovery of the additional AMC cost.

SRPC Deliberations

c) MS, SRPC stated that successful implementation of the project would require extensive coordination and cooperation from all utilities. He further stated that, although the AMC cost is significantly higher, the SR constituents have already provided the necessary comfort for recovery of the additional cost. He emphasized that the project is essential from the grid operation perspective and, therefore, timely implementation is of paramount importance.

SRPC Conclusion

✓ ***All SR constituents to extend necessary coordination, cooperation and support to PGCIL for timely implementation of the AMR project, including necessary support regarding recovery of the AMC cost.***

10.ISTS & INTRA-REGIONAL TRANSMISSION CONSTRAINTS

a. The ISTS and Intra-Regional Transmission constraints have been under discussion in the SRPC & TCC meetings and being followed up regularly in Sub Committee Meetings. As per the mandate provided by SRPC, SRLDC has been tasked with identifying and reporting the constraints.

b. SR Import Constraints

Element	Details / Constraint	Status / Update	Responsible Agency /Latest update	55th TCC Deliberations
765 kV Angul – Srikakulam D/C line	Enhances import from ER to SR	Special Purpose Vehicle (SPV) transfer had been completed in (February 2026)	**54th TCC:** The tentative Date of Commissioning (COD) would be August 2028.	**Latest status** (CEA June Month Report): August 2028 & Engg under progress **CTUIL update**: SCoD 03.08.2028

765 kV Bidar – Parli D/C line	Strengthens interregional link	SPV transfer had been completed in October 2025	**57th SRPC**: Scheduled CoD: 17.10.2027, with implementation schedule of 24 months	**Latest status** (CEA Monthly Report): October 2027 & Engg under progress **CTUIL update**: SCoD 17.10.2027
Gazuwaka East Bus (Low Voltage)	Voltage issues at AP–ER interface	Jeypore–Jagdalpur 400 kV D/C line commissioned on 10.06.2025; Voltage improved from 385–390 kV to 390–395 kV; Power order on B2B may increase by 50–100 MW	**54th TCC:** CTUIL had informed that their Eastern Region team was taking up the issue with ERLDC and OPTCL to address the voltage concern. The Jeypore–Therubali–Gopalpur 400 kV D/C line was being implemented by OPTCL with a target schedule of 2028–29, and expressed confidence that the voltage profile would improve upon commissioning of the said line. In response to the 220 kV network constraints highlighted by SRLDC, CTUIL had informed that the matter would be taken up in the forthcoming Joint Study Meeting of the Eastern Region.	• CTUIL had informed that the constraints in 220kV Jeypore system are expected to be addressed with the commissioning of Jeypore – Therubali – Gopalpur 400kV D/c line which is under implementation by OPTCL and expected by 2028-29. 220kV strengthening beyond Jeypore may be identified by OPTCL, if required. • Regarding the 220 kV network constraints highlighted by SRLDC, matter is being taken up in the forthcoming Joint Study Meeting of the Eastern Region scheduled on 24.07.2026

c. SR Export Constraints

Element	Details / Constraint	Status / Update	Deliberation Highlights	Responsible Agency
765 kV Kudgi – Pune D/C	Remedial line for export congestion	Being tracked under PRAGATI portal;	**54th TCC:** CTUIL informed that as per the latest report submitted by TSP, the line was expected to be commissioned by June 2026. **55th TCC:** Latest status (CEA June Month Report): Anticipated Target- October 2026. (Original CoD: July 2024)	CTUIL / ATL
400kV Kudgi(PG) – Kolhapur (PG) D/C				
TCC Update: SRLDC informed that, due to the non-commissioning of the Kudgi–Pune 765 kV D/C line, a major portion of the power from North Karnataka is presently being evacuated through the Kudgi–Kolhapur D/C corridor, resulting in increased loading on the corridor. Further, ISTS-connected renewable energy projects at Koppal and Gadag				

	are being commissioned in phases, leading to additional loading on the Kudgi ICTs and the Kudgi–Pune corridor. To maintain grid security in North Karnataka, Load Generation Balancing (LGB) measures are presently being implemented. SRLDC further observed that additional RE generation from Koppal, Gadag and Koppal-II may further increase the loading on the Kudgi–Kolhapur (PG) D/C corridor, necessitating continued monitoring and operational measures.			
Gazuwaka HVDC (SR → ER export)	Export restricted due to 220 kV Jeypore system	System strengthening in ER required	CTUIL & SRLDC to carry out study for corridor enhancement and submit update	CTUIL / SRLDC
Raigarh–Pugalur HVDC (SR → WR export)	Limited export due to inadequate ICT capacity		**53rd TCC:** SRLDC informed that the transfer capability of the link in reverse direction was still restricted to 3000 MW due to limit of HVDC poles.	PGCIL / CTUIL
TCC Deliberations: SRLDC informed that the transfer capability in reverse direction was restricted to 600 MW in the recent times due to Intra State injection into ISTS. **SRPC Deliberaions:** SRLDC informed that, particularly during solar hours, high wind and solar generation connected at the 220 kV and 400 kV levels results in heavy loading of the intra-State transmission network. Consequently, whenever the power flow through the Raigarh–Pugalur HVDC system is attempted to be reversed, the loading on the Madurai–Pugalur 400 kV D/c line increases significantly, thereby limiting the ability to reverse the Raigarh–Pugalur HVDC link				
SRPC noted the above				

d. Transmission Constraints

Transmission constraints in the Southern Region including ICT overloading, low voltage pockets, overloading of key corridors, and reconductoring of critical lines were deliberated in the 54th TCC and 57th SRPC Meetings. All relevant stakeholders are requested to provide action plans for mitigating the transmission constraints.

i. ICT Constraints

Sl. No.	Location	Voltage Level & ICT Capacity	Owner	Observation	Remarks / Action Required
1	Raichur	765/400 kV, 2 × 1500 MVA	PGCIL	Continuous N-1 violation observed	Augmentation / third ICT was agreed by all constituents (Joint study meeting)
A. **54th TCC:** KPTCL: Regarding Mallat S/S, land is being identified. It is to be awarded under TBCB (with timeline of 24 months). **Joint study meeting (28-30th April, 2026)**: It was opined that high loading of ICTs has also been observed in the Rolling plan as well as operational feedback reports,					

hence augmentation of 3rd ICT (1x1500MVA) at 765/400kV Raichur SS was agreed by all constituents.

B. **TCC Deliberations:**

CTUIL**:** Augmentation of Raichur New 765/400kV S/s with 1x1500 MVA, 765/400kV ICT (3rd) is agreed in the Joint Study meeting of SR held on 25.06.2026. The proposal shall be deliberated in the 48th CMETS-SR scheduled on 29.07.2026.

SRPC noted the above

2	Kudgi NTPC	400/220 kV, 2 × 500 MVA	NTPC	N-1 violation during high flow periods	Additional ICT / Load re-distribution needed

A. 54th TCC:

KPTCL informed that Substations are planned as part of 20 GW RE evacuation plan of Karnataka.

400 kV Yalwal S/S is expected to be commissioned by December 2026. Existing 220 kV line to Kudgi is planned to be rearranged to 400 kV Yalwar.

400 kV Mulawad is proposed to be taken up through TBCB. Land is being identified.

SRLDC enquired whether any RE plants connected to Kudgi S/S are planned to be shifted to the upcoming S/S. KPTCL to carry out a comprehensive study and plan for RE injection into STU grid. If required, rearrangement of transmission lines may be explored to relieve overloading at ISTS points such as Kudgi.

CTUIL was requested to study flow in both directions of Kudgi ICT.

B. Joint Study Meeting (28–30th April 2026)

It was observed that the loading is primarily due to injection of intra-State RE power from the Karnataka 220 kV network into the ISTS 400 kV system during high RE generation and high demand conditions, thereby restricting the Southern Region's export capability.

SRLDC informed that the loading on the Kudgi ICTs is expected to further increase after commissioning of the Narendra–Pune 765 kV D/c line, necessitating suitable operational and network strengthening measures.

KPTCL informed that the commissioning of the Yalwar transmission system is expected to mitigate the constraints related to 220/400 kV RE injection; however, State-side drawal constraints are likely to persist.

Accordingly, KPTCL was advised to review the drawal constraints, strengthen the intra-State network, and the issue was decided to be reviewed further in subsequent meetings.

Subsequently in the Joint Study meeting held on 25.06.2026, the constraints in Kudgi ICTs and Narendra New ICTs were deliberated. The MoM is awaited.

C. TCC Deliberations

- SRLDC observed that an additional ICT at the NTPC Kudgi station is required.
- CTUIL observed that, during periods of high renewable energy (RE) generation, injection of RE power by KPTCL from the 220 kV network into the 400 kV network is resulting in loading constraints on the ICTs at NTPC Kudgi and consequently restricting the export of power from the Southern Region through

the ISTS. CTUIL further observed that augmentation by addition of another ICT at Kudgi, by itself, may not adequately address the constraint unless the pattern and quantum of RE injection from the 220 kV network into the 400 kV network are appropriately controlled/managed by KPTCL.

- KPTCL stated the following:

a) During periods of high generation from the NTPC Kudgi generating units, the injection of RE power from the State network towards the Kudgi ICTs on the ISTS side is relatively low.
b) KPTCL assured that RE injection from the STU network would be curtailed, whenever required, to avoid overloading of the NTPC Kudgi ICTs.
c) KPTCL further stated that, from the operational perspective, an additional ICT at NTPC Kudgi is required to provide adequate transformation capacity and operational flexibility.
d) MS, SRPC clarified that the concern raised by CTUIL was not merely regarding the loading of the existing ICTs at NTPC Kudgi, but also the possibility that addition of an ICT at Kudgi may facilitate increased injection of InSTS power by KPTCL from the 220 kV STU network into the 400 kV ISTS network during periods of high RE generation. Such increased injection, if not appropriately managed, could result in shifting the power-flow constraint to other elements of the ISTS network and may adversely affect the transfer capability available to, and consequently the rights of, the existing GNA holders.

   He observed that mere augmentation of transformation capacity at NTPC Kudgi may not, by itself, resolve the underlying transmission constraint, unless the associated InSTS injection from the STU network is appropriately planned and managed. KPTCL may, therefore, be required to curtail InSTS drawl/injection, whenever necessary, to ensure that the transmission capability required for existing GNA holders is safeguarded. In this regard, CTUIL may carry out the necessary system studies, considering the proposed additional ICT.
e) CTUIL further noted the following:
   - CTUIL, vide letter dated 03.07.2025 addressed to NLDC, reiterated that the 2×500 MVA, 400/220 kV ICTs at Kudgi were primarily envisaged for meeting black start and auxiliary requirements and drawal of power by the STU. CTUIL observed that the existing ISTS infrastructure at Kudgi was not planned for significant upward injection from the 220 kV STU network. Accordingly, KPTCL was advised to regulate/restrict such RE injection so as to maintain ICT loading within permissible limits, with SRLDC monitoring the same and providing suitable feedback to KPTCL.
   - ·The upgradation of the Narendra–Kolhapur 765 kV D/C line, presently charged at 400 kV, to 765 kV level was deliberated and agreed upon in the 36th CMETS-WR held during 26–28.05.2025 and subsequently in the 39th CMETS-SR held on 18.07.2025. CTUIL expected that the proposed augmentation would relieve the loading constraints at Kudgi and facilitate improved evacuation of RE through the ISTS.
f) SRLDC/KPTCL assured that, in coordination, they would initiate necessary operational measures, including curtailment of InSTS injection from the 220 kV network into the 400 kV network during periods of high RE generation,

wherever required, so as to ensure that the transmission capability allocated to existing GNA holders is safeguarded.

g) CTUIL agreed to undertake the necessary system studies for addition of an ICT at NTPC Kudgi, duly considering the network constraints and the impact on the rights of existing GNA holders.

SRPC deliberations

h) CTUIL observed that the requirement for the additional ICT at NTPC Kudgi for drawl purpose would be established based on the outcome of the detailed system study. If the study establishes that the additional ICT is required for facilitating the identified power flow through the ISTS and for meeting the system-level transmission requirement, the ICT would form part of the ISTS strengthening scheme. Since the existing ICTs at Kudgi were implemented by NTPC, CTUIL indicated that the additional ICT may also be implemented by NTPC, subject to the outcome of the study and the approved scope of the ISTS scheme.

i) MS, SRPC stated that the implementation responsibility of the additional ICT by NTPC may be deliberated during the study meeting. He also recalled that NTPC had earlier confirmed the availability of space at the Kudgi switchyard for installation of the additional ICT.

j) Regional ED, NTPC stated that the requirement for the additional ICT had arisen primarily due to the proposed system power flow through the Kudgi corridor and the associated ISTS requirement, and was not an internal requirement of NTPC. Therefore, he observed that, before incurring the associated CAPEX, there should be a clear system-level confirmation establishing the requirement for the ICT and the corresponding implementation responsibility. NTPC further stated that the existing transmission constraint was also affecting grant of permission for the full capacity of the proposed BESS, particularly during non-solar hours, and therefore the matter required further examination.

k) MS, SRPC observed that, if the system study establishes that the additional ICT is required as part of the ISTS strengthening for accommodating the proposed power flow, the same may be considered for implementation by NTPC. He further observed that the additional transformation capacity may also be useful for accommodating the requirements of the proposed BESS and upcoming storage projects at Kudgi, thereby providing flexibility for future system requirements.

l) NTPC emphasized that, since the proposed augmentation is primarily arising from a system-level ISTS requirement rather than an exclusive requirement of NTPC, a formal communication from the competent authority would be necessary to establish the requirement and implementation responsibility and to provide the basis for NTPC to take up the associated CAPEX.

m) MS, SRPC informed that ISTS strengthening schemes are generally progressed based on formal communication/approval from CTUIL, identifying the system requirement and the corresponding scope of works. He therefore requested CTUIL to clarify the proposed mechanism for taking up the additional ICT at Kudgi.

n) CTUIL stated that the requirement would be examined in the context of the ISTS schemes being planned/implemented for the concerned projects, including the expected power flow, RE/BESS requirements and the overall transmission system constraints. CTUIL further stated that, if the study establishes the requirement of the additional ICT as part of the ISTS system strengthening, the necessary formal communication/Office Memorandum would be issued to NTPC for taking up the augmentation as per the approved scope of the ISTS scheme.

SRPC Conclusion

- ✓ ***CTUIL shall carry out the necessary system studies to establish the requirement of the additional ICT at NTPC Kudgi, considering the RE, BESS and future power-flow requirements. Based on the outcome of the study and confirmation that the ICT forms part of the ISTS strengthening scheme, the implementation responsibility shall be decided and formally communicated by CTUIL to the concerned agency for taking up the augmentation.***

3	Kaiga	400/220 kV, 2 × 500 MVA	NPCIL	N-1 violation observed	Strengthening proposal to be reviewed

Discussed as separate agenda (Item No. 10)

ii. Transmission Line Constraints

Sl. No.	400kV Line	Type	Observation	Remarks
1	Madurai – Pugalur	D/C	Continuous N-1 violation during peak monsoon period	Line loading reached thermal limits in June 2025; reconductoring required

54th TCC:

CTUIL: The reconductoring of Tirunelveli – Udumalpet and Pugalur – Madurai 400kV D/c lines with HTLS conductor was agreed in 36th NCT meeting held on 30.12.2025 for implementation under RTM by POWERGRID with implementation schedule of 24 months (ScoD : February 2028).

TCC Deliberations

SR-II POWERGRID informed that the contract for the reconductoring of the Tirunelveli–Udumalpet and Pugalur–Madurai 400 kV D/c transmission lines is expected to be awarded by August 2026. The Scheduled Commercial Operation Date (SCoD) is **August 2028**.

SRPC noted the above

2	Madurai – Udumalpet	S/c	Thermal loading and N-1 violation	Immediate action for reconductoring needed

54th TCC:

CTUIL: Upgradation / Conversion of Udumalpet – Madurai 400kV S/c line to Udumalpet – Madurai 400kV (quad) D/c line was agreed in 36th NCT meeting held on 30.12.2025 for implementation under RTM by POWERGRID with implementation schedule of 30 months (ScoD: August 2028).

TCC deliberations

a) SR-II POWERGRID informed that the contract for the upgradation/conversion of the Udumalpet–Madurai 400 kV S/c line to a Udumalpet–Madurai 400 kV (quad) D/c line is expected to be awarded by October 2026. The Scheduled Commercial Operation Date (SCoD) is August 2028.

b) SR-II POWERGRID further stated that severe Right of Way (RoW) issues are being encountered along the Madurai–Udumalpet transmission line corridor, which may result in a slight deviation from the project schedule. In this regard, support from the Tamil Nadu power utilities was requested to facilitate timely execution of the project.

c) MS SRPC stated the following:
   - ❖ The optimization of shutdowns may be determined based on studies to be carried out by SRLDC. The sequencing of project activities and associated shutdowns may be planned in a manner considering the peak RE generation season and peak loading season.
   - ❖ A separate meeting involving SRPC, SRLDC, the Tamil Nadu utilities, and SR-II POWERGRID may be convened to examine and optimize the proposed shutdowns, including the duration of each shutdown, upon receipt of the requisite details from SR-II POWERGRID.
   - ❖ Following completion of the study and finalization of the shutdown sequence, POWERGRID may proceed with the award of the contract for execution of the works.
   - ❖ SR-II POWERGRID may seek the support of the Government of Tamil Nadu for resolution of the Right of Way (RoW) issues at the required locations.

d) SRLDC stated that Study would be required to consider the sequence of shutdowns.

e) TANTRANSCO stated the following:
   - ❖ Abhishekapatty bay needs to be commissioned prior to undertaking the proposed shutdowns.
   - ❖ Necessary support would be extended to SR-II POWERGRID for resolving the Right of Way (RoW) issues associated with the project.

TCC Conclusion

- ➢ ***SR-II POWERGRID shall furnish the tentative schedule and requisite details of the proposed works, based on which SRPC, SRLDC, TN utilities and SR-II POWERGRID shall jointly examine and optimise the shutdown sequence and duration. Thereafter, POWERGRID may proceed with award of the works, while TN power utilities shall extend necessary support for resolution of RoW issues along the Udumalpet–Madurai line.***

SRPC noted the above

3	Gooty – Pavagada	D/c	High loading observed	Stressed corridor; N-1 violations reported

TCC Deliberations:

CTUIL informed that the reconductoring of Gooty – Tumkur (Pavagada) 400kV D/c line was agreed in 41st NCT held on 18.05.2026 and scheme has been allocated to POWERGRID vide OM dated 10.06.2026 for implementation under RTM with implementation schedule of 24 months (SCoD – 10.06.2028).

SRPC Deliberations

SR-I POWERGRID stated that the estimates are under preparation. Subsequently, the works would be taken up for tendering.

SRPC noted the above

4	Narnoor – Srisailam	S/c	Repeated thermal limit breaches Carrying 700–800 MW, operating close to their thermal limits (45°C ambient, 75°C conductor temperature)	Critical for grid security; reconductoring urgently needed

TCC deliberations

a) APTRANSCO stated that the observed violations occurred predominantly during periods of high solar generation injection from Pavagada, coinciding with low generation/pumping operation at Srisailam Left Bank and high lift irrigation load in Telangana. The violations were limited to approximately 50–60 time blocks, during which the line loading exceeded 600 MW.

APTRANSCO further stated that the commissioning of the series reactor at Orvakal, which was approved in 2023, is expected to modify the prevailing power-flow pattern and may have a bearing on the observed line loading. APTRANSCO also recalled that, during one of the incidents, the fault level had increased to approximately 60 kA, indicating the need to consider the impact of the changed network configuration on both power flow and fault levels.

Regarding the proposed mitigation/augmentation, APTRANSCO stated that cable remains a major challenge and that the remedial action cannot be finalised without the concurrence of TGTRANSCO. It was therefore indicated that early concurrence and coordination among the concerned utilities would be necessary for taking forward the proposed works.

b) TGTRANSCO stated the following:

- Since the issue is associated with power injection from Pavagada and its impact on the transmission network, a Joint Study Meeting involving the concerned utilities may be convened to examine the matter in detail under different operating scenarios.
- The augmentation requirements, including those pertaining to both the regional transmission system and the intra-State transmission system, may also be examined and deliberated upon during the Joint Study Meeting, so that a coordinated transmission solution can be evolved.

c) SRPC/SRLDC observed that the status of the Orvakal series reactor, including its approval and implementation status, may be verified, as the same had not been approved in the earlier meetings referred to in the deliberations. The impact of the reactor, if implemented, on the prevailing power-flow pattern, line loading and fault levels may accordingly be considered in the Joint Study.

d) CTUIL observed the following:

- The Kurnool–Srisailam 400 kV S/C line is an STU transmission line and, therefore, the required strengthening/reconductoring of the line may be taken up by APTRANSCO, based on the outcome of the system study.

- CTUIL further stated that, during the Joint Study Meeting held in April 2026, it was decided that TGTRANSCO and APTRANSCO would carry out the requisite study and analysis of the issue. Subsequently, the findings of the State utilities would be examined by CTUIL from the CTU/ISTS perspective, and the matter would be deliberated further based on the outcome of the studies.

e) MS, SRPC enquired whether installation of suitable FACT devices on the Kurnool–Srisailam line or at an appropriate location in the nearby network could help in managing the power flow/injection during periods of high RE generation, particularly by switching or controlling the device as required under prevailing system conditions.

f) CTUIL stated that the feasibility of deploying suitable FACTS devices for power-flow control and mitigation of the observed transmission constraints would be examined as part of the detailed system study.

SRPC deliberations

a) APTRANSCO informed that, as recorded in the minutes of the Joint Study Meetings held on 02.05.2024 and 04.05.2024 at Hyderabad, installation of a series limiting reactor at Orvakal was discussed and agreed upon. However, the matter was not deliberated in the subsequent meetings. APTRANSCO further stated that, based on the studies, commissioning of the series limiting reactor is expected to alter the prevailing power-flow pattern and, upon implementation of the identified measures, the requirement for reconductoring of the Kurnool–Srisailam line may not arise.

b) MS, SRPC stated that the study findings submitted by APTRANSCO may be examined by CTUIL. He further requested TGTRANSCO to explore suitable alternatives/mitigation measures so that the observed transmission constraint could be resolved.

c) TGTRANSCO agreed to submit a proposal for conducting a Joint Study at the earliest, in coordination with the concerned utilities.

SRPC conclusion

- ✓ ***TGTRANSCO and APTRANSCO shall undertake the requisite Joint Study to examine the observed power-flow constraints, considering Pavagada RE injection, Srisailam operating conditions, the status and impact of the Orvakal series limiting reactor, for removal of constraint on the Kurnool–Srisailam 400 kV S/C line***
- ✓ ***CTUIL shall subsequently examine the study findings from the ISTS perspective, including the feasibility of FACTS devices and other suitable system-strengthening measures, and the appropriate solution shall be finalised based on the overall study outcome, duly avoiding duplication of transmission augmentation/expansion.***

5	Gooty – Narnoor	S/c	High loading observed Touched their thermal limits in June 2025 itself without N-1	Loading breached limits even under normal conditions

54th TCC:

CTUIL: Same shall be studied in next Joint study meeting of SR.

Joint Study Meeting (28-30th April 2026)

During the joint study meeting, matter was deliberated and following options were studied for addressing high short circuit of Kurnool and high loading on Gooty – Kurnool & Kurnool – Srisailam 400 kV S/c lines:

• Installation of 15 ohm SLR on Gooty – Kurnool 400kV S/c line at Gooty end.

• Bypassing of Gooty – Kurnool and Kurnool – Srisailam 400 kV S/c lines at Kurnool to form Gooty – Srisailam 400kV S/c line.

However, not much relief in short circuit levels and loadings on the lines was observed with the above options.

In view of the above, it was decided that TGTRANSCO & APTRANSCO may carry out study analysis. Subsequently, same shall also be studied by CTU and the matter will be discussed again

TCC Deliberations:
Covered in above item.

6 Overloading of 400kV Tirunelveli – Kanarpatty S/C Line

52nd TCC: SRLDC had emphasized the urgent need for commissioning of the 400 kV Tirunelveli–Kanarpatty-2 line, cautioning that outage of the existing S/C could result in cascading trippings (~170 MW load loss; ~750 MW generation loss). Subsequent incidents led to RE curtailment up to 3900 MW, highlighting system vulnerability. The matter was deliberated in 229th to 235th OCC meetings, TCC/SRPC Meetings and in special meetings. A MoU has been signed between PGCIL and TANTRANSCO for long-term resolution, as well.

Updated Status (As on 240th OCC):

Temporary Solution: TN SLDC informed that the proposal kept on hold as more power will be injected into Madurai.

Permanent Solution: SR II, PGCIL informed that target date is December 2026.

SPS Implementation: TN SLDC, vide e-mail dated 22.06.2026, informed that the SPS was successfully implemented on 12.06.2026 and the corresponding SPS logic, along with all relevant details, had been shared. SRLDC observed relief was inadequate.

TCC deliberations:

Permanent Solution: SR-II POWERGRID informed that the overloading of the lines and associated network elements is expected to be addressed through the permanent transmission strengthening works ie commissioning of Kanarpatty-Thirunelveli ckt II which is targeted for completion by December 2026/January 2027. SR-II POWERGRID further stated that it would coordinate with TANTRANSCO to explore the possibility of expediting the works, considering the severity of the prevailing loading conditions.

Intermediate Solution:

- MS SRPC observed that, pending completion of the permanent strengthening, suitable operational measures/SPS arrangements would be required to manage the high loading of the transmission corridor. It was informed that SPS has already been implemented at the concerned location; however, the quantum of relief provided by

the existing SPS was considered inadequate, as expressed by SRLDC, particularly during periods when loading of the single-circuit line in the Kanarpatty–Tirunelveli corridor reaches very high levels, reportedly around 1800–2000 MW.

- He emphasized the need for installation of PMUs at suitable locations in the affected network to obtain adequate visibility of the dynamic behaviour of the system, including voltage/frequency response and the performance of RE generating stations during grid disturbances, particularly with respect to HVRT/LVRT ride-through. Premature tripping of RE generators during such events could further aggravate system stress and contribute to increased loading of the transmission network.
- He observed that the experience from disturbances in the Northern Region, where generator ride-through performance has been monitored and analysed, may be suitably considered while strengthening similar PMU-based monitoring and compliance verification mechanisms in the Southern Region**.**

TNSLDC/TANTRANSCO apprised the following:

- ❖ RE generating entities in Tamil Nadu are required to enable the prescribed LVRT/HVRT ride-through features. Necessary follow-up with the RE developers is being undertaken in this regard.
- ❖ Additional loads/conditions would be incorporated in the SPS, as required, to improve its effectiveness in managing the prevailing high-loading conditions.
- ❖ Necessary action is being taken to pursue the RE developers for furnishing the required generator-wise data to SLDC. Discussions have already been held with the RE generators, and a number of generators have agreed to provide the requisite data. The process of obtaining the data and establishing the required monitoring arrangement is in progress.
- ❖ The requirement for installation of PMUs at suitable nodes in the affected network would be examined and necessary action would be taken accordingly.

TCC Conclusion

- ✓ **TNSLDC/TANTRANSCO shall expedite the above measures, particularly strengthening of the SPS and PMU-based monitoring, ensuring availability of RE generator data and compliance with CEA Connectivity requirement including LVRT/HVRT provisions.**
- ✓ **PGCIL SR II and TANTRANSCO in coordination to pursue the early commissioning of the second circuit of the Tirunelveli–Kanarpatty line, considering the high loading on the existing circuit and the need for additional transmission capacity.**

SRPC noted the above

7 Overloading of 400 kV Hoody-Devanhalli D/C lines

TCC deliberations:

a) KPTCL stated that the survey has been completed, HTLS upgradation of the lines has been planned, and the DPR has been prepared, with invitation of tenders planned to be issued by 15.08.2026.

b) SRLDC stated that the 400 kV Hoody–Devanahalli D/C transmission lines are experiencing high loading, resulting in N-1 violations, and observed that reconductoring with HTLS conductors would enhance the power-transfer capability and help alleviate the prevailing transmission constraints.

SRPC noted the above

iii. Low Voltage Issues in Southern Region

Sl. No.	State/UT	Affected Areas	Observations	Remarks
1	Karnataka	Bangalore, Munirabad, Jagalur, Guttur, Doni	Severe low voltage observed during morning peak hours due to high solar/wind injection and state demand	Reactive compensation may be reviewed; voltage support needed

240th OCC (10.07.2026)

- Total 2780 MVar reactive power compensation was planned.
- 1620 MVar capacitor banks approval received was under immediate tendering stage.
- 1160 MVar STATCOMs will be put up to Management for approval.

TCC Deliberations

KPTCL stated that the DPR for installation of 650 MVAr capacitor banks has been prepared and the tender is expected to be floated within 10 days. The proposal for installation of STATCOMs would be reviewed and studied, with the same being envisaged for commissioning at the upcoming 765 kV KPTCL substations.

SRPC noted the above

2	Tamil Nadu	Chennai, Trichy, Kanaarpatty, Kayathar	Low voltages aggravated by high RE injection and urban-industrial demand	Capacitor installation / OLTC optimization recommended

240th OCC (10.07.2026)

528 MVar shunt capacitor banks approval was received to install in 4 regions at Trichy, Tanjavur, Thiruvannamalai & Villupuram across 29 Substations at 11kV, 22kV, 33kV & 110kV levels.

Earlier tender for installation of 528 MVAr capacitor banks has been closed and a fresh tender is proposed to be floated shortly.

TCC Deliberations

a) MS, SRPC observed that the planned 528 MVAr capacitor banks may not be adequate to meet the anticipated reactive power requirement under high RE injection and urban-industrial demand conditions. He suggested that the ongoing works may be expedited and that the requirement for additional reactive power compensation may also be assessed through system studies and suitable augmentation planned accordingly.

b) TANTRANSCO/TNSLDC stated that the 528 MVAr capacitor banks are scheduled for commissioning within 18 months, with commissioning expected by December 2027. CE, TNSLDC further stated that a proposal for installation of two STATCOMs, one in North Tamil Nadu and one in South Tamil Nadu, would be placed before the management for consideration.

c) ED, SRLDC observed that, if TANTRANSCO/TNSLDC furnishes the details of the locations where the 528 MVAr capacitor banks and STATCOM are proposed to be installed, SRLDC can undertake the necessary system studies to assess the requirement for additional capacitor banks/reactive compensation.

d) SRPC secretariat observed that, during the previous year, TANTRANSCO had not furnished the required base-case file for the capacitor study, which had constrained further assessment of the reactive power requirement.

SRPC noted the above

iv. Reconductoring of 220kV Inter-State Lines

Sl. No.	Inter-State Line	Current Issue	Remarks	56th SRPC update
1	220kV Chittoor – Tiruvallam S/C	Line is either kept open or tripped via SPS when loading exceeds ~200 MW	Identified as a constraint; reconductoring proposed to handle increased power flow	TANTRANSCO to upgrade their system and limit the power flow, permissible up to the present capacity i.e., 160-170MW.
2	220 kV Sullurpet – Gummidipundi S/C	Line loading exceeds safe limit; managed by opening or SPS action	Reinforcement discussed in various forums; concrete action plan yet to be finalised	TANTRANSCO was suggested to either explore alternative solutions within Tamil Nadu's 230 kV network or hold joint discussions with AP to arrive at a mutually agreed solution.

Joint Study Meeting (28-30th April 2026)

a) The proposed connectivity of Nagalapuram substation under Kadapa-II transmission system and associated 220 kV connectivity, the issues of high loading on Sullurpet – Gummidipundi & Chittoor – Tiruvallam 220kV S/c lines are being resolved.

TCC Deliberations

b) **CTUIL** informed that under Kadapa-II transmission system, the following were included:

- Establishment of 765/400 kV SS near north Chennai (Chennai-II) with connectivity to Kadapa-II
- LILO of 400kV Sriperembaudur-Nellore D/C line at Chennai-II
- LILO of one ckt 400 kV SV Chatram-Alamati at Chennai-II.
- Proposed 400 kV D/C connectivity from Chennai II to proposed 400 kV Nagulapuram SS (AP)

The issue of high loading on 220 kV Sullurpet – Gummidipundi & 220 kV Chittoor – Tiruvallam 220kV S/c lines are expected to be resolved.

c) TANTRANSCO informed that, as discussed during the Joint Study meeting, the necessary system studies are being carried out and the report would be furnished by the next CMETS meeting.

d) APTRANSCO stated that the observed power flows were examined by APERC, which had raised queries regarding the necessity for reconductoring of 220 kV lines.

e) It was clarified that, as discussed in the joint study meeting and concurred by AP study team, establishment of the proposal of 400 kV station at Nagulapuram would provide additional feeding source for the southern part of AP and would relieve the high loading of the 220 kV Sullurpet–Gummidipundi and Chittoor–Tiruvallam transmission lines.

SRPC Deliberations

f) The forum requested TANTRANSCO to intimate its concurrence at the earliest as approval of Kapada-II transmission system is based on this outcome. Identification of suitable location may be taken up subsequently.

g) TANTRANSCO acknowledged the requirement for this connectivity and stated that it would be put up to management and would revert back.

TCC Deliberations on APTRANSCO query on High Power Conductors

a) APTRANSCO raised a query regarding the methodology adopted for selection of high-ampacity conductors by other TRANSCOs, particularly whether the conductor type is selected based on 200% loading criteria or any other specified loading percentage. It was informed that ACSS Panther and ACSS Lynx conductors are generally adopted, while CFCC conductors are being considered for 200 % loading requirements.

b) KPTCL informed that reconductoring with High Temperature Low Sag (HTLS) conductors is generally undertaken by them to meet the N-1 contingency requirement. The lines are designed for normal operating loading and not for loading beyond their rated capacity. KPTCL further informed that HTLS carbon core (CFCC) conductors are presently being adopted for reconductoring of existing lines, whereas other High Power Conductor (HPC) technologies may also be considered while constructing new transmission lines.

c) TANTRANSCO informed that suppliers are available and HTLS conductors can be designed for any required current rating, such as Panther equivalent, Zebra equivalent or other specifications, depending on the requirement. It was, however, emphasized that conductor upgradation alone is not sufficient, as the associated bay equipment, including switches, circuit breakers and current transformers, would also require corresponding upgradation.

Follow up from previous SRPC meetings

Constraint	**Remedial Solution Proposed**	**Status Update as on Date**	54th TCC update
400 kV Raichur_KA – Raichur_PG D/C (Quad Moose)	Constraint observed under N-1 condition	CTUIL/PGCIL to update	CTUIL stated that the requirement for strengthening shall be reassessed after the commissioning of the 765 kV Narendra–Pune D/c line. It was noted that the constraint was not observed in the Joint Study. However, SRLDC may share the relevant details and the proposal may be taken up suitably. **55th TCC:** SRLDC informed that there is no update

400 kV UPCL–Kasargode D/C	Resolve RoW issues in Kerala and Karnataka	Monitored at PMO level; RoW resolved in Kerala (94/101 towers erected); in Karnataka, 31 towers erected (out of 177). Joint delegation and GoK intervention underway	KSEBL - All towers were completed. KPTCL-The matter is being reviewed at Chief Secretary and ACS level with DCs of Dakshin Kannada and Udupi.

TCC Deliberations

KPTCL informed that all ROW issues are resolved and the transmission licensee is going ahead with the works. Foundation works completed and erection works are in progress. Due to the monsoon rains in Dakshina Kannada, the works have slowed down. However, completion is expected by September 2026

KSEBL informed that all works including stringing are completed in 47 km Kerala portion of the line. Further, for evacuation, 9 km 220 kV D/C line and multi-circuit multi-voltage line from existing 400 kV Substation, Karindalam (Kasaragod) are on the verge of completion with commissioning expected by August 2026

Additional Connectivity to KSEBL	Connectivity via CN Halli (Chikkanayakanahalli) and Wayanad Additional feed to Thiruvanthapuram	Final location to be decided post survey. Connectivity from Mysore side under Ananthapur-2 Phase-2

TCC Deliberations

a) MS, SRPC informed that in the Joint Study meeting held on 28-30 April, 2026, KSEBL had proposed connectivity from CN'halli substation being developed under Ananthapuram-II transmission system to Wayanad substation. However, based on system studies, no significant power flow was observed on the proposed connectivity.
b) KSEBL stated that, considering Kerala's geographical location, additional ISTS connectivity is presently possible only through Tamil Nadu or Karnataka. KSEBL requested that the possibility of establishing additional ISTS connectivity to Kerala may be explored. It was further proposed that, in the event of an outage of the UPCL–Kasargode line, the CN'Halli–Wayanad line could carry the resulting power flow and may serve as an N-1 contingency path for connectivity to Kerala.
c) CTUIL requested KSEBL to carry out an internal system analysis, as discussed in the Joint Study Meeting, and furnish the basic technical details of the proposals, including the proposed Point of Interconnection, to facilitate further examination and planning of the 400 kV connectivity.
d) KSEBL stated that the proposals are ready and will be submitted to CTUIL within a week.

SRPC Deliberations

KSEBL updated that PSSe case-file for connectivity proposal from Kundankulam to Balaramapuram (in Southern Kerala) was sent to CTUIL for discussion in the next Joint Study Meeting. Further, in North Kerala region, Kakayam PSP was planned with 800 MW, however, as per study conducted by the implementing agency, the identified potential is expected to be increased to 1200 MW. Hence, a 400 kV SS is being planned at Kakayam. KSEBL will study and send a proposed case file to CTUIL.

ICT Augmentation: Ramagundam	Augmentation proposed by TGTRANSCO	Proposal to be taken up with CTUIL through CMETS

- Auto Transformers No. 3 and 4, rated 250 MVA, 400/220/33 kV, at the Ramagundam Super Thermal Power Station switchyard, would be replaced with Auto Transformers of 500 MVA, 400/220/33 kV rating.

TCC Deliberations

NTPC informed that tendering is under progress and are expected to be commissioned by September 2028.

ICT Augmentation: Warangal	Augmentation proposed by TGTRANSCO	Proposal to be taken up with CTUIL through CMETS. State network augmentation details to be furnished to CEA.	**53rd – 54th TCC:** TGTRANSCO informed that they would come up with a consolidated proposal

TCC Deliberations: SRLDC stated that currently the overloading of Warangal ICTs is reduced after the charging of Bhoopalapalli ICT.

The forum concluded that TG Transco may take a decision accordingly.

58th SRPC: SRLDC would give its inputs in the next joint study meeting.

ICT Constraints at NLC TS-II	Expedite 400/230 kV Ariyalur substation by TANTRANSCO	**55 TCC Update:** **Temporary Solution:** NLCIL informed that commissioning is expected by September 2026 with the old ICT from Sriperumbudur SS shifted to TS-II **Permanent Solution:** Cancellation of tender for new ICT is under progress due to the commercial condition of single tender and the new tender will be initiated within 3 months **58th SRPC Deliberations** NLCIL stated that due to the long lead time for transformers, good progress was not being made on procurement of new ICT. However, NLCIL is refloating the tender after consulting with the OEMs.

Nagapattinam PS Connectivity (TN & PED)	Establish 400/230 kV at Nagapattinam; enhance PED connectivity via HTLS & 230kV upgrades	

TCC Deliberations:

PED furnished the proposed augmentation works at the 230 KV and 110 KV Sub Stations as follows:

i) Augmentation of the existing 2 X 100 MVA ICT's at Thondamanatham 230/110 KV SS with additional 100 MVA Transformer by March 2027

ii) Augmentation of 2 X 100 MVA ICT's Villianur 230 /110 KV SS with additional 160 MVA Transformer by December 2027

iii) Augmentation of existing 2X 80 MVA ICT's at Bahour 230 /110 KV SS with additional 160 MVA Transformer by December 2027

iv) Acquisition of adjoining land at Karaikal for erection of 230 KV feeder bay. Approval of the Government sought.

v) New 110 kV Substations: Establishment of two new 110/22 kV Substations at Lawspet and Thavalakuppam, each with 2 × 25 MVA transformation capacity, proposed for commissioning during 2028–29.

vi) Additionally, Augmentation of Transformation capacities by about 118 MW have also been planned across the various 110 /22 KV Sub Stations.

Further, it needs to be taken to NCT. SRPC had already given its concurrence.

Survey works need to be done by PGCIL – submitted to corporate -- SR II, PGCIL informed that the detailed survey report was submitted to CTUIL on 16.07.2026. Subsequently, CTUIL would prepare a cost estimate and would be taken to NCT for approval with information to SRPC.

CTUIL updated that in modification of earlier approved scheme, the Neyveli-Villianur line will be reinstated as per the request of PED.

TCC noted the same and requested PED to concentrate on substation works and reactive compensation which is required to overcome the low voltage issues. PED informed that 72 MVAr is upcoming this year.

It was further confirmed that, under the current scheme, 4 nos. of 220 kV bays have been allocated to Puducherry and 6 nos. of 220 kV bays to Tamil Nadu at Nagapattinam Substation.

SRPC Deliberations

MS, SRPC highlighted the criticality of this connectivity and informed that it is being followed up by CEA as well. Further, PED had represented to MoP as well.

PED requested for early commencing of the project and would facilitate claiming of much needed additional GNA/TGNA to the UT.

CTUIL stated that the cost analysis is being prepared and would try to include in the next NCT meeting.

Overloading of 220kV Sedam-Tandur line		**54th TCC:** CTUIL informed forum that the matter would be studied during the next joint study meeting of SR constituents, planned in April 2026.

TCC Deliberations

TGTRANSCO informed that after multiple discussions, the line was closed in the 1st week of June, with bus split arrangement at Sedam. In the afternoons, with increase in RE generation at Sedam, the line is over loading to 250 MW and forced to open the line. TGTRANSCO expressed concern on non-utilization of the asset.

CTUIL stated that as discussed in the Joint Study Meeting, in the future scenarios as well, loading of the line is expected to increase further and reconductoring may not resolve the issue and 400 kV connectivity may be explored. As decided in the meeting, it may be jointly studied by CTU, SRPC, SRLDC, KPTCL and TGTRANSCO. The inputs were awaited from TGTRANSCO and KPTCL

KPTCL stated that the flow was attempted to be controlled by keeping one bay dedicated for the Tandur-Sedam line. It was advised that upgradation to double circuit may be explored.

TGTRANSCO stated that a 400 kV substation is proposed at Pargi and 400 kV connectivity to any Karnataka SS may be explored.

CTUIL stated that the proposals will be taken up in the next joint study and try to evolve a solution

Wayanad SS and LILO of 400kV Mysore -Kozhikode at Wayanad SS

55th TCC Deliberations:

KSEBL stated that there were issues in land acquisition which caused a delay. Land Acquisition was completed in January 2026. Wayanad SS is expected in 3 years, i.e., 2029.

Madakathara –Waynad- Kasargode

TCC Deliberations

KSEBL informed that regarding Kasargode-Wayanad Line, there were ROW compensation issues which were resolved now by the intervention of Kerala's Minister for Energy. The works are expected to restart again from August 2026 onwards.

Out of 369 number of towers, 110 nos are completed.

COD is expected by December 2027.

Along with the commissioning of UPCL-Kasargode line, Udupi will be directly connected to Madakathara and then connectivity will be established as Udupi-Madakatra-Udumaplet and Thirunalveli and further to Pugalur.

Other Transmission constraints in Intra-state network pointed out by SRLDC are given below:

Andhra Pradesh –

- N-1 violation observed in 400/220kV ICTs at Kalpakka, KV Kota, Vemagiri and Gazuwaka

- 220 kV Line loadings are observed in Vemagiri, KV Kota, Kalpakka, Nunna, Anantapur, Chittoor and Narnoor area.

Telangana –

- N-1 violation observed in 400/220 ICTs at Damaracherla, Ramagundam, Dindi, Gajwel, Warangal, Shankarpalli, Nirmal and Talapalli
- 220 kV Line loadings are observed in Nirmal, Mehboobnagar, Nagarjunasagar, Dichpally and Hyderabad area.

Karnataka

- N-1 violation observed in 400/220kV ICTs at Hoody, Nelamangala, Guttur, UPCL, Narendra, Mylasandra, Bidadi, Talaguppa, Jindal.
- 220 kV Line over loadings are observed in Bangalore, Mangalore, Mysore, UPCL, Kali complex areas

Tamil Nadu

- N-1 violation observed at 400/230kV ICTs at NLC TS2, NNTPS, Kalivandapattu, Shoolinganallu and Udumalpet.
- Overloading of 400kV NCTPS-Manali S/C will cause overloading of 400kV Alamaty-Manali S/C
- 230kV Line over loadings is observed in Chennai, Neyveli, Coimbatore, Tuticorin, Madurai and Hosur areas.

Kerala –

- N-1 violation observed in 400/220kV ICTs at Kozhikode and Trichur HVDC
- 220kV line loadings are observed in Areakode, Kochi and Sabarigiri area.

➢ **Entities were requested to take remedial measures and inform SRLDC/SRPC.**

11. KAIGA ICT CONSTRAINTS

a) **54th TCC**

- NPCIL had highlighted that loading on Kaiga ICTs has been persisting for nearly 19 years, posing operational and maintenance challenges, and requested an additional 400 kV ISTS connectivity from Kaiga to Xeldem, considering the availability of ROW and the importance of reliable evacuation from the nuclear generating station.
- KPTCL is taking steps to strengthen the STU system at Kaiga with new S/S (Kumta & Giriyal Switching Station) and upgradation of lines
- KPTCL had informed that strengthening works are under implementation, including:
  - Giriyal 220 kV Switching Station (expected within 12–14 months);
  - Reconductoring of three 220 kV lines (targeted for completion during October–December 2026).
  - Post-commissioning load reconfiguration to divert power towards Giriyal and Hubli, thereby reducing loading on Kaiga ICTs.
- CTUIL had informed that the existing evacuation system is adequate for the existing four Kaiga units, and that the present ICT loading is primarily due to increased power injection from the Karnataka network. It was further stated that comprehensive

transmission planning for Kaiga Units 5 & 6 would be taken up upon receipt of a formal connectivity application.

- The forum concluded to wait until the ongoing works are completed. The system performance would be reviewed after commissioning of Giriyal station and completion of reconductoring. If issues persist, further transmission strengthening may be examined by STU/CTU.

b) **Joint Study Meeting (28-30th April 2026)**

- CTUIL reiterated that the existing 400 kV transmission system is adequate for reliable evacuation of power from the existing Kaiga generating units, and that additional 400 kV connectivity is not presently required.
- KPTCL informed that, apart from the Giriyal Switching Station, establishment of the 220 kV Kumta Substation, integration of Seabird load, and upgradation of 220 kV Kali complex lines to High-Performance Conductors (HPC) are expected to bring the loading on Kaiga ICTs within permissible limits.
- After detailed technical studies, it was agreed that KPTCL shall expedite the ongoing transmission strengthening works, while CTUIL would undertake transmission planning for the additional Kaiga units upon receipt of the requisite connectivity application from NPCIL.

c) **NPCIL letter dated 10.03.2026 & 21.04.2026 are enclosed at Annexure-11A**

NPCIL has again highlighted the necessity of alternate connectivity to Kaiga GS being a nuclear station.

TCC Deliberations

d) NPCIL reiterated that the loading on the Kaiga ICTs has been persisting for nearly 19 years, resulting in operational and maintenance challenges. NPCIL requested an additional 400 kV ISTS connectivity between Kaiga and Xeldem, considering the availability of Right of Way (RoW) and the need to enhance the reliability of power evacuation from the Kaiga Nuclear Power Station.

Informed that eight towers of the 400 kV Kaiga–Guttur transmission line had collapsed on 14.05.2026, and the line is yet to be restored. Consequently, evacuation of power from the Kaiga Nuclear generating station is presently being carried out only through the 400 kV Kaiga–Narendra transmission line at the 400 kV level.

NPCIL further informed that on 30.06.2026, 400 kV Kaiga–Narendra Circuit-I was out of service due to a line fault and was restored only on the following day. During this period, power evacuation from the Kaiga Nuclear generating station, along with generation from KPCL hydro stations, had to be carried out through the remaining single circuit.

Considering the strategic importance and operational criticality of the Kaiga GS, NPCIL reiterated the need for an additional transmission corridor to provide adequate redundancy, thereby enhancing the reliability and security of power evacuation under contingency conditions.

e) KPTCL informed that transmission system strengthening works are under implementation, including the establishment of the 220 kV Giriyal Switching Station, which is expected to be commissioned within the next 12–14 months, and reconductoring of three 220 kV transmission lines, targeted for completion during October–December 2026. KPTCL further informed that, upon commissioning of these works, the system load would be reconfigured towards Giriyal and Hubballi, thereby reducing the loading on the Kaiga Inter-Connecting Transformers (ICTs).

f) CTUIL recapped that the existing transmission system is adequate for evacuation of power from the existing four units of the Kaiga GS and stated that the present loading on the ICTs is primarily due to increased power injection from the Karnataka network. CTUIL further informed that comprehensive transmission planning for Kaiga Units 5 & 6 would be taken up upon receipt of the formal connectivity application from NPCIL.

g) The Chairperson, TCC observed that NPCIL had reiterated the requirement for an additional transmission corridor in view of the strategic importance of the Kaiga Nuclear generating station, whereas CTUIL maintained that the existing transmission system was adequate and that KPTCL was implementing transmission strengthening works to address the loading on the Kaiga Inter-Connecting Transformers (ICTs). She opined that in view of the differing perspectives, the matter relating to the requirement of additional transmission connectivity for the Kaiga Nuclear generating station may be referred to Member (Power System), CEA for further examination and appropriate guidance.

TCC Recommendation

- ***The TCC recommended that the matter relating to the requirement for additional transmission connectivity for the Kaiga Nuclear Power Station be referred to Member (Power System), CEA for further examination and appropriate guidance.***

SRPC Deliberations

- ✓ ***SRPC agreed to TCC recommendation and concluded that the matter may be apprised to Member (Power System), CEA for further examination and appropriate guidance regarding the requirement for additional 400 kV transmission connectivity for the Kaiga Nuclear Generating Station.***

12.APCC AGENDA

APCC vid E-mail dated 08.07.2026 and 09.07.2026 had furnished the following items for deliberation:

A. Formulation and Implementation of Procedure for Segregation and Recovery of Deviation and Ancillary Services Deficit Charges Pertaining to Embedded GNA/GNA-RE Entities

a. APPCC had raised the issue of formulation and implementation of a procedure for the segregation and recovery of Deviation and Ancillary Services deficit charges pertaining to embedded GNA/GNA-RE entities under Agenda Item No. 38(B)

during the 54th TCC and 57th SRPC meetings held on 16.03.2026 and 17.03.2026, respectively, to facilitate timely settlement of the bills.

b. During the deliberations, it was recorded that "*ED, SRLDC informed that a draft procedure had been formulated by DGM (Market Operation) and shared with the Chief Engineer, APSLDC. APPCC was requested to examine the draft procedure, suggest additional requirements, if any, and provide its feedback, after which the finalized document would be circulated among all DICs*."

c. However, upon subsequent enquiry, it has been observed that APSLDC is not in possession of the said draft document. Consequently, APPCC could not examine the procedure or furnish its comments as envisaged in the minutes of the meeting.

d. Further, the Hon'ble CERC, vide Order No. 02/SM/2026 dated 30.03.2026, has directed that sub-clause (i) of Regulation 9(7) of the DSM Regulations, 2024 shall continue to remain in force up to 04.10.2026 (instead of 31.03.2026), and sub-clause (ii) of Regulation 9(7) shall come into effect from 05.10.2026 (instead of 01.04.2026).

e. It is also observed from the Grid India (NLDC) website that the cumulative Pool Account Deficit up to 03.05.2026 stands at ₹1,62,10,86,666/-. As the issuance of deficit recovery statements by NLDC is expected shortly, it is necessary to have a finalized procedure in place for the segregation and recovery of Deviation and Ancillary Services deficit charges pertaining to embedded GNA/GNA-RE entities to ensure timely and transparent settlement of bills.

f. TCC/SRPC may deliberate and advise Grid India /SRLDC to share the draft procedure with APPCC and other stakeholders for review and to finalize and implement the procedure at the earliest, enabling timely segregation, recovery, and settlement of Deviation and Ancillary Services deficit charges pertaining to embedded GNA/GNA-RE entities.

TCC Deliberations

a) Director, APTRANSCO raised concerns regarding the recovery of charges from embedded GNA/GNA-RE entities, stating that the stipulated 10-day payment period to SRLDC does not provide adequate time for the States to recover the corresponding amount from the embedded entities or to issue the necessary notices. He suggested that either an advance payment mechanism may be adopted or the existing payment timeline may be suitably extended. He further stated that DISCOMs are not willing to make the payment on behalf of the embedded entities, as this would result in loss of interest to the DISCOMs.

b) SRLDC stated that the respective States may evolve an appropriate mechanism for timely recovery of the charges from their embedded GNA/GNA-RE entities.

c) On a query on embedded entities, KPTCL informed that the matter regarding recovery of charges may be enquired with PCKL.

d) MS, SRPC added that TANTRANSCO also has an embedded entity. TANTRANSCO clarified that SAIL, Salem has been identified as a separate entity

for billing purposes and is not being included under Tamil Nadu's GNA for billing. Accordingly, separate billing is being carried out for SAIL, Salem. TANTRANSCO stated that the matter would examine in detail and revert.

e) Director, APTRANSCO reiterated that the bill amount had been raised based on the State's entire GNA quantum only.

f) It was noted that, as per the Procedure, Grid-India recovers the deficit amount by considering the State's GNA and the actual drawl quantum. Accordingly, the bill is raised to the State as a whole (including embedded entities), and it is the responsibility of the State to segregate and recover the applicable charges from the embedded GNA/GNA-RE entities.

g) Director, APTANSCO further stated that there is no provision under the CERC or State Regulations for collecting advance payments from these embedded entities. Therefore, he suggested that a marginal extension of the payment timeline may be considered to enable the States to recover the charges from the embedded entities before making the payment. He also pointed out that it is not feasible for the DISCOMs to make additional payments on behalf of the embedded entities, as doing so would lead to audit observations.

h) APTRANSCO proposed the following two options to address the issue of recovery of charges from embedded GNA/GNA-RE entities:

   i. Provision of regulatory support to enable the States to collect an advance amount from the embedded GNA/GNA-RE entities; or

   ii. Grant of an extension in the payment timeline to Grid-India, enabling the States to recover the charges from the embedded entities before making the payment.

i) SRLDC observed that granting an extension in the payment timeline would be difficult, as the timeline is prescribed under the Regulations.

j) MS, SRPC opined that the matter may be taken up by Chairperson, SRPC with the Chairperson, CERC.

k) Chairperson, TCC remarked that a few SLDCs were not yet clear about the billing methodology. She stated that the details regarding the embedded GNA/GNA-RE entities, along with the billing methodology being followed by the States, would be obtained and, based on the consolidated information, the matter would be taken up with Chairperson, CERC through Chairperson, SRPC.

TCC Conclusion

- ***After obtaining the requisite information from all the States regarding the embedded GNA/GNA-RE entities and the billing methodology being followed, Chairperson, SRPC may take up the matter with Chairperson, CERC regarding the formulation of Procedure for Segregation and Recovery of Deviation and Ancillary Services Deficit Charges Pertaining to Embedded GNA/GNA-RE Entities.***

SRPC Deliberations

l) MS, SRPC appraised the forum that KPTCL had furnished this issue as an agenda item for the upcoming Commercial Sub-Committee meeting for deliberation. KPTCL had also provided the list of embedded entities along with the implementation issues being faced.

m) TANTRANSCO confirmed that SAIL, Salem is an embedded entity and that segregation of the billing for the embedded entity is required.

n) TGTRANSCO stated that, at present, there are no embedded entities under its jurisdiction. However, such entities may emerge in future and, therefore, a clear and comprehensive procedure needs to be framed for uniform implementation.

o) KSEBL stated that there are no such embedded entities in the State.

p) After deliberations, Chairperson, SRPC recommended that the matter be taken up with Chairperson, CERC regarding the formulation of Procedure for Segregation and Recovery of Deviation and Ancillary Services Deficit Charges pertaining to Embedded GNA/GNA-RE Entities.

Conclusion

- ✓ The forum noted the concerns regarding segregation and recovery of Deviation and Ancillary Services deficit charges pertaining to embedded GNA/GNA-RE entities, including the need for a clear and uniform procedure and adequate time for recovery of charges from such entities.
- ✓ SRPC Secretariat shall compile the information received from all States/SLDCs and based on the consolidated information, ***Chairperson, SRPC would take up the matter with Chairperson, CERC regarding formulation of a clear and uniform Procedure for Segregation and Recovery of Deviation and Ancillary Services Deficit Charges pertaining to Embedded GNA/GNA-RE Entities, including appropriate provisions for timely recovery and settlement of such charges.***

B. Publishing of Fly Ash Generation, Utilization and Disposal Details on a Public Portal

a. During the 57th SRPC Meeting held on 17.03.2026, the issue relating to fly ash generation, utilization, disposal and publication of relevant information by generating stations was deliberated.

b. On behalf of APDISCOMs, APPCC had proposed the creation of an online Fly Ash Portal to ensure transparency by providing comprehensive information relating to ash generation, availability, dispatches, utilization, disposal methodology and the agencies lifting the ash.

c. During the deliberations, NTPC informed that the required information is available on the Central Pollution Control Board (CPCB) portal. However, it is observed that the CPCB portal is a restricted-access platform intended primarily for generating stations to upload fly ash generation and utilization data. The portal does not provide beneficiaries or other stakeholders with access to real-time information necessary for independent verification and monitoring of ash disposal activities.

d. The availability of such information is indispensable for the beneficiaries to examine the validity, prudence and reasonableness of the separate ash disposal charges being claimed by the CGSs from time to time. It is pertinent to note that none of the State Generating Stations, whether regulated under Section 62 or Section 63 of the Electricity Act, are claiming separate recovery of ash disposal charges, notwithstanding that the directions issued by the MoEF&CC are uniformly applicable to all generating stations. In the absence of transparent and verifiable data, the beneficiaries are deprived of the opportunity to independently assess and validate the necessity and regulatory justification for such additional claims.

e. APPCC therefore proposes that NTPC may develop and maintain a live, publicly accessible dashboard, either through its official website or the SRPC portal, in accordance with the provisions of the MoEF&CC Notification dated 30.01.2026.

f. The proposed portal/dashboard should, inter alia, provide comprehensive information relating to:

- Fly ash generation and utilization;
- Quantity of ash sold, auctioned and disposed;
- Tender, bidding and contract details;
- Details of agencies lifting fly ash;
- Transportation arrangements and quantities transported;
- Expenditure incurred towards ash handling, transportation and disposal;
- Revenue realized from sale/auction of fly ash;
- Work orders, invoices, payment details and other supporting documents relevant to fly ash transactions.

g. Publication of the above information in the public domain would significantly enhance transparency and accountability, enable beneficiaries and Regulatory Commissions to independently verify the prudence of the ash disposal expenditure claimed for tariff recovery, facilitate informed scrutiny during tariff proceedings and Retail Supply Tariff Order (RSTO) & FPPCA public hearings, and ensure that fly ash disposal and transportation activities are carried out in a fair, competitive and efficient manner without any scope for ambiguity or data manipulation.

h. **Proposal for Consideration by SRPC:**

APPCC hereby requests SRPC to kindly advise NTPC and other Central Generating Stations (CGSs) to publish comprehensive fly ash generation, utilization, disposal and related financial information through a live, publicly accessible portal/dashboard, with periodic updates, so as to ensure transparency, facilitate regulatory oversight and enable beneficiaries to verify the prudence of ash disposal expenditure claimed for tariff recovery.

TCC Deliberations

a) CGM (Comml), NTPC stated that the requisite data have already been furnished to the concerned authorities and that APPCC is requesting the information to be made available on the website. He further stated that, if any direction is issued by the Regulatory Commission for publication of those data in the public domain, NTPC

would comply accordingly. He added that all the details, as directed by the Commission, have already been furnished.

b) Director, APTRANSCO pointed out that the information is presently available on the CPCB portal. However, the CPCB portal is a restricted-access platform intended primarily for generating stations to upload fly ash generation and utilization data and does not provide beneficiaries or other stakeholders with access to information.

c) NTPC stated that the CPCB portal is administered by CPCB and the Ministry of Environment, Forest and Climate Change (MoEF&CC), and therefore, access to the portal would have to be sought from the concerned authorities.

d) Director, APTRANSCO requested NTPC to furnish the required information to the beneficiaries, as the auditors are seeking the relevant data. NTPC stated that the information is also being submitted to CEA and suggested that the matter may be collectively taken up with CPCB to provide access to the portal. Director, APTRANSCO requested the TCC forum to take up the matter with MoEF&CC and CPCB to give the access of the information uploaded in the website.

e) MS, SRPC suggested that all the requisite information, along with the billing details, may be furnished to the beneficiaries in accordance with the prevailing Regulatory framework. NTPC responded that all information required under the Commission's directions, including end-user certificates, the price discovery mechanism, and audited monthly statements, is being furnished along with the bills to the beneficiaries. However, access to the CPCB portal would have to be pursued separately with CPCB.

f) NTPC further assured that any information sought by the beneficiaries would be furnished, as the beneficiaries are entitled to obtain the relevant data in accordance with the applicable regulatory provisions.

g) It was added that if any further issues arise, the matter may be brought before the forum again for appropriate deliberation.

SRPC Deliberations

h) NTPC assured that data sought by the beneficiaries within the regulatory framework of CERC/CEA would be furnished. The beneficiaries may directly contact NTPC and assured that the issue would be resolved.

SRPC noted the above

C. Treatment of Carrying Cost on Revised Part Load Compensation Bills

a) As decided in the 56th SRPC Meeting held on 16.11.2025 under Agenda Item No. 28, the Chairperson, SRPC, vide letter dated 23.12.2025, had taken up the matter with the Hon'ble CERC seeking clarification/guidance regarding the applicability of carrying cost on revised Part Load Compensation (PLC) charges. Subsequently, the GoAP also addressed a letter dated 30.05.2026 to the Hon'ble CERC requesting clarification and issuance of necessary directions on the subject.

b) However, no clarification, amendment, or direction has been issued by the Hon'ble Commission till date. In view of the continuing uncertainty and the financial

implications involved, it is requested that the matter may once again be taken up with the Hon'ble CERC for early issuance of necessary clarification/guidance regarding the applicability of carrying cost on revised Part Load Compensation bills

TCC Deliberations

a) CGM (Comml), NTPC stated that the issue has been flagged before Central Commission and matter is being followed up. MS, SRPC appraised the forum regarding the interaction session proposed by CERC with various stakeholders to receive feedback on the following CERC regulations: -

   i. CERC (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022
   ii. CERC (Indian Electricity Grid Code) Regulations, 2023
   iii. CERC (Sharing of inter-state transmission charges and losses), Regulations, 2020.
   iv. CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

b) MS, SRPC informed that the matter has been included as an agenda item for the forthcoming CERC Interaction Meeting.

c) Director, APTRANSCO stated that, since the issue has already been listed for discussion, the forum may await the outcome of the meeting. He further informed that APPCC would also highlight the matter during the CERC Interaction Meeting.

13. ISSUES WITH TRANSMISSION ELEMENT OUTAGES ON ACCOUNT OF REPEATED DEFERMENT/EXTENSION OF APPROVED SHUTDOWNS FOR NHAI/INFRASTRUCTURE DIVERSION WORKS AND NEED FOR STRENGTHENING THE EXISTING SOP

a. Transmission line shutdowns required for infrastructure projects such as National Highways and other public utility works have a direct bearing on transmission system availability, inter-regional power transfer capability, outage planning and secure grid operation. Shutdowns of EHV transmission corridors are approved only after detailed operational studies considering system security, demand conditions, corridor loading, voltage profile and network redundancy. Therefore, deferment, non-utilization or extension of approved shutdowns results in loss of valuable outage opportunities, repeated system studies and operational constraints, particularly during periods of high demand

b. To facilitate infrastructure development while ensuring secure grid operation, the Ministry of Power (MoP) issued a Standard Operating Procedure (SOP) for coordination of transmission line shutdowns required for infrastructure projects. The SOP emphasizes advance planning, complete site readiness, stakeholder coordination, optimization of shutdown duration and strict adherence to approved shutdown schedules

c. The issue has been under continuous review at various forums. The chronology of major developments is summarized below

Date/Forum	Major Discussion / Communication	Outcome / Directions
02.02.2026	Meeting of Member Secretaries of RPCs under the Chairmanship of Chairperson, CEA	RPCs were advised to first take up issues with the concerned organizations at Member Secretary level and, if unresolved, escalate the matter to Member (GO&D), CEA.
12.02.2026	NLDC Letter	Expressed concern over repeated extension of planned transmission outages and advised RPCs to ensure optimization of shutdown duration and strict adherence to approved timelines.
17.02.2026	SRPC Letter to Chairman, NHAI	Matter formally taken up with NHAI highlighting the impact of repeated deferment/extension of approved shutdowns on grid security, transmission availability and coordinated outage planning.
54 TCC-57 SRPC	Forum Recommendation	Observed that delays in transmission shutdowns for infrastructure works adversely affect system availability and grid reliability. The Forum noted that the existing practice of granting deemed availability during such shutdowns may be reviewed, as it places the financial burden on consumers. It was decided that an SRPC Sub-Committee would examine suitable provisions to disallow deemed availability and place the associated liability on NHAI/Infrastructure Project Developers, thereby enhancing accountability, ensuring adherence to approved shutdown schedules, and discouraging repeated deferments or extensions.

d. The issue was further deliberated in detail in the 66th Commercial Sub-committee meeting held on 08.05.2026 and subsequently in the 238th OCC Meeting held on 11.05.2026 wherein the recommendations of the Commercial Coordination Committee (CCM) and the views of the constituents were examined. The following were concluded:

- ❖ Deemed availability may continue to be granted only for the reasonable restoration period initially approved, in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2024 and the approved SOP.
- ❖ Delays beyond the reasonable restoration period shall be examined on a case-to-case basis to determine the attributable entity before fixing liability.
- ❖ The Forum agreed that demurrage-type charges and suitable provisions for compensation of damages caused by infrastructure project developers may be considered to enhance accountability and ensure timely completion of works.

- ❖ Usage of "CBuD" portal should be envisaged and encouraged.
- ❖ STUs/Transmission Licensees were advised to strictly adhere to the provisions of the MoU, optimize shutdown duration, and ensure adequate planning and preparedness before availing shutdowns.
- ❖ SRPC had informed that the views of the constituents would be placed before the TCC/SRPC for further deliberation and onward submission to MoP/CEA. The deliberations in the CC and OCC meetings are attached as **Annexure-13A.**

e. Subsequently, NLDC, vide letter dated 18.05.2026 **(Annexure-13B)** had reiterated the need for strict adherence to approved shutdown timelines, optimization of outage duration and effective outage coordination among all stakeholders to ensure secure grid operation.

f. The concerns regarding adherence to the SOP by MoP, have continued to manifest during execution of recent transmission line diversion works. The experience of the 400 kV Jeypore–Gajuwaka D/C line diversion works for NHAI clearly demonstrates the operational implications arising out of inadequate planning and repeated extensions of approved shutdowns.

   i. The shutdown was initially sought during March 2026, coinciding with the SR peak demand period. Considering the prevailing high demand, reduction in inter-regional transfer capability, operational constraints and other system security concerns, the proposal was not agreed in the 235th OCC.

   ii. CMD, NHAI, vide letter dated 16.03.2026 (**Annexure-13C**), requested Chairperson, SRPC to facilitate the shutdown from 06.04.2026 to 27.04.2026 (22 days). However, Chairperson, SRPC, vide letter dated 24.03.2026 (**Annexure-13D**), advised deferment of the shutdown considering the anticipated summer peak demand, curtailment of transfer capability, operational constraints, concerns expressed by the States and the prevailing election period, while suggesting that the shutdown may be availed after 15.05.2026.

   iii. Thereafter, the shutdown was reconsidered in the 237th OCC and was facilitated from 15.05.2026 after detailed operational assessment. The outage was also coordinated with the shutdowns of 500 kV Talcher–Kolar HVDC, 400 kV Nellore–Thiruvalam and 400 kV Nellore–Vijayawada diversion works to optimally utilize the available outage window. The forum stipulated that ER, PGCIL should submit a detailed work plan, furnish weekly progress reports to SRPC/SRLDC and closely monitor the execution by NHAI to ensure strict adherence to the approved timelines.

   iv. Despite these conditions, ER, PGCIL, based on requests from NHAI, sought repeated extensions of the approved shutdown period through communications dated 04.06.2026, 13.06.2026, 22.06.2026 and 30.06.2026, extending the shutdown from the originally approved period up to 20.07.2026. Most extension requests were received only on the last day of the approved outage period, citing unforeseen site conditions. Such recurring requests indicate deficiencies in advance planning, site preparedness, resource mobilisation and execution management, which are contrary to the objectives of the MoP SOP.

v. A similar issue was also observed during the 400 kV Nellore–Thiruvalam shutdown, wherein approvals for the associated 110 kV & 33 kV works were not fully coordinated between TANTRANSCO and NHAI before availing the shutdown, due to which other parallel shutdowns were delayed or deferred. The forum had repeatedly emphasized that all statutory approvals, distribution-level shutdowns and site readiness should be completed before approaching the OCC for approval of transmission line shutdowns, in accordance with the provisions of the MoP SOP.

g. In view of the increasing number of infrastructure projects involving transmission line diversions, the repeated instances of deferment and extension of approved shutdowns, and the recent operational experience, the matter is placed before the Committee for consideration of the recommendations emerging from the OCC deliberations and for appropriate communication to MoP/CEA for strengthening the implementation of the existing SOP

TCC Deliberations

h. MS, SRPC briefed the forum on the recurring issue of repeated extension of approved transmission shutdowns by NHAI/Infrastructure for diversion works, which has been affecting the planning and implementation of other interlinked transmission outages. He informed that the matter had been deliberated in the Operations and Commercial Sub-Committee meetings, wherein it was agreed that deemed availability may continue only for the approved reasonable restoration period, in accordance with the prevailing regulations and SOP. Delays beyond the approved period would be examined on a case-to-case basis to identify the attributable entity before fixing liability. The proposal for introducing demurrage-type charges to improve accountability was also discussed. He further highlighted that the shutdown of the 400 kV Jeypore–Gajuwaka D/C line had been extended six times, resulting in an extension of 52 days beyond the originally approved restoration date of 05.06.2026, and requested the forum to deliberate on measures to address such recurring extensions.

i. Director, APTRANSCO suggested that suitable regulatory provisions may be evolved to discourage repeated extensions of approved shutdowns and to impose appropriate penalties for delays.

j. TNPDCL opined that, since the shutdowns are availed for infrastructure works and not for activities of the Transmission Licensee, the corresponding period should not be considered for deemed availability. It was further suggested that the transmission charges during the approved shutdown period may be borne by the concerned Infrastructure Project Developer and that any extension beyond the approved period should be dealt with separately based on system studies, with suitable penalty provisions. TNPDCL requested that the matter be taken up with the appropriate authority.

k. MS, SRPC clarified that the existing provisions are governed by the MoP SOP and the CERC Tariff Regulations, under which deemed availability is admissible for the approved shutdown period. However, any delay beyond the approved restoration period could be examined on a case-to-case basis for fixing the attributable entity, and any

further changes would require appropriate amendments within the existing regulatory framework.

l. PGCIL (SR-I) informed that the diversion works are being executed by NHAI in the larger public interest and that the existing SOP does not provide any mechanism for recovery of transmission charges from the Infrastructure Project Developer. It was further informed that PGCIL closely coordinates with NHAI and plans the shutdown schedule based on the manpower, material availability and work programme furnished by the executing agency.

m. ED, SRTS-I, PGCIL informed that all efforts are being made to restore the transmission lines within the approved shutdown period through close coordination with NHAI. However, delays continue due to site-related issues cited by NHAI, and the issue of penalties is already under consideration at higher forums.

n. CE, TGSLDC suggested that the recommendations already deliberated in the earlier forums may be forwarded to CEA/MoP for consideration to incorporate the provisions in existing SOP.

o. Chairperson, TCC suggested that the SOP may include suitable provisions to incentivise timely completion of infrastructure works and penalise delays beyond the approved shutdown period, thereby improving adherence to the approved outage schedules. CEE, KAR SLDC endorsed for the same.

p. MS, SRPC further sought the views of the members on the feasibility of introducing a nominal charge even for works completed within the approved shutdown period, with a view to enhancing commitment towards timely execution. He also suggested that, for critical transmission outages, the possibility of Transmission Licensees undertaking the diversion works in place of the Infrastructure Project Developer may be examined.

q. SRLDC reiterated the need for strengthening the existing SOP to address repeated non-adherence to approved shutdown timelines by Infrastructure Project Developers and to ensure timely completion of diversion works.

TCC Conclusion

- ***The matter may be referred to MoP/CEA for incorporating suitable provisions/modifications in the existing SOP for Infrastructure Diversion Works, including suitable accountability and penalty provisions for delays beyond the approved shutdown period.***
- ***Deemed Availability may be considered only for the approved outage/restoration period, normally limited to one or two outages per project for the same transmission line, in accordance with the approved shutdown schedule.***
- ***In case of approved extensions beyond the original shutdown period, deemed availability may continue to be extended to the Transmission Licensee in accordance with the applicable regulations; however, appropriate charges/demurrage may be levied on the Infrastructure Project Developer/Concessionaire, with the proceeds suitably utilised towards reduction of transmission charges, as per the applicable regulatory framework.***

- ***MoP/CEA may examine the feasibility of levying minimum demurrage charges even during the approved shutdown period to promote better planning, optimise outage duration and ensure timely restoration of transmission elements.***
- ***Critical transmission line diversion works may be entrusted to the concerned Transmission Licensee on a deposit-work basis, wherever feasible, to avoid repeated extensions and prolonged outages.***
- ***Repeated shutdowns of the same transmission line by different concessionaires/project developers shall be avoided through proper coordination and integrated planning before seeking outage approval.***
- ***Suitable provisions may be incorporated in the SOP to enable recovery of the cost of damages caused to transmission assets/equipment from the concerned Infrastructure Project Developer/Concessionaire.***

SRPC Deliberations

- ✓ ***Chairperson SRPC to take up the recommendations of TCC with MoP/CEA for suitable incorporation in SOP.***

14. REVIEW OF EMERGENCY RESTORATION SYSTEM (ERS) AVAILABILITY AND COMPLIANCE IN SOUTHERN REGION AS PER MOP GUIDELINES

A. Compliance of ERS in Southern Region

a) As per MoP/CEA directions, ERS readiness in SR was reviewed on 10.05.2025; states/licensees with shortfalls were advised to prioritize procurement or mutual agreements.

b) The status is being reviewed in OCC and SRPC meetings. The update as per 55th TCC Meeting is as follows:

Entity	ERS Required	ERS Available	Shortfall / Remarks
Andhra Pradesh	5	2	**Shortfall of 3.** **55th TCC:** Administrative approval accorded. Tender specifications being prepared for 1 set of ERS.
Telangana	5	1	**Shortfall of 4.** **55th TCC**: TGTRANSCO informed that 2nd ERS system is being planned. Simultaneously, exemption is being planned to be sought from CEA to reduce the requirement from 5 Nos. to 2 Nos., considering the comparatively lower seismic risk in the geographical area of Telangana.
Karnataka	4	1	**Shortfall of 3.** **55th TCC**: KPTCL informed that 1 No. of 400 kV tower available at Bangalore and 1 No. of 400 kV tower at Hubli, which may be considered as 1 ERS system.

			Tendering process initiated for 3 nos. of additional ERS set.
Kerala	2	0	**Shortfall of 2**. **55th TCC**: KSEBL informed that Board has given approval for new Make in India conditions. Re-tendering process is going on. Planned to purchase ERS in 2 years. Two nos. of sets of ERS are planned to be procured (1 ERS set = 4 towers planned)
Tamil Nadu	6	2	**Shortfall of 4.** **55th TCC**: TANTRANSCO informed that four additional ERS units are planned, including one at 765 kV level, considering future transmission expansion and upcoming 765 kV infrastructure. TANTRANSCO informed they will initiate action for 4 nos. of ERS sets shortly.
Puducherry	Mutual sharing agreement	0	**55th TCC**: PED informed that PGCIL had given consent to share for natural calamities only
PGCIL – SR-II	4	2	**Shortfall of 2** **55th TCC**: POWERGRID stated that order is placed for 5 Nos. for SR. SR-1 – 2 Nos (1 No. 765 kV set: Kadapa S/S, 1 No. 400 kV set: Ghanapur (Hyderabad) S/S) SR-2 – 3 Nos. (3 Nos of 400 kV sets, one each at Somanahalli S/S, Madurai S/S and Trichur S/S) Order placed on 06.10.2025. Delivery is expected by May 2027.
PGCIL – SR-I	5	3	**Shortfall of 2**
Kudgi TL	1	0	At least 1 ERS set is required for Kudgi TL in SR which is compatible upto 765 kV. Sterlite Invit and Kudgi TL have a binding agreement that allows Kudgi TL to deploy ERS in an emergency situation.
MTL, RSTCL, KNTL, Gadag (IndiGrid)	1	0	At least 1 ERS set is required for Indigrid in SR which is compatible upto 765 kV. **55th TCC**: Placed order for procuring ERS in SR. Expected by April 2027.
PGCIL TBCBs (VTL, PNMTL, PSITSL)	-	-	Considered in PGCIL ckm as per deliberation in 52nd TCC/55th SRPC meeting.
WKTL, Karur TL (Adani Energy	1	0	At least 1 ERS set is required for AESL in SR which is compatible upto 765 kV. **55th TCC:** 3 ERS are present on PAN India Basis. 1 ERS in NR (400 kV – 14 towers at

Solutions Limited)			Bikaner SS), 2 ERS in WR (765 kV – 18 towers in each set at Koradi SS(Nagpur) and Sami SS(Gujarat)). In case of emergency, the ERS be moved to SR in few days from Koradi SS which is in proximity.
Gadag TL (Gadag IIA) (Renew)	Mutual sharing agreement	0	**55th TCC:** ReNew (Gadag Transmission Limited) currently has access to one ERS set located at Kutch (Gujarat), compatible up to 400 kV. In addition, two more ERS sets are planned for procurement, to be stationed at Kutch/Solapur region, which can be mobilized for ReNew's assets during any emergency.

SRPC noted the above

c) The status of ERS (Voltage wise) and the details of existing ERSs available and current location is at **Annexure-14A.**

15. CRISIS MANAGEMENT PLAN (CMP - DECEMBER 2025) & DISASTER MANAGEMENT PLAN (DMP - DECEMBER 2025) MINISTRY OF POWER

a) **CEA (PSLF Division)** had issued the revised **CMP and DMP (December 2025)**. SRPC has also emphasized implementation of the **CEA SOP for Transmission System Restoration (May 2025)** in conjunction with the CMP/DMP to strengthen emergency preparedness and restoration planning.

b) Utilities were advised to align, institutionalize, and periodically update their CMP/DMP in line with MoP/CEA guidelines, conduct quarterly mock drills, update DRIPS portal details, and confirm compliance to SRPC. SRPC and SRLDC also extended capacity-building support, including an awareness programme for TGTRANSCO utilities on **14.07.2025** to facilitate effective implementation of the CMP, DMP, and SOP.

The latest status of CMP/DMP Alignment – State-wise/Central Sector is as follows:

State/Entity	SLDC / Control Center	TRANSCO	GENCO	DISCOMS
Andhra Pradesh	Both CMP & DMP for APTRANSCO (includes SLDC), along with 3 DISCOMs were submitted as per 2024. However, it would be updated as per the latest 2025 document.	Both CMP & DMP for APTRANSCO (includes SLDC), along with 3 DISCOMs were submitted as per 2024. However, it would be updated as per the latest 2025 document.	**55th TCC: Dr NTTPS(VTPS) station document updated as per CMP/DMP 2025 document.** **RTPP, SDSTPS stations are in the process of preparation of their CMP/DMP documents.**	Both CMP & DMP for APTRANSCO (includes SLDC), along with 3 DISCOMs were submitted as per 2024. However, it would be updated as per the latest 2025 document.
Karnataka	BESCOM is preparing for all DISCOMs/SLDC/ TRANSCO except for KPCL. All the CMP/DMP were furnished to Higher Management for approval. BESCOM was requested to incorporate the new changes as per the 2025 guidelines in the document put up for management approval.	BESCOM is preparing for all DISCOMs/ SLDC/ TRANSCO except for KPCL. All the CMP/DMP were furnished to Higher Management for approval. BESCOM was requested to incorporate the new changes as per the 2025 guidelines in the document put up for management approval.	CMP/DMP documents as per 2024 guidelines were approved and ready. The modification wrt 2025 guidelines are being carried out.	BESCOM is preparing for all DISCOMs/SLDC/ TRANSCO except for KPCL. All the CMP/DMP were furnished to Higher Management for approval. BESCOM was requested to incorporate the new changes as per the 2025 guidelines in the document put up for management approval.
Kerala	CMP & DMP compiled across all wings (Transco, Genco, Discom) and formulation of SDMG submitted to Govt. After the formation of the new government, the matter will be followed up.			
Tamil Nadu	Documents are prepared. After internal deliberations, would put up to competent authority for approval	Documents are prepared. After internal deliberations, would put up to competent authority for approval	• NCTPS St-I: have updated documents wrt CMP/DMP 2024(letter dated 16.02.2026). • NCTPS Stage II documents wrt CMP/DMP 2024 were furnished on 02.03.2026. • MTPS St-I: Have updated document wrt DMP 2024(letter dated 09.02.2026). • MTPS St-II : have updated document wrt DMP 2024(letter dated 31.01.2026). GENCO: Received documents from all Generating Stations	Documents are prepared. After internal deliberations, would put up to competent authority for approval

			including Hydro and in the process of compiling stage as per latest CEA 2025 document and soon would be submitted to management for approval.	
Telangana	**55th TCC:** SLDC updated in line with CEA CMP/DMP-2025	TGTRANSCO is yet to prepare CMP/DMP documents **55th TCC:** Under process	**55th TCC**: All TGGENCO stations updated in line with 2025 guidelines, expect Yadadri TPS	TGDISCOMs are yet to prepare CMP/DMP documents **55th TCC :** Under process
PGCIL (SR-I/SR-II)	**56th SRPC:** CMP/DMP documents aligned with MoP guidelines.			
NTPC	**238th OCC:** CMP/DMP documents aligned with MoP guidelines.			
NPCIL	**56th SRPC:** CMP/DMP already in place.			
NLCIL	**238th OCC:** NLCIL stated that the CMP/DMP documents are under preparation. **55th TCC Will be finalized within 15 days.**			
NTPL	**57th SRPC:** Under Preparation, would complete at the earliest.			

Conclusion

- ***All the utilities to align the CMP and DMP documents in line with CEA (PSLF Division) issued revised documents in December 2025***

SRPC noted the above

16. COMMITTEE TO RECOMMEND FEASIBLE METHOD OF IMPLEMENTATION OF PRE ISLANDING LOAD REDUCTION DYNAMICALLY THROUGH SCADA

a) In the 135th PCSC meeting held on 06.10.2025, it was proposed to constitute a committee to recommend feasible way(s) of implementing pre-islanding load reduction in the Electrical Islands in SR to maintain G/L ratio of the Islands to a desired level for sustenance of the island, if formed, in view of the wide variations observed in generation of the participating generators.

b) First, second and third committee meeting was held on 26.11.2025, 11.02.2026 and 05.05.2026.

c) Physical site visit to TATA Power Trombay, LDC was held on 29.05.2026 to gain practical understanding on implementation of Mumbai IS.

d) Based on the deliberations held in the Committee meetings and the observations made during the site visit, the Committee finalized its recommendations. Accordingly, the Final Report of the Committee on "*Implementation Methodology for Pre-Islanding Load Reduction*" was issued on 06.07.2026 and is enclosed as **Annexure-16A**.

e) As per the Annual Review of Southern Region Islanding Schemes 2025-26, the following quantum of load has been proposed for pre-islanding load reduction under the respective islanding schemes of the Southern Region:

S. No.	Islanding Scheme	Pre-Islanding Load Reduction Quantum (MW)
1	Chennai Islanding Scheme	500
2	Bangalore Islanding Scheme	1000
3	Vijayawada Islanding Scheme	600
4	Visakhapatnam Islanding Scheme	700
5	Hyderabad Islanding Scheme	1000
6	Neyveli Islanding scheme*	NIL*
7	Kudankulam Islanding scheme*	NIL*

* The review of Neyveli and Kudankulam Islanding Schemes is yet to be completed due to issues in submission of validated SCADA data by TNSLDC and KERSLDC to SRLDC. After receipt of the validated data from SRLDC, the pre-islanding load reduction quantum for Neyveli and Kudankulam Islanding Schemes will be proposed accordingly.

- ***Concerned utilities are requested to take necessary action for implementation of pre-islanding load reduction dynamically, in accordance with the methodology finalized by the Committee and the load reduction quantum proposed for the respective islanding schemes.***

TCC deliberations

a) Forum noted that, during the review of the existing islanding schemes in the Southern Region, it was observed that the Load–Generation Balance (LGB) becomes critical during solar hours, as the system experiences relatively higher load while the availability of firm generation is comparatively lower. Under such a scenario, in the event of an islanding condition, tripping of RE generation alone may not be adequate to maintain the required Load–Generation Balance, and there could be a significant generation–load mismatch within the island.

b) In view of the above and considering the need to maintain a stable Load–Generation Balance during critical grid disturbances, a Committee was constituted to examine and evolve a feasible methodology for dynamic pre-islanding load reduction through SCADA. The objective was to ensure that an appropriate quantum of load could be identified and reduced prior to or during the formation of the island, based on the prevailing system conditions, so as to improve the reliability and stability of the islanding scheme.

c) The Committee also studied the islanding scheme implemented in Mumbai and visited the Mumbai M/s Tata system to understand its operational methodology. It was noted that the Mumbai islanding scheme incorporates certain dynamic aspects, wherein the pre-incident Load–Generation Balance is considered for identifying suitable loads for tripping. Based on the prevailing system condition, selected loads can subsequently be tripped locally through Under Frequency Relay (UFR) operation to maintain the required balance within the island.

d) Based on the observations of the Committee and the assessment of the prevailing Load–Generation Balance in the Southern Region, it was considered necessary to incorporate an appropriate **pre-islanding load reduction quantum** in the islanding schemes of the Southern Region. Accordingly, the islands in the Southern Region were advised to provide/consider the pre-islanding load reduction quantum as indicated above, with a view to ensuring adequate Load–Generation Balance and improving the resilience of the islanding schemes during critical grid disturbances.

e) TGTRANSCO informed that they are in the process of doing a trial operation to control the loads of Manikonda station from SLDC as a part of pre-islanding load control. The feedback on the trial operation would be forwarded to the SRPCs & RLDC as a part of pre-islanding load control.

f) APTRANSCO, TANTRANSCO, KPTCL and KSEBL informed that preparations are currently underway for the implementation; however, concurred that the implementation will be carried out using the new SCADA system.

SRPC noted the above

17. WORKFORCE ADEQUACY GUIDELINES FOR LOAD DISPATCH CENTERS AND GUIDELINES FOR DEPUTATION OF WORKSPACE FROM SLDCS TO GRID - INDIA FOR FIXED TERMS

A. Work Adequacy Guidelines

a) The Ministry of Power (MoP) vide communication dated **30.10.2024** issued:

i. **Workforce Adequacy Guidelines** for Load Despatch Centres (LDCs), aimed at benchmarking manpower adequacy for SLDCs, RLDCs, and NLDC.

ii. **Guidelines for Deputation of Workforce** from SLDCs to Grid-India, encouraging fixed-term collaborative deputations to promote capacity building and cross-functional exposure.

b) The Ministry of Power, vide letter dated 25.11.2024, directed States/UTs to identify staffing gaps in their SLDCs and implement a phased recruitment plan, while ensuring mandatory training and certification of all system operators as per national standards. The need for urgent compliance with these Workforce Adequacy Guidelines was emphasized by the Hon'ble Minister during the Power Ministers' Conference on 12.11.2024 and acknowledged by all States/UTs.

c) The indicative **staffing norms** as per the Guidelines are:

LDCs- Workforce Staffing Norms					
	NLDC	**RLDC**	**Large SLDC**	**Medium SLDC**	**Emerging SLDC**
Grand-Total	**153**	**138**	**144**	**103**	**62**

Function-wise workforce allocation is at **Annexure-17A.**

d) Status of staffing as per **55th TCC meeting** is given below:

SLDC	Norm	Sanctioned	Present	Status/ Latest Updates
AP	144	96	**68 (Technical executives = 61, Non-executive (Accounts) =7)** **Rest will be recruited at the Assistant Engineer**	APERC approval received. **55th TCC:** 200 nos. of AE's will be recruited by October 2026. Some of them will be posted in SLDC.
KAR	144	99	**91** **As per the latest guidelines, the 60 Nos staff from field (communication), will be excluded.**	**57th SRPC:** KPTCL informed that the proposal was pending with the Government of Karnataka for approval of 144 posts and informed that restructuring was parallely progressing. **55th TCC:** Approval is received from Finance Department. The proposal (along with ring fencing) is put up for government approval.
KER	103		**Technical executives = 48,** **Non executives = 19** **(Total = 67)**	• Reorganization and restructuring plan are ongoing; separate arrangements will be made for including more workforce in LD. Inclusion in the revised proposal is planned. • Total sanctioned strength remains unchanged; however, as an urgent requirement, they have sought approval from Higher Management for six additional posts on a short-term basis (2 Executive Engineers, 2 Assistant Executive Engineers, and 2 Assistant Engineers). **55th TCC:** KSEBL stated that 6 posts were approved as part of next transfer and posting and also stated that restructuring was progressing in good pace and expected to be completed by September 2026 end.
TN	144	57	**57**	**57th SRPC:** TANTRANSCO had informed that in principle approval for 49 posts were taken and 18 posts were under administrative approval. **55th TCC:** TANTRANSCO stated that new proposal will be put up to management for approval to fill up the posts.
TG	144	87	**96 (Technical Executives = 69, Non-Technical Executive =27)**	Recruitment ongoing. Technical Executives = 69, Non-technical Executive (Supervisors and workmen)=27.

				Additional Technical Executives plan: June 26 end = 34, Dec 26 = 10, June 27 = 10. Non-Technical Executive strength is planned to be reduced to 20 by June 2027. **57th SRPC:** TGTRANSCO informed that as per the norms the number of personnel shall be 144. The sanctioned posts are 59 and the strength of Executive working were 71. They also informed that the Management had approved 120 posts, as per the CEA guidelines, for Executives other than finance and HR to be inducted by June 2027. Balance 24 would be for the HR and finance wings, with a plan to be shifted from the existing posts in TGTRANSCO. **55th TCC:** The strength of Executives working are 69. Additional personnel are planned to be recruited in upcoming years.
PED	62		**Technical executive = 9,** **Non-executive = 3**	It is proposed to fill up 32 executives earmarked for SLDC by December 2027. (PED stated that the proposal would be submitted to the Government by February/March 2026). **238th OCC:** PED stated that they have requested for 62 nos. of posts and the Government has sought some clarification, the same has been furnished by PED. It might also go upto MoP/MHA for clearance. Presently 12 nos. of posts are filled up **55th TCC:** In principle Government approval is obtained. Government has sought some clarification, the same has been furnished by PED. MHA approval is also required. It may take around 3 to 4 months.

SRPC noted the above

e) Given the presence of Higher Management, SRPC had requested that the matter be accorded due priority and necessary instructions issued to strengthen the SLDC workforce in line with the notified norms, as adequate manpower is essential for the efficient operation of these specialized functions.

f) CERC in its Order dated 05.10.2025 in 9/SM/2024 has suggested

With the round-the-clock system operation, the State Load Despatch Centers are expected to contribute to Market Operation, Communication, IT services, cyber security and other establishment services to carry out the various functions with a suitably skilled workforce. There has been a dynamic shift in the power sector with the large-scale integration of renewable sources, and it brings new challenges. Furthermore, there should be a sufficient number of power system operators so that the grid can be operated safely and efficiently. Keeping in view of above facts, urgent action is required to ensure the availability of adequate number of manpower and for this SLDCs need to take up the matter with their management to provide the manpower as per their current sanctioned strength and also to approach their Management/ respective State Regulatory Commissions for approval of additional manpower in terms of MoP's Workforce Adequacy Guidelines for Load Despatch Centres. Addressing these shortfalls is essential for ensuring the smooth operation of SLDCs and effective monitoring, compliance and grid management.

SLDCs may also work towards framing a separate HR Management and Development Policy, which should be aimed at structuring the movement of officers in specialised functions without disrupting operations and ensuring smooth staffing, structured job rotation, minimum tenure and continuous skill development of personnel. SLDCs also need to work towards improving the working environment and upgrading their infrastructure. In this regard, the HR policy framed by UPSLDC may be referred to by SLDCs.

SRPC/TCC noted the above

B. Deputation of workspace from SLDCs to Grid - India for fixed terms

a) Exchange program between SRLDC & SLDCs and between SLDCs if any may be informed.

TCC Deliberations

a) ED, SRLDC stated that the requirement for knowledge-exchange programmes had been taken up with all SLDCs. The concerned SLDCs may communicate to SRLDC the specific modules/topics for which knowledge-sharing programmes are required, based on which SRLDC would coordinate and organise suitable programmes in consultation with the respective SLDCs.
b) MS, SRPC endorsed the above and stated that the SLDCs may identify and communicate the specific areas requiring knowledge sharing, following which SRLDC and the respective SLDCs may mutually coordinate and organise the programmes.

Conclusion

- ***The SLDCs to communicate their identified knowledge-sharing modules/topics to SRLDC, and SRLDC shall coordinate with the respective SLDCs to organise suitable knowledge-exchange programmes.***

SRPC noted the above

***C.* Training and Certification of SLDC staff**

CERC in the Order dated 05.10.2025 in 9/SM/2024 has suggested:

The continuous training and certification for SLDC staff ensure that an adequate workforce is trained and certified annually, improving operational preparedness and technical competence of the SLDCs. It is suggested that the trained staff should ideally not be shifted from the SLDCs,

and to attract the staff for working in SLDCs, incentive provisions can be incorporated for the certified staff under the Fee and Charges of the SLDCs.

RLDCs are directed to conduct structured capacity-building programs in collaboration with NLDC to equip SLDC personnel with the required technical skills.

18. REVIEW OF TRANSMISSION LINE TRIPPINGS DURING THUNDERSTORM/ADVERSE WEATHER CONDITIONS AND NEED FOR ENHANCED SITUATIONAL AWARENESS OF STRESSED CORRIDORS

a) SRLDC, vide email dated 01.06.2026(**Annexure-18A)**, and NLDC vide letter dated 02.06.2026**(Annexure-18B)** had highlighted the increasing instances of transmission line outages and tower collapses across the Southern Region due to adverse weather conditions, resulting in generation loss, transmission constraints, and reduced corridor availability. The issue was deliberated in the 240th OCC, wherein concerned transmission licensees were advised to expedite restoration, furnish root cause analysis, and implement preventive measures to improve transmission system resilience.

Transmission Element	Cause of Outage	Brief Analysis / System Impact
400 kV Kaiga–Guttur D/c Line (KPTCL)	Collapse of five towers and partial damage to three towers due to heavy rainfall and gusty winds (14.05.2026).	The prolonged outage of this critical evacuation corridor made Kaiga Nuclear Generating Station largely dependent on the Kaiga–Narendra corridor, reducing N-1 security and increasing operational risk during the monsoon and high hydro/wind generation period.
240th OCC A joint site inspection involving representatives from CEA, SRPC, KPTCL and CPRI was carried out on 27.05.2026. In the 239th OCC meeting, KPTCL informed that restoration activities had commenced on 05.06.2026 and, based on the present schedule, restoration was expected by 26th –27th July 2026 **55th TCC update: KPTCL informed that due to the rainfall, the restoration activities were further delayed. Expected revival time is 16.08.2026.**		
220 kV Veena Energy–Gadag PS & Green Infra–Gadag PS Lines	Collapse of five towers and partial damage to one tower due to adverse weather (17.05.2026).	The outage constrained evacuation of around 230 MW of renewable generation, highlighting the vulnerability of dedicated RE evacuation corridors and the importance of expeditious restoration.
240th OCC: A joint site visit involving representatives from CEA, SRPC, KPTCL, CPRI, Veena Energy and SEMCORP Green Infra Ltd. was conducted on 26.05.2026. Veena Energy, vide communication dated 08.06.2026, had informed that restoration of the affected transmission line was expected by 25.06.2026. Subsequently, it is observed that the circuits have been restored on permanent towers on 28.06.2026.		
400 kV Gadag–Koppal D/c Line	Initial tower collapse due to heavy rainfall, gusty winds and thunderstorms; additional	The outage reduced network redundancy in the Gadag–Koppal RE corridor and increased dependence

	towers collapsed during restoration owing to conductor back-span mechanical effects, resulting in collapse of 15 towers.	on alternate corridors. Since the line was recently commissioned, detailed technical investigation is warranted.
Gadag Transmission Limited informed that restoration of the affected transmission line was expected by 30.07.2026. **55th TCC: The tower collapse happened on 23.05.2026 & the latest restoration time is noted as 31.08.2026**		
400 kV Nagapattinam–Trichy D/c Line (POWERGRID)	Collapse of three towers and partial damage to five towers due to heavy winds and adverse weather (31.05.2026).	The outage weakened the Trichy transmission network, leading to low-voltage conditions that were mitigated through nearby STATCOM support, emphasizing the importance of resilient transmission infrastructure and timely restoration.
A joint site inspection involving representatives from CEA, SRPC, CPRI and Powergrid was carried out on 08.06.2026. Subsequently, SR-II POWERGRID informed that 400 kV Trichy - Nagapattinam line -1 has been charged through ERS towers on 14.06.2026 at 11:35 hours. Subsequently, SR-II POWERGRID informed that 400 kV Trichy - Nagapattinam line -1 and 2 has been charged through original/permanent towers on 28.06.2026 at 19:32 and 19:41 hours, respectively.		
400 kV Kudgi–Kolhapur & 765 kV Warora–Warangal / Warangal–Chilakaluripeta Lines	Transient phase-to-ground/phase-to-phase faults (R-N, R-B, B-N and R-G faults), likely associated with adverse weather conditions.	Repeated trippings temporarily reduced Southern Region import/export transfer capability and highlighted the need for detailed review of protection performance, line health, and weather resilience of critical EHV corridors.

TCC Conclusion

- ***The concerned transmission licensees expedite restoration of the affected transmission elements, submit detailed Root Cause Analysis (RCA) reports for repeated trippings/failures, and implement effective preventive and predictive maintenance measures to enhance the resilience and reliability of the transmission system***

SRPC noted the above

19. TRANSMISSION PLANS RELATED TO PRODUCTION OF GREEN HYDROGEN/ GREEN AMMONIA IN THE COUNTRY

a) As per directions of CEA in the meeting held on 07th March, 2023, for the plans related to production of Green Hydrogen/ Green Ammonia in the country, requirement of electricity (in MU and MW) indicating the breakup of MW capacity to be met from Inter-State Transmission Network and that to be met from Intra-State Transmission Network.

b) In the 55th TCC/58th SRPC Meeting the following status were noted:

State / Entity	Status / Developments	Remarks / Observations	54th TCC update	55th TCC Deliberations
Andhra Pradesh	Three locations identified: Vishakhapatnam, Kakinada, Machilipatnam.	No developers have submitted registered applications.	No application received.	APTRANSCO informed that no applications have been received so far for intra-State **Green Hydrogen** connectivity. However, an application for **80 MW Green Ammonia** has been received from Greenko seeking connectivity at the 132 kV level. APTRANSCO further informed that Nagarjuna Fertilizers and Chemicals Limited (NFCL), Kakinada, has been acquired by Greenko, and the proposed Green Ammonia project is planned to be developed at the existing NFCL premises
Karnataka	No formal applications received.	KPTCL mentioned 765 kV network at Yalwar, Chikkanayakahalli, Mangalore may be planned at ISTS level by CTUIL and considered under National Component of ISTS. Developers expressed interest via MoUs at Global Investors Meet. Concerns raised on inadequate evacuation, especially across Western Ghats. Only major corridor available, UPCL–Hassan line has limited capacity. Draft Green Hydrogen Policy under consideration by Karnataka Government. Parallel planning and transmission augmentation needed.		No Application received.
Kerala	Expression of Interest invited; 11 responses received.	Technical evaluation in process. Brahmapuram plant available.		KSEBL informed that a site at Brahmapuram, owned by KSEBL, has been identified for development of a Green Hydrogen project. KSEBL further informed that the location has significant potential and that they intend to collaborate with ANERT (Agency for New and Renewable Energy Research and Technology) and other stakeholders for

				implementation of the project.
Tamil Nadu	1. MoU with **ACME Green Hydrogen & Chemicals Pvt Ltd** on 01.07.2022 (4950 MW solar in 2 phases). 2. MoU with **Greenko Group** on 29.03.2023. 3. MoU with **Gentari Hydrogen** on 02.06.2023. 4. **SEMCORP** expressed interest for 1000 MW in Tuticorin.	M/s ACME, through a letter dated 16.07.2024, proposed to shift from STU to CTU connectivity citing EU RED-II regulations that mandate renewable energy consumption within one hour of generation. TNPDCL objected to this proposal, referring to the Electricity Act 2003, which permits CTU to transmit power only to licensees and not directly to consumers. Studies also confirmed that no network upgradation was required at Tuticorin. In subsequent meetings, TNGECL informed that ACME and Gentari Hydrogen continue to show interest, and SEMCORP has commenced groundwork with its power requirement details to be communicated later. It was clarified that these developers are seeking CTUIL connectivity. CTUIL noted that SEMCORP's earlier application was closed due to non-submission of a Bank Guarantee, though the developer may reapply. States and CTU were advised to coordinate with SEMCORP to confirm their requirements.		**TNGECL** informed that discussions with the Management regarding the proposed Green Hydrogen projects are in progress and that the updated status would be communicated after finalization
Telangana	Government Policy notified.	Projected Green Hydrogen production: 18 KTPA by 2034, 550 KTPA by 2035. Exact power demand assessment under preparation; locations being explored. SRPC to be informed upon finalization.	Govt. of Telangana notified Telangana Clean and Green Energy Policy on 11.01.2025.	**TGTRANSCO** informed that the status remains unchanged. It was reiterated that the Government of Telangana has notified the Telangana Clean and Green Energy Policy, and assessment of the power requirement and identification of suitable locations are in progress.
NTPC	NTPC Green Energy Limited signed JV with NREDCAP on 21.11.2024.	Plans: 25 GW RE generation, 10 GW PSP at Pudimadaka, including Green Hydrogen Hub. Foundation stone laid by PM. Contract awarded for master planning; report expected May 2025.		

TCC deliberations

1. NTPC informed that the earlier 2.5 GW GNA (Renewable Energy) connectivity granted at Pendurthi Pooling Station was withdrawn and the connectivity application was closed due to severe Right of Way (RoW) constraints, as the CTUIL-identified substation was located approximately 50 km away from the proposed Green Hydrogen Hub.

NTPC further informed that, in consultation with CEA, a fresh application for 1 GW GNA (Renewable Energy) connectivity from the existing 400 kV NTPC Simhadri Substation was submitted to CTUIL in June 2026 to meet the initial requirements of the Green Hydrogen Hub, and the application is yet to be considered by the CTUIL in CMETS.

It was also informed that several demonstration projects, including 10 TPD Ethanol, 6 TPD Sustainable Aviation Fuel (SAF), and 150 TPD Urea, are under various stages of implementation at the Pudimadaka Green Hydrogen Hub. Further, common enabling infrastructure such as the Jetty, GIS Substation, and Desalination Plant are under various stages of tendering.

2. CTUIL informed that the earlier 2.5 GW connectivity granted to NTPC was revoked on 05.05.2026 due to non-submission of the requisite Bank Guarantee.

Fresh 1 GW connectivity application is presently under scrutiny and, upon completion of scrutiny, would be placed before the CMETS for consideration.

c) The following is the updated status of ISTS GH_2/GNH_3 projects as noted in **55th TCC Meeting**:

Sl. No.	Applicant	Location	Connectivity Quantum (MW)	GNARE Quantum (MW)		Connectivity sought from
				Within Region	Outside Region	
1	AM Green Ammonia (India) Pvt. Ltd.	Kakinada, AP	~~2000~~ **750**	~~2000~~ **750**	0	~~30.04.2027~~ **29.12.2028**
2	Green Infra Renewable Energy Farms Pvt. Ltd.	Tuticorin, TN	800	5	795	23.12.2030 (revoked on 05.05.2026 due to non submission of BG's)
3	Jiribam Solar Power Private Limited	Tuticorin, Tamil Nadu	100		100 (Out side Region)	31.12.2030

55th TCC Deliberations:

1. CTUIL informed that the bidding process for the transmission system associated with the Tuticorin Green Hydrogen (3000 MW) project is presently on hold. It was further informed that an additional 100 MW Green Hydrogen connectivity application at Tuticorin has been received from Jiribam Solar Power Private Limited during April 2026.

   The transmission system for the Kakinada Green Hydrogen Phase-I (3000 MW) project is under implementation by POWERGRID through the Tariff Based Competitive Bidding (TBCB) route with an implementation schedule of 30 months. It was informed that the Special Purpose Vehicle (SPV) was transferred on 29.06.2026, and accordingly the Scheduled Commercial Operation Date (SCOD) is 29.12.2028.
2. Greenko informed that, for the AM Green Ammonia project at Kakinada, connectivity for 750 MW has been granted for Stage-I, and the project is being developed in a phased manner. It was further informed that connectivity applications for Stage-II

	(1300 MW including stage -I) and Stage-III (2000 MW cumulative) would be submitted subsequently. 3. CTUIL informed that connectivity applications for Stage-II and Stage-III of the AM Green Ammonia project have not yet been received. Greenko confirmed that the applications are under preparation and would be submitted in due course.					
4	Green Hydrogen / Green Ammonia/Data Center projects in Vizag area	Andhra Pradesh (Phase-I)				
	Discussed and agreed in the 32nd NCT meeting held on 12.08.2025 with 30 months implementation schedule. **55th TCC Deliberations: -** 1. CTUIL further informed that the transmission system associated with the Pendurthy Green Hydrogen Project has been finalized through the bidding process. It was informed that the SPV is expected to be transferred during July/August 2026, with an implementation period of 30 months from the date of SPV transfer. Accordingly, the tentative Scheduled Commercial Operation Date (SCOD) is January 2029. 2. Pendurthy has been identified as a common hub for Green Hydrogen as well as Data Centre loads, considering the anticipated growth of both sectors in the region.					

SRPC noted the above

20. STATUS OF NEW THERMAL PROJECTS OF CENTRAL /STATE SECTOR

20.1. The status updates as discussed in the 55th TCC/58th SRPC meetings is as follows:

Sl No	Name of the Entity	Located in	Capacity in MW	Commissioning Schedule / Remarks
1	**KKNPP** **Unit 3 & 4 (NPCIL)**	TN	2x1000	**55th TCC:** Due to the present geo-political conditions, the expected COD is postponed to Unit 3: December 2027 Unit 4: December 2028
	Allocation of Power as per MOP letter dated 13.07.2026 is as follows: Andhra Pradesh: 226.69 MW (11.33%) Karnataka: 256.01 MW (12.80%) Puducherry: 9.79 MW (0.49%) Tamil Nadu (Home State): 1507.51 (75.63%) PCKL raised a concern regarding the reduction in allocation to 256.01 MW against the requested quantum of 442 MW. MS, SRPC informed that the allocation is			

				decided by MoP and suggested PCKL to approach MoP for appropriate redressal of the matter. **58th SRPC:** NPCIL raised a query on whether CTUIL would conduct system studies for the revised/new allocation. CTUIL informed that the evacuation system for the allocation had already been identified as part of the ISTS network. TANTRANSCO was requested to confirm whether the STU network would be capable of absorbing the increased allocation from 1000 MW to 1507.51 MW. TANTRANSCO assured the forum that the STU network would be suitably prepared to facilitate the increased allocation. The forum proposed that the matter be examined in detail during the next Joint Study Meeting, including assessment of the adequacy of the STU network and any additional system strengthening requirements.
2	**BHAVINI**	TN	1x500	**55th TCC:** December 2026 (as per information available with PCKL)
3	**North Chennai Stage III**	TN	1x800	**55th TCC:** COD declared on 24.01.2026.
4	**Ennore SEZ STPP** **(North Chennai Stg IV)**	TN	2x660	**55th TCC:** Expected date of commissioning for Unit 1: August 2027 Unit 2: October 2027
5	**Ennore TPS Exp.**	TN	1x660	**55th TCC:** ETPS Expansion project to be established on "as is where is basis condition" under DBFOO model through tariff based competitive bidding, approval obtained from Hon'ble TNERC and Tender opening is 28.07.2026. **58th SRPC:** The tender opening date is extended to 20.08.2026
6	**Uppur TPS**	TN	2x800	**55th TCC:** Decision is taken that Uppur TPS will be taken up in same location. **58th SRPC:** Under discussion to revive the project. Earlier the project was stopped while in construction stage.
7	**Udangudi Stage I**	TN	2x660	**55th TCC:**

				Unit 1: The Commissioning activities were started on 20.07.2026. COD is expected by August 2026. Unit 2: COD is expected by December 2026. **58th SRPC:** Unit 1: Full load was achieved on 08.06.2026. The trial operation had started and as per contractual obligations, the unit needs to operate at full load for 30 days. 72 hour trial run for achieving COD was started on 28.07.2026
8	**TGGENCO-** **Damaracherla (Yadadri)**	TG	5x800	**58th SRPC: (Unit1-4 COD over)** Unit 5: Steam blowing was in progress and was expected to be completed by 29.07.2026, followed by approximately 20 days for normalization. First-time synchronization is planned by the end of August 2026. Thereafter, the COD process is expected to commence by the end of September 2026, with COD expected by the first week **of October 2026**.
9	**NLCIL,** **Proposed pithead project Phase-I at Talabira**	Odisha	3x800	First unit will be commissioned in 2029–30, with the remaining units in 2030–31. **55th TCC:** Foundation works of Unit 1 are in progress. Boiler material supply started and erection works will start soon. Financial Progress: 14.1% Physical Progress: 4.7% Total Engineering: 15.9% **58th SRPC** NLCIL stated that the progress of the project has been particularly affected by issues related to land acquisition and the availability of borrowed soil. In this regard, the State Government, on 27.07.2026, has accorded permission for transportation of borrowed soil from NLCIL mines to the project site. The issue of land acquisition is also being pursued with the State Government as well as the concerned authorities. NLCIL stated that although the overall progress has been slow, the resolution of the borrowed soil issue is expected to facilitate acceleration of project activities. NLCIL further

		informed that BHEL is also expected to augment its efforts towards expediting the project execution.		
10	NLCIL TPS-II, 2nd Expansion	Tamil Nadu	2x500	**55th TCC:** The EPC tender is scheduled to be opened on 15.09.2026. Approval for floating the tender for modification of the Environmental Clearance (EC) is presently under circulation. The Letter of Award (LOA) is expected to be issued by December 2026. The project is targeted for completion by **2031**. **58th SRPC:** NLCIL stated that the bid submission is scheduled by 26.09.2026. BHEL had sought extension of the bid submission date on multiple occasions, which was accommodated by NLCIL. However, considering BHEL's present order book position, BHEL has requested an extension of the project schedule. Discussions in this regard have been concluded, and based on the outcome, NLCIL is expected to issue the necessary amendment. BHEL is expected to submit its bid in September 2026. NLCIL further stated that, upon receipt of the bid, the project is expected to be awarded within approximately two months, i.e., within the current financial year.

b) SRLDC vide mail dated 09.07.2026 (*Refer Annexure-5A*) had stated that In the Southern Region, approximately 8 GW of new thermal generation capacity is expected to be commissioned in the coming years.
All the above generating stations fall under the operational purview of the respective State Load Despatch Centres (SLDCs). In this regard, SLDCs are requested to ensure strict compliance with the relevant provisions of IEGC 2023 prior to issuance of trial run certificate or declaration of Commercial Operation Date (CoD).

IEGC 2023 clause (22)
Quote
"*Trial Run of the Thermal Generating Unit shall be carried out in accordance with the following provisions:*

(a) A thermal generating unit shall be in continuous operation at MCR for seventy-two (72) hours on designated fuel: Provided that:

(i) short interruption or load reduction shall be permissible with the corresponding increase in duration of the test;

(ii) interruption or partial loading may be allowed with the condition that the average load during the duration of the trial run shall not be less than MCR, excluding the period of interruption but including the corresponding extended period;

(iii) cumulative interruption of more than four (4) hours shall call for a repeat of trial run".

Unquote

As per IEGC clause 24

Quote

"*(2) All thermal generating stations having a capacity of more than 200 MW and hydro generating stations having a capacity of more than 25 MW shall submit documents confirming the enablement of automatic operation of the plant from the appropriate load despatch centre by integrating the controls and tele-metering features of their system into the automatic generation control in accordance with the CEA Technical Standards for Construction and the CEA Technical Standards for Connectivity*

(3) Documents and Tests Required for Thermal (coal/lignite) Generating Stations:

(a) The generating company shall submit the following OEM documents, namely

(i) start-up curve for boiler and turbine including starting time of unit in cold, warm and hot conditions,

(ii) capability curve of generator,

(iii) design ramp rate of boiler and turbine.

(b) The following tests shall be performed:

(i) Operation at a load of fifty-five (55) percent of MCR as per the CEA Technical Standards for Construction for a sustained period of four (4) hours.

(ii) Ramp-up from fifty-five (55) percent of MCR to MCR at a ramp rate of at least one (1) percent of MCR per minute, in one step or two steps (with stabilization 54 period of 30 minutes between two steps), and sustained operation at MCR for one (1) hour.

(iii) Demonstrate overload capability with the valve wide open as per the CEA Technical Standards for Construction and sustained operation at that level for at least five (5) minutes.

(iv) Ramp-down from MCR to fifty-five (55) percent of MCR at a ramp rate of at least one (1) percent of MCR per minute, in one or two steps (with stabilization period of 30 minutes between two steps).

(v) Primary response through injecting a frequency test signal with a step change of ± 0.1 Hz at 55%, 60%, 75% and 100% load.

(vi) Reactive power capability as per the generator capability curve as provided by OEM considering over-excitation and under-excitation limiter settings and prevailing grid condition."

Unquote

c) The above matter was discussed during the 233rd OCC meeting, wherein the forum emphasized that all States and generating companies (Gencos) should take note that the applicable FTE&I/FTC requirements shall be communicated to the Original Equipment Manufacturer (OEM) well in advance. Further, the generator shall ensure that all necessary tests are completed prior to the Date of Commercial Operation (CoD).

d) Further periodic testing needs to be carried out on power system elements as per IEGC 2023 clause-40 for ascertaining the correctness of mathematical models used for simulation studies as well as ensuring desired performance during an event in the system.

- **SLDCs/States are requested to furnish the existing practices being followed for the First Time Charging/Energization and Integration (FTC/FTE&I) of recently commissioned generating units/plants, along with the status of compliance with the provisions of the IEGC 2023.**

TCC Deliberations

e) SRLDC stated that approximately 8 GW of new thermal generation capacity is expected to be commissioned in the Southern Region in the coming years. It was noted that these generating stations would fall under the operational purview of the respective State Load Despatch Centres (SLDCs). In view of the significant quantum of new generation being integrated into the grid, SRLDC emphasized the need for advance preparedness and strict compliance with the applicable provisions of IEGC, 2023, CEA regulations, CERC regulations and other relevant grid connectivity and operational requirements.

f) In this regard, the following important requirements were highlighted:

i. **Validation and submission of simulation models:**

❖ The generating stations shall ensure availability and validation of the required PSSE and PSCAD models. The validated models shall be suitable for integration into the All-India base case and shall accurately represent the dynamic and steady-state behaviour of the generating units and associated systems. Timely submission and validation of these models is essential for carrying out system studies and assessing the impact of the new generation on grid security and stability.

ii. **Compliance with FTC procedure:**

❖ The applicable First Time Charging (FTC) procedure shall be followed for the generating stations. In cases where the concerned SERC has not prescribed a specific FTC procedure, the FTC procedure applicable to ISTS-connected generating stations shall be followed, as applicable. The necessary clearances and compliance requirements shall be completed before the generating station is integrated with the grid.

iii. **Mandatory testing and commissioning requirements:**

❖ SRLDC emphasized that the requisite tests shall be completed and their satisfactory performance demonstrated before COD. The following tests were specifically highlighted:

- **Primary Frequency Response (PFR) testing**, to demonstrate the capability of the generating unit to respond to system frequency variations;
- **Excitation system testing**, to verify the performance and response of the excitation system under different operating conditions;
- **Full-load testing**, to establish the capability of the generating unit to operate at its declared capacity and associated operating parameters;

- **Power System Stabilizer (PSS) tuning and testing**, to ensure adequate damping of system oscillations and support secure grid operation; and
- **Reactive Power Capability testing**, to demonstrate the reactive power capability of the generating unit and its ability to provide the required voltage support to the grid.

g) SRLDC further emphasized that the above requirements should be taken up well in advance of the proposed COD and coordinated among the generating company, SLDC, SRLDC and other concerned agencies, so that any deficiencies observed during testing can be addressed without affecting the planned commissioning schedule.

- ***TCC emphasized that the concerned SLDCs and generating companies shall ensure strict compliance with all mandatory testing, modelling, protection, communication and grid integration requirements prior to declaration of COD. Completion of these requirements should not be treated merely as a commissioning formality, but as an essential prerequisite for ensuring the reliable, secure and stable integration of the new generating capacity into the Southern Region grid.***

SRPC noted the above

21. HIGH SHORT CIRCUIT LEVELS IN 220KV & ABOVE SUBSTATIONS IN SR -REGION

a) As per the ATC Peak Demand case file submitted by SRLDC (**Annexure-21A**) vide email dated 25.06.2026, it is observed that the following stations in the SR region are experiencing high three-phase short-circuit currents, and the short-circuit levels are exceeding the fault level capacity of station equipment.

b) The concerned utilities of the stations mentioned below are advised to submit the details of necessary actions taken/planned to mitigate the short-circuit levels.

Bus Number	Name	Utility	Unit	Current	Angle
412021	[TALLAPLLI 220.00]	APTRANSCO	AMP	40884.3	-133.36
412025	[VTS 220.00]	APGENCO	AMP	47420.2	-130.4
412038	[NUNNA 220.00]	APTRANSCO	AMP	40187.5	-130.2
414010	[KURNOOL4 400.00]	APTRANSCO	AMP	54271.1	-130.82
414013	[VTS-IV 400.00]	APGENCO	AMP	40649.2	-128.62
414021	[SATENAPALI4 400.00]	APTRANSCO	AMP	40440.5	-128.74
414029	[NELLORE-AP4 400.00]	APTRANSCO	AMP	59663	-128.39
414030	[SDSTPS 400.00]	APGENCO	AMP	45455.2	-128.15
414058	[SEIL-P2_AP 400.00]	SEIL	AMP	41888	-128.1
414060	[GREENCO_CPSS400.00]	GREENKO	AMP	48684.1	-132.56
414064	[GREENCO_PSP 400.00]	GREENKO	AMP	44470.6	-133.47
422003	[GHANAPUR 220.00]	TGTRANSCO	AMP	41750.4	-132.08
422023	[BPD 220KV SS220.00]	TGTRANSCO	AMP	42323.5	-129.94
422024	[MALKARAM 220.00]	TGTRANSCO	AMP	49612.7	-130.91
422031	[MMP 220 BUS 220.00]	TGTRANSCO	AMP	46976.1	-131.47
422037	[HIAL 220.00]	TGTRANSCO	AMP	42270.9	-131.58

422144	[RAIDURG 220.00]	TGTRANSCO	AMP	40562.3	-131.36
424006	[MAMIDIPALLI 400.00]	TGTRANSCO	AMP	47107.4	-129.26
424019	[DINDI 400.00]	TGTRANSCO	AMP	44445.5	-130.42
424022	[MAHES-TS 400.00]	TGTRANSCO	AMP	66567.5	-127.77
860090	[ZSWSH_860090400.00]	TGTRANSCO	AMP	44445.5	-130.42
424002	[RSTPS NTPC 400.00]	NTPC	AMP	41549.8	-128.26
424043	[RSPTS_FSP 400.00]	NTPC	AMP	41549.8	-128.26
434006	[RAICHUR TPS 400.00]	KPCL	AMP	42740.9	-127.58
442015	[BASINBRIDGE 230.00]	TANTRANSCO	AMP	43886.8	-134.97
442016	[CHECKN42 230.00]	TANTRANSCO	AMP	40400.7	-126.22
442038	[KOYAMBEDU 230.00]	TANTRANSCO	AMP	41290.9	-134.65
442076	[SPBUDUR2 230.00]	TANTRANSCO	AMP	46918.9	-136.14
442082	[TARAMANI 230.00]	TANTRANSCO	AMP	42229.5	-134.79
442083	[TONDIARPET 230.00]	TANTRANSCO	AMP	41807.6	-134.96
442119	[KOYCMRL 230.00]	TANTRANSCO	AMP	40095.6	-134.62
442128	[ALDRCMRL 230.00]	TANTRANSCO	AMP	40926.1	-134.47
442129	[GUINDY 230.00]	TANTRANSCO	AMP	42229.6	-134.52
442151	[RAPURAM 230.00]	TANTRANSCO	AMP	41250.3	-134.59
442216	[PULIYANTHOP 230.00]	TANTRANSCO	AMP	44001.7	-134.98
414001	[GOOTY 400.00]	APTRANSCO	AMP	41885.5	-131.18
414003	[NELLORE-PG 400.00]	PGCIL SR-I	AMP	59663	-128.39
414004	[CHINAKMPALLI400.00]	PGCIL SR-I	AMP	45138.7	-131.89
414006	[CNP-FSC2 400.00]	PGCIL SR-I	AMP	45138.7	-131.89
414023	[NELLORE-PS 400.00]	PGCIL SR-I	AMP	58106.5	-128.22
414031	[KURNOOL-PG 400.00]	PGCIL SR-I	AMP	58351.4	-131.2
414032	[GTYNLM-FSC 400.00]	PGCIL SR-I	AMP	41885.5	-131.18
414033	[GTYSMN-FSC 400.00]	PGCIL SR-I	AMP	41885.5	-131.18
414052	[CUDDAPA GIS 400.00]	PGCIL SR-I	AMP	45138.7	-131.89
424003	[GHANAPUR 400.00]	PGCIL SR-I	AMP	40253.6	-130.05
424004	[KHAMMAM 400.00]	PGCIL SR-I	AMP	41958.6	-129.24
424021	[MHSWRM-PG 400.00]	PGCIL SR-I	AMP	66960.5	-127.73
434008	[TUMKUR 400.00]	PGCIL SR-II	AMP	41218.7	-132.67
434009	[RAICHUR-PG 400.00]	PGCIL SR-II	AMP	44929.3	-128.03
444005	[TIRUNELVELLI400.00]	PGCIL SR-II	AMP	45245.2	-126.43
414012	[SIMHADRI400.00]	NTPC	AMP	38197.1	-124.24

- ***SRLDC is requested to furnish the details of short-circuit levels of all the Sub-stations, where the short-circuit levels are exceeding the station fault level capability.***
- ***The utilities of the above-mentioned stations are requested to verify the station connectivity details as indicated in the case file furnished by SRLDC and furnish the remedial actions taken/planned for mitigating the short-circuit levels at their respective stations.***

TCC Deliberations

c) MS, SRPC suggested all the Southern Region States to take necessary mitigation measures at substations where the short-circuit levels exceed the equipment fault level ratings.

d) SRLDC cautioned the forum that, considering the prevailing rate of increase in three-phase short-circuit levels at various substations, the prospective fault currents at certain locations may exceed the equipment rating in the near future. SRLDC emphasized that timely assessment and implementation of appropriate fault-level mitigation measures are essential to maintain the equipment within its rated short-circuit duty and ensure grid security.

e) Director, APTRANSCO requested SRLDC to share the ATC Peak Demand case file for detailed assessment of the prevailing short-circuit levels at the concerned substations. SRLDC agreed to share the requested file with APTRANSCO for further analysis.

f) PGCIL informed the forum that the short-circuit levels are increasing significantly across the network and that, at some of its substations, the prospective fault currents have already exceeded the rated short-circuit withstand/interruption capability of the installed equipment. PGCIL further informed that fault current levels as high as 66 kA have been observed at some of its substations.

In view of the above, PGCIL requested CTUIL to undertake updated short-circuit studies and formulate appropriate system-planning measures considering the increasing fault levels, as the short-circuit level issue cannot be addressed solely through measures at the individual utility level.

g) CTUIL informed the forum that the issue would be examined in detail and that the increasing short-circuits levels and associated mitigation measures would also be deliberated in the Joint Study Meeting with the concerned CTUs and STUs.

h) It was emphasized that, in addition to system-level planning and network reconfiguration measures to be considered by CTUIL, the concerned entities should also undertake equipment-level mitigation measures, including upgradation/replacement of circuit breakers and associated switchgear with higher short-circuit ratings, wherever required, to ensure that the prospective fault currents remain within the equipment ratings.

TCC opined that all the State Transmission Utilities (STUs) to conduct similar short-circuit studies for their respective networks, assess the prevailing and projected fault levels against the short-circuit ratings of the installed equipment, and formulate and implement appropriate corrective and mitigation measures wherever required.

SRPC noted the above

22.PROLONGED OUTAGES

A. State Generating stations

S.No	Unit	Installed Capacity (MW)	Outage from	Reason for Outage	Status Update as per 55th TCC
1	Tuticorin Unit 1	210	15.03.2025	fire in UCB (Control Room) of Unit 1&2	October 2026
2	Tuticorin Unit 2	210	14.03.2025	fire in UCB (Control Room) of Unit 1&2	Boiler light up on 24.07.2026. Subsequently, the unit was synchronised to grid on 28.07.2026.
3	Kadamparai Unit 1	100	16.06.2025	Rotor Earth Fault	March 2027.
4	Kadamparai Unit 3	100	16.04.2025	Generator stator fault	January 2027.
5	Raichur Unit 1	210	22.06.2022	Bunker collapse - 10.08.2022	December 2027
6	Nagjheri Unit 2	150	18.06.2024	Turbine replacement work	Expected to be revived after R & M works by mid-August 2026
7	Srisailam LBPH Unit 4	150	03.10.2025	Too small air gap between Stator and Rotor	Expected to be revived by mid-August 2026
8	Sabarigiri Unit 2	55	10.08.2025	Turbine shaft replacement work	31.08.2026

SRPC noted the above

B. ISGS Station : MAPS

Unit out from 28.01.2018

In the 57th SRPC Meeting, NPCIL had informed that studies with respect to Unit 1 will continue till May 2026 and report will be submitted to Regulator. NPCIL had informed that the outage was due to end shielding issues.

- ***NPCIL may update the revival status***

TCC deliberations

- MS, SRPC observed that, as per the OCC update, MAPS Unit-1 is not expected to be available during FY 2026–27.

SRPC deliberations

- NPCIL informed that the study report would be submitted to the Regulator by December 2026.

23.SCHEDULING, ACCOUNTING, METERING AND SETTLEMENT OF TRANSACTIONS IN ELECTRICITY (SAMAST) BY STATE UTILITIES

a) Ministry of Power Committee to address issues related to Renewable (Solar/Wind) generators in the Deviation Settlement Mechanism Regulations, 2022 has recommended that for judicious apportionment of deviation among intra state entities within states it is essential that the SAMAST framework should be implemented in each state.

b) The Status updates in respect of SAMAST implementation is as follows:

State/Utility	Status (57th TCC)
Andhra Pradesh/ APTRANSCO	**57th TCC:** All necessary approvals have been obtained, and the tender is expected to be floated within the next 10 days. .
Kerala/ KSEBL	**57th TCC:** Software SAT has been completed. Certain punch points pertaining to the remaining four modules are yet to be resolved and are expected to be completed by September/October 2026. VAPT is yet to be carried out, and the work order has been issued to an external agency.
Telangana/ TGTRANSCO	**57th TCC**: Metering module: Meters have been commissioned at almost all locations, with only 10 meters remaining to be commissioned. IT Module: Retendering is under progress. Subsequently, the remaining two modules, namely the AMR module and the hardware component, will be taken up immediately after the completion of the Scheduling Package.

c) CERC suo-moto order 09/SM/2025 dated 05.10.2025 had suggested

The SAMAST report provides a roadmap for implementing a robust, scalable and dispute-free scheduling, metering, energy accounting and settlement system in the states. The report outlines the basic framework and governance structure of SAMAST, including information technology (IT) infrastructure and human resources required for market operations functions discharged by the SLDCs. Visibility of data is the first step in ensuring grid security, and SAMAST implementation is the key to this visibility. Implementation of the SAMAST, where the scheme is in its initial stage/not yet implemented, the scheme needs to be awarded and implemented in a period not exceeding one year after the award.

SRPC noted the above

24.STATUS OF IMPLEMENTATION AUTOMATIC GENERATION CONTROL (AGC)

a) Central Sector:

- **All CGS stations of SR except NTPC Ramagundam STPS Stage-I had implemented AGC.**

Entity	Generator	Status (54th TCC)
NTPC	**Ramagundam STPS Stage-I** (3x200MW)	**55th TCC:** AGC implemented in Unit 2 & 3 on 18.04.2026 Unit 1: AGC was implemented on 11.05.2026.

All generators to look into the inconsistencies observed in AGC corrections during low frequency events, especially when operators report receiving advise for opposite responses. Ensure on-going communication with NLDC to address any issues promptly, especially given the current unavailability of machines.

b) State Level-Pilot Project identification &Implementation:

State	Generator	Status
Andhra Pradesh	**Krishnapatnam (2x800MW)**	**55th TCC**: All units will be put under AGC by 2026-27(along with SCADA up gradation). **APGENCO** had started procurement of required materials
Karnataka	**Sharavathy Generating Station (1035 MW)**	**55th TCC:** KPCL stated that AGC is ready at Sharavathy & Varahi. Whenever, clearance is given by SLDC, it will be enabled.
	Varahi Under Ground Power House (4x115 MW)	
Kerala	**Kuttiady Unit No.5 (50 MW)**	**55th TCC** Being in the Northern Kerala, dedicated resources cannot be allocated for AGC at the moment. After commissioning of UPCL-Kasargod line, it might be possible.
	Idukki Unit No.1 (130 MW)	KSEBL is in negotiation with M/s GE (OEM) and the proposed cost is exorbitantly high. So, the issue is held up. It is being pursued by SLDC as well.
	No other units are proposed under AGC in Kerala.	
Tamil Nadu	**1 North Chennai TPS Stage-II (2 x 600 MW)**	**55th TCC:** PO placed for materials. Materials reached. Work is in progress. **58th SRPC**: Order was placed in March 2026. Material is received and erection and commissioning works are in progress. Expected to be completed by end of August 2026
Telangana	**2 MTPS-II (1 x 600MW)**	**55th TCC**: PO placed for materials. Material is awaited. Work is in progress.

		Both are expected to be completed by Nov-2026. Integration with SLDC would be taken up along with upgradation of SCADA **58th SRPC**: Order was placed in March 2026. Material is awaited.

Online Workshop on Assessment of Secondary and Tertiary Reserve Capacity, Information Exchange, and Timelines under the CERC (IEGC) Regulations, 2023 was carried out by SRLDC on 18.03.2026.

1. CERC in its Order dated 05.10.2025 in Petition No 9/SM/2024 had suggested

SLDCs need to impress the generators to enable AGC in intra-state generating stations. SERCs should also make suitable provisions for incentives under State Regulations in line with provisions under CERC Regulations. Adoption of AGC would offer dual benefits—generators would be able to earn revenue from AGC operations, while states would be able to maintain reserves within their own boundaries. Furthermore, till the enablement of AGC provisions in the State, the State generators can also participate in Central SRAS.

2. 54th TCC recommendations:

- *Generators and SLDCs to complete all pending works.*
- *All SLDCs and Generators to enable AGC and maintain adequate reserves as per regulatory requirements. SERC to be approached for regulatory approvals.*
- *States to consider integration of PSP and BESS into Ancillary framework for enhanced balancing support.*

SRPC Deliberations

a) Member Secretary, SRPC, expressed concern over the slow progress in implementation of Automatic Generation Control (AGC) in the State sector. He highlighted that, with the increasing penetration of Renewable Energy (RE) in the Southern Region, greater flexibility and faster response from conventional generating stations would be essential for maintaining grid frequency and ensuring secure system operation. In this context, it would become increasingly important for generating units in the State sector to be equipped with and participate in AGC. He requested the Management of the concerned State utilities and generating companies to accord due priority to the implementation of AGC and take necessary steps for expediting its adoption in the State sector.

Further, it was suggested that the concerned State Electricity Regulatory Commissions (SERCs) may be apprised of the requirement and encouraged to consider suitable tariff mechanisms, rates or incentives, on lines similar to the provisions/mechanism introduced by CERC for AGC participation, to facilitate and incentivize participation of State generating stations and State-embedded generating stations in AGC.

b) ED, SRLDC concurred that early implementation of AGC in the State sector would significantly support grid stability and frequency regulation, particularly with the

increasing integration of RE generation. From the grid operator's perspective, wider participation of State generating stations in AGC would provide greater flexibility and faster generation response to real-time variations in generation and demand, thereby facilitating effective balancing of the system and secure grid operation. It would also provide SLDCs/SRLDC with enhanced operational flexibility in managing system conditions.

SRPC noted the above

25. RECOVERY OF RELINQUISHMENT CHARGES AS PER THE DIRECTION OF CERC IN ORDER DATED 08.03.2019 IN PETITION. NO: 92/MP/2015

a) As per the CERC Order dated 08.03.2019 in Petition No. 92/MP/2015, the relinquishment charges had been computed by CTU and the total relinquishment charges payable to the PoC pool by the generators/ LTA customers, was Rs. 7,299.07 Crore. Before the CERC Order, many IPPs/generators had relinquished the LTA and the charges were being recovered from the beneficiaries.

b) Later through different CERC/court orders, some of the relinquishment charges got reduced (with respect to what was calculated, vide 92/MP/2015) and some new relinquishing entities were added in the list. Accordingly, when the figures were compiled in January, 2024 the amount came out to be Rs. 6,924.80 Crore.

c) Following is the status regarding relinquishment charges of various categories of generators:

Sl .No	Description	Total relinquishment charges in ₹. (Lakhs)	Total billed in ₹. Lakhs	Payment received (₹. In Lakhs)	BG Encashed (₹. In Lakhs)	Pending (₹. In lakhs)	BG Available (₹. In Lakhs)	Remarks
1.	List of IPPs and state utilities filed appeals in APTEL and not in Insolvency/ liquidation proceedings (**Category E**)	**219181**	196008	0	3387	**215794**	28923	As per the direction of APTEL dated 04.09.2025, bills are raised for an amount of ₹1960.08 Crores on 08.09.2025
2.	List of IPP filed appeals in APTEL and undergoing insolvency/liquidation proceedings (**Category C**)	116739	116739	0	20895	95844	1084	Bills raised
3.	List of IPP filed appeals in APTEL	261483	-	13699	15565	232219	0	Taken over by new entities in

	and insolvency/liquidation proceedings completed **(Category-D)**							the Insolvency proceedings, hence no bills raised.
4.	List of IPPs and state utilities did not file appeals in APTEL **(Category-B)**	**91242**	**91242**	**12674**	120	**78448**	14208	Bills raised
	Total	**688645**	**403989**	**26373**	**39967**	**622305**	**44215**	

d) In the 54th TCC and 57th SRPC meetings held on 16.03.2026 and 17.03.2026, respectively, CTUIL informed that CERC had issued an order in respect of M/s ADHPL, in Petition No. 97/MP/2022 dated 29.12.2025, directing the revision of relinquishment charges upon receipt of a payment of ₹4 crore. Consequently, the total amount to be recovered was reduced to ₹6,88,645 lakh from ₹6,92,480 lakh. CTUIL further reiterated that a stay was in force on the collection of relinquishment charges and requested all DISCOMs to actively support efforts to get the stay vacated so that the recovery of relinquishment charges could be pursued.

e) The matter was deliberated in 66th Commercial Sub-Committee meeting held on 08.05.2026; CTUIL informed that next hearing would be on 12th May 2026. Tamil Nadu, Andhra Pradesh, and Karnataka actively participated in effectively defending the case before the appropriate judicial forums, securing vacation of the stay on the bills and enabling regulatory action. Kerala and Telangana were requested to implead in the said petition to vacate the stay. CTUIL was requested to take necessary action for removal of the stay.

TCC Deliberations

f) CTUIL informed that the plea seeking the recusal of the Member (Technical) has been rejected by the Hon'ble Tribunal on 7th July 2026. Accordingly, the proceedings shall continue before the same Bench. IA has been filed to vacate the stay for realisation of relinquishment charges and hearing is listed on 30.07.2026.

SRPC Deliberations

✓ ***The matter has been regularly followed up in the Commercial Sub-Committee meetings. However, it was also requested that all the SR Utilities to actively participate and support to vacate stay which would enable to follow up on raised bills.***

26.CYBER SECURITY COORDINATION FORUM

a) Clause 53(1) & (2) of IEGC 2023 is reproduced below:

(1) The sectoral CERT (Computer Emergency Response Team) for wings of power sector, as notified by Government of India, from time to time, shall form a Cyber Security

Coordination Forum with members from all concerned utilities and other statutory agencies to coordinate and deliberate on the cyber security challenges and gaps at appropriate level. A sub-committee of the same shall be formed at the regional level.

(2) The sectoral CERT shall lay down rules of procedure for carrying out their activities.

b) In the draft Central Electricity Authority (Cyber Security in Power Sector) Regulations, 2025 the following has been proposed (Clause 5):

The Authority through separate order may also designate sub sectoral CERTS in Power Sector for Generation, Transmission, Distribution, Grid Operation and any other sub-sector, along with their roles and responsibilities, to assist CSIRT-Power.

c) **In the 54th TCC / 57th SRPC meetings,**

- The Forum suggested that SRLDC be included as a member of CERT-Thermal and CERT-Transmission to enable more comprehensive and effective deliberations. SRLDC confirmed its agreement to the same.
- GENCOs were asked to furnish their nominations at Station level and at Corporate Level to CERT-Thermal (NTPC).
- State Transmission Licensees and STU also to furnish their nominations at Station level (220 kV and above) and at Corporate Level to CERT-Trans (PGCIL).
- Concerned utility nodal officers were requested to coordinate and ensure the participation of field officials in these Regional CSCF meetings.

d) **In the 71st COMSR meeting deliberations,**

- It was also noted that the second Regional Cyber Security Coordination Forum meeting of CERT-Thermal was held on 11.06.2026; participation from all thermal utilities was not observed.
- With regard to CERT-Trans, it was noted that no Regional Cyber Security Coordination Forum meetings were held in the quarter April 2026 to June 2026. PGCIL to update the status

e) Ten meetings of Southern Regional Cyber Security Coordination (GO-SR-CSCF) have been held. The annual compendium of the activities, resolutions and observations of the GO-SR-CSCF FY 2024-25 were published. The compendium captures key challenges, including manpower shortages, legacy infrastructure, and the need for regulatory clarity on issues such as log retention and audit scope. It also records matters escalated to the Central CSCF and the key resolutions adopted to promote a harmonized regional approach. Further, it consolidates the forum's recommendations to strengthen cyber security preparedness, enhance regulatory compliance, improve incident reporting, and foster continuous knowledge sharing among SLDCs, serving as both a record of progress and a roadmap for future improvements.

- ***PGCIL and NTPC may update the forum on the present status of functioning of the Regional Cyber Security Coordination Forums and related sub-structures***

f) CERC in the Order dated 15.10.2024 in Petition No 9/SM/2024 had suggested the following:

Cybersecurity is a major focus area in the power sector due to the critical nature of electricity infrastructure and the growing sophistication of cyber threats. As power grids become increasingly digitised, interconnected, and decentralised, they are more vulnerable to cyber-attacks that can cause widespread blackouts, economic damage, and public safety issues. State SLDCs do not have adequate manpower in the area of Cyber Security. With the growing concern of cyber threats, an adequate number of staff needs to be deployed, and adequate staff should be mandatorily trained in this area.

TCC Deliberations

g) The forum noted that ten meetings of the Southern Regional Cyber Security Coordination Forum (GO-SR-CSCF) have been conducted and appreciated the significant progress achieved in strengthening cyber security coordination for Grid Operation in the Southern Region.

h) With regard to CERT-TRANS, the forum noted that four Regional Cyber Security Coordination Forum meetings have been conducted, with the latest meeting held on 23.07.2026. However, participation in the meetings was observed to be limited, with fewer than ten officials attending.

i) MS, SRPC requested PGCIL-SR, being the Nodal Agency for CERT-TRANS, to ensure wider participation by including field-level officials in the Regional Cyber Security Coordination Forum. He suggested that, officials from all 220 kV and above substations may be nominated to participate in the meetings to facilitate effective dissemination of cyber security advisories to the field level.

j) The Southern Region transmission utilities agreed to nominate officials from 220 kV and above substations for participation in the CERT-TRANS Regional Cyber Security Coordination Forum.

k) With regard to CERT-Thermal, the forum noted that two Regional Cyber Security Coordination Forum meetings have been conducted, with the latest meeting held on 11.06.2026. However, participation from thermal generating utilities, particularly plant-level officials, was observed to be inadequate.

l) MS, SRPC requested NTPC, being the Nodal Agency for CERT-Thermal, to coordinate with all thermal generating utilities in the Southern Region and ensure active participation of plant-level officials in the Regional Cyber Security Coordination Forum meetings.

m) The Southern Region thermal generating utilities agreed to nominate plant-level officials for participation in the CERT-Thermal Regional Cyber Security Coordination Forum.

n) The forum requested SRLDC to nominate officials to participate in the Regional CERT-TRANS and CERT-Thermal forums to facilitate comprehensive deliberations on cyber security issues pertaining to grid operation and transmission systems.

o) With regard to CERT-Hydro, MS, SRPC informed that the matter has been taken up with NHPC, the Nodal Agency for CERT-Hydro, vide letters/e-mails dated 14.05.2025, 24.04.2026, and 14.07.2026, requesting formation and

operationalization of the Regional Cyber Security Coordination Forum for hydro utilities. The forum noted that a response from NHPC is awaited.

TCC Conclusion

- ***PGCIL, as the Nodal Agency for CERT-TRANS, to ensure wider participation of transmission utilities by facilitating nomination of officials from 220 kV and above substations to the Regional Cyber Security Coordination Forum.***
- ***NTPC, as the Nodal Agency for CERT-Thermal, to coordinate with all thermal generating utilities and ensure active participation of plant-level and HQ officials in the Regional Cyber Security Coordination Forum meetings.***
- ***SRLDC to nominate suitable officials for participation in the Regional CERT-TRANS and CERT-Thermal forums.***
- ***NHPC to expedite the formation and operationalization of the Regional CERT-Hydro Forum.***

SRPC noted the above

27. ESTABLISHMENT OF STATE-OF-THE-ART NATIONAL UNIFIED NETWORK MANAGEMENT SYSTEM (N-UNMS) IN MAIN & BACKUP CONFIGURATION INTEGRATING ALL THE REGIONAL UNMS- FOR ISTS COMMUNICATION SYSTEM

a) **Deployment of Network Management Tools (NMT) – 24x7 operation**

In the 54th TCC / 57th SRPC meetings, PGCIL was requested to deploy the Network Management Tools (NMT) in a 24x7 manner for all Regions at the earliest, so as to enable continuous monitoring, supervision and management of the communication system through the unified N-UNMS platform

- ***PGCIL may update the Forum on the present status of NMT deployment for SR and the associated timelines for achieving full 24x7 operationalisation of N-UNMS in main and backup configurations***

TCC Deliberations

i. PGCIL informed that CTUIL has filed a petition before CERC regarding deployment of the Network Management Team (NMT). It was informed that the matter is presently under consideration of CERC and the Order has been reserved. PGCIL further informed that AMC personnel are presently manning the UNMS Control Room on a 24×7 basis, while deployment of PGCIL officials is pending.

ii. CTUIL informed that PGCIL has been requested to deploy officials for NMT activities. However, PGCIL is awaiting directions from CERC before taking further action.

iii. CTUIL further informed that Grid-India (NLDC) has also requested PGCIL to expedite deployment of the Network Management Team.

TCC Recommendations

- ***TCC emphasized the need for early deployment of the Network Management Team to facilitate full-fledged 24×7 operation of the National Unified Network Management System (N-UNMS) in both Main and Backup configurations. PGCIL was requested to expedite deployment of officials.***

SRPC noted the above

b) **Communication Availability**

- The identified Six (6) no. of Channel (RTU, PMU, VOIP, ICCP, AGC and AMR) are to be considered to start with the availability computation from source to sink through UNMS.
- PGCIL vide mail presented the updated channel mapping status in UNMS, pertaining to Master Communication Centre (MCC), as shown below:

S.No	Data Type	Total Available Channels (MCC)	MCC Channels Mapped in SR-UNMS	MCC Channels Mapped in SR-UNMS (%)	Remarks
1	104 RTU SCADA	135	123	91.11	IPP station pending as they have not extended management channel
2	104 RTU REMC	48	48	100.00	
3	101 RTU	7	7	100.00	
4	DCPC	14	14	100.00	
5	ICCP	22	22	100.00	
6	URTDSM	88	88	100.00	
7	VOIP	120	108	90.00	
8	AGC	0	0		
	Total	434	410	94.47	

- SRLDC had highlighted several issues pertaining to the channel availability calculations in UNMS to CTUIL and PGCIL, particularly with respect to end-to-end mapping, treatment of redundant paths and consistency of availability computation logic across different data types.
- In this context, PGCIL was requested to regularly conduct monthly stakeholder meetings with CTUIL, STUs and SRLDC to address the identified issues, expedite completion of pending channel mapping works and ensure that all critical channels are adequately integrated and monitored through N-UNMS. Accordingly, PGCIL has conducted monthly stakeholder meeting on 29.06.2026 to discuss the issues faced by stakeholders on the UNMS.

- All outstanding issues may be resolved and communication availability certification needs to commence at the earliest, in compliance with the applicable CERC Regulations governing communication system performance and reporting.

▪ ***PGCIL/ULDC, CTUIL and SRLDC are requested to update the Forum on the current status of channel mapping in SR-UNMS, the action plan for resolving the outstanding issues.***

TCC Deliberations

i. MS, SRPC informed that a meeting on the workflow for generation of Communication Availability reports through the Unified Network Management System (UNMS) was held on 22.07.2026. He informed that feedback was received from various stakeholders, including SRLDC, on the methodology for computation of communication availability and the outstanding issues pertaining to channel mapping. It was expected that the communication availability computation process would improve based on the observations received.

ii. Director, APTRANSCO informed that operational issues encountered in UNMS had been communicated to PGCIL vide e-mail dated 12.06.2026 and requested that the same be resolved at the earliest.

iii. PGCIL informed that software patches are being released periodically and the issues reported by various stakeholders are being addressed on a continuous basis.

iv. The forum suggested that PGCIL, in coordination with CTUIL and SRLDC, conduct regular stakeholder meetings to review the status of pending channel mapping, address operational issues raised by the utilities, and expedite resolution of the outstanding issues to facilitate early commencement of communication availability certification through N-UNMS

TCC Recommendations

TCC emphasized the need for early completion of pending channel mapping, resolution of operational issues, and commencement of communication availability certification through N-UNMS, in compliance with the applicable CERC Regulations.

SRPC noted the above

c) **Communication Audit component within UNMS**

i) In the 17th NPC meeting, under the agenda item **"Unified Accounting Software (UAS) for RPCs and NPC,"** it was noted that several modules had been proposed for inclusion in Phase-II of UAS, viz., LGBR, power supply position, transmission and generator outage planning, protection audit, communication audit, protection setting approvals and protection data management, which are presently being carried out manually through Excel sheets. Chairperson, CEA / NPC suggested adopting a holistic architecture rather than developing individual modules in isolation. With regard to the Communication Audit Module, it was observed that CTUIL may take up its development, as the procedures for communication audits have already been evolved to a considerable extent.

Accordingly, NPC decided that CTUIL shall take up the development and operationalization of the Communication Audit Module within the overall architecture of the proposed system.

ii) In the 69th COMSR meeting, CTUIL informed the Forum that the matter had been discussed internally with PGCIL (GA&C) and that a meeting was being planned to finalize the implementation approach. CTUIL further informed that the Communication Audit Module was not part of the original scope of the National UNMS project and, therefore, its implementation may require scope augmentation/amendment.

iii) In the 70th COMSR meeting, the Forum requested PGCIL (GA&C) to explore the possibility of incorporating the Communication Audit Module within the Outage Management Portal framework and furnish its findings to CTUIL for further examination and submission to the NPC.

iv) In the 71st COMSR meeting, CTUIL informed the Forum that it had received an official communication from PGCIL (GA&C) stating that the Communication Audit Module could not be incorporated into the National UNMS, as it falls outside the approved scope of the project.

PGCIL (GA&C) clarified that the National UNMS has been designed primarily for real-time monitoring of communication networks, alarm acquisition and management of communication assets, and is not connected to the IT network.

PGCIL (GA&C) further stated that the Communication Audit process is an offline activity involving manual entry of audit observations and reports, which requires IT connectivity for data entry, access and retrieval. Since the objectives and architecture of the proposed Communication Audit Module differ from those of the National UNMS, the module cannot be integrated into the existing UNMS platform.

v) In view of the above, the COMSR Forum suggested that CTUIL may place the matter before the National Power Committee (NPC) for further deliberation and appropriate decision regarding the development of the Communication Audit Module, including identification of a suitable IT-based platform and implementation framework outside the scope of the current National UNMS.

TCC Deliberations

i. CTUIL informed that PGCIL has conveyed that incorporation of the Communication Audit Module into the National Unified Network Management System (N-UNMS) is not feasible, as the project is presently at an advanced stage of implementation and the proposed module is outside the approved scope of the project.

ii. CTUIL further informed that, in line with the recommendations of the COMSR Forum, the matter would be placed before the forthcoming National Power Committee (NPC) meeting scheduled during September 2026 for further deliberation and appropriate decision.

SRPC noted the above

d) **Reliability of AGC Communication Links (NLDC Letter to PGCIL)**

AGC-based implementation of Secondary Reserve Ancillary Services (SRAS) presently covers 89 generating stations (≈85.6 GW), making reliable communication links critical for secure grid operation.

NLDC, vide letter dated 26.06.2026 (**Annexure-27A**), reported that on 23.06.2026, simultaneous failure of all standby communication links in the Western Region and all ULDC communication links of Southern Region AGC plants resulted in the loss of AGC services from 13 generating stations (≈14.5 GW) in the Southern Region. The links were restored only on 24.06.2026 at around 10:30 hrs.

NLDC emphasized the need to eliminate common-mode/single-point failures, strengthen communication redundancy, ensure 24×7 monitoring, establish prompt escalation mechanisms, and expedite restoration during communication failures.

NLDC has advised PGCIL-ULDC to ensure 100% availability of AGC communication links and implement the recommendations contained in Annexure-II to prevent recurrence.

In the 240th OCC meeting PGCIL had informed that the issue was in WR and they will furnish the status in COMSR meeting.

TCC Deliberations

PGCIL informed that the communication failure was caused by the outage of communication links in the Western Region. It was informed that the Bina–Surajpur and Wapi–WRLDC communication links failed at around 20:30 hrs and 22:30 Hrs on 23.06.2026 respectively and were restored by 10:30 hrs on 24.06.2026.

PGCIL stated that the Bina–Surajpur and Wapi–WRLDC links were configured as the main and standby communication paths and also served as mutual protection paths earlier.

PGCIL further informed that, following the incident, the communication paths have been re-evaluated and reconfigured. At present, three distinct physical routes have been established for AGC communication links of the Southern Region. PGCIL also informed that efforts are underway to establish a diversified protection path for the standby communication channel, independent of the main channel protection path.

TCC Conclusion

- ***TCC noted the status and emphasized the importance of maintaining reliable and redundant AGC communication links for secure grid operation. PGCIL was requested to expedite the implementation of the diversified standby communication path and ensure reliable operation of the AGC communication system.***

SRPC noted the above

28. UPGRADATION / REPLACEMENT OF SCADA / EMS SYSTEMS IN SR

a) In the earlier SRPC/TCC and COMSR meetings, the following points were noted:

- Grid-India would execute SCADA up-gradation project jointly with SLDCs in SR & WR. PGCIL would execute the SCADA up-gradation project jointly with SLDCs in ER & NR.
- It was noted that Karnataka is going for up-gradation of their SCADA on their own. It was also noted that the PSDF funding would not be available for SCADA up-gradation / replacement of SCADA / EMS Systems; accordingly, all States were requested to mandatorily go for SCADA up-gradation as per MoP directives.

b) Status furnished by SRLDC is as below:

S. No.	Description	SRLDC	Kerala, Tamil Nadu, Telangana, Andhra Pradesh	Puducherry
1	Finalization of Technical Specifications and BOQ for all SLDCs and RLDC for new SCADA system	December 2022	December 2022	December 2022
2	Tender publishing Date	06th March 2023	06th March 2023	06th March 2023
3	Tender Opening Date (original)	26th April 2023	26th April 2023	26th April 2023
4	Number of Extension done opening tender	04	04	04
5	Date of submission of proposal	27th June 2023	27th June 2023	27th June 2023
6	Actual date of tender opening after receiving consent from SLDCs	03rd July 2023	03rd July 2023	03rd July 2023
7	Issue of NOA by GRID-INDIA/SLDC for new SCADA system	16th October 2024	November 2024 (subject to issuance by SLDC)	November 2024 (subject to issuance by SLDC)
8	Completion Schedule (in Months)	**26**	**20**	**16**
9	Start of Parallel Operation (tentative as per Implementation Schedule)	**15th September 2026**	**April 2026**	**December 2025**
10	Execution of project (ToC)	**15th December 2026**	**July 2026**	**March 2026**

c) As per the 59th COM-SR deliberation, Forum noted that all States have secured extension of existing AMC contract in SCADA system till the completion schedule of the upgradation project.

d) Status of NOA & Contract signing furnished by the entities during 61st Meeting of COM SR is as below:

S.No	Utility	LOI	NOA Date	Contract Signing Date	Project upgradation completion schedule
1	SRLDC	30-08-2024	16-10-2024	20-12-2024	15-12-2026
2	AP	30-08-2024	13-12-2024	12-02-2025	12-08-2026
3	TG	30-08-2024	06-01-2025	28-02-2025	04-09-2026
4	KL	30-08-2024	30-11-2024	18-03-2025	30-07-2026
5	TN	30-08-2024	06-01-2025	06-03-2025	04-09-2026
6	PY	30-08-2024	05-05-2025	17-07-2025	04-09-2026

e) In 64th COMSR meeting, SRLDC informed that parallel operation would begin before 3 months of Project completion and furnished the updated operation timeline as below:

S.No	Key Milestones	SRLDC	APTRANSCO	KSEBL	TGTRANSCO	TANTRANSCO	PONDY
		Schedule	Schedule	Schedule	Schedule	Schedule	Schedule
1	Parallel Operation of Existing System and New System & Availability Test	Dec-26	Aug-26	Jul-26	Sep-26	Sep-26	Sep-26

f) In 71st COMSR, the following were noted:

- SRLDC informed that the project was progressing as per schedule, and the Factory Acceptance Test (FAT) was in progress.
- KPTCL informed that the Site Acceptance Testing (SAT) had been completed for the SCADA upgradation project. It was further informed that the parallel operation was commenced from the first week of June 2026 for testing purpose and the project was expected to be commissioned by August 2026.

- ***All State SLDCs and SRLDC may update on the latest progress of project implementation and milestones achieved.***
- ***SRLDC may also apprise the forum regarding the status of system integration, parallel operation readiness and coordination with State SLDCs.***

TCC Deliberations

g) SRLDC informed the Forum that the parallel operation of the systems is progressing as per the approved schedule and the required materials for Andhra Pradesh would be dispatched as per the schedule and that the Site Acceptance Test (SAT) would also be conducted as planned.

h) APTRANSCO expressed concern that, considering the current pace of commissioning of the systems, the project may be delayed by approximately 2–3 months. KSEBL also expressed similar concerns regarding the progress and timely completion of the project.

i) SRLDC informed the forum that, if required, the matter would be taken up with the OEM, M/s L&T, to facilitate timely completion of the project and address the issues affecting the progress of parallel operation.

TCC Conclusion

- ***TCC suggested all the states to send their agenda pertaining to upgradation / replacement of SCADA / EMS systems and all the issues affecting the progress of parallel operations to SRLDC.***
- ***Subsequently, SRLDC to coordinate a meeting with the states and OEM for resolving the issues.***

SRPC noted the above

29. ITEMS FOR INFORMATION OF SRPC AND TCC

I. Partial & Forced outages in Thermal Stations

a) The 57th SRPC had noted concerns of the Ministry of Power/CEA regarding increasing partial outages of thermal generating units, particularly during the critical evening peak hours, and emphasized accurate classification and reporting of partial and forced outages.

b) Generators were advised to report only genuine and properly classified reasons for partial outages, with clear segregation of technical reasons, coal/fuel-quality issues, and schedule-related factors. Utilities reporting coal-quality issues were also advised to furnish design, committed, and actual GCV details.

c) NLDC, vide email dated 03.07.2026 (**Annexure-29I**), while reviewing power system preparedness in view of the anticipated El Niño conditions and high summer demand, advised all RLDCs, SLDCs and generating stations to maximize thermal unit availability by minimizing planned, forced and partial outages through timely preventive maintenance, adequate fuel management, close monitoring of critical equipment, expeditious restoration of units under outage, and effective coordination among generators, transmission utilities and Load Despatch Centres.

SRPC/TCC noted the above

II. Final SOP/ Guidelines for diversion of RPC approved Spare Transformers and Reactors to the constituents / State Transmission Utilities

a) NRPC/SRPC SOPs were discussed in 66th CCM and OCC Meetings and consolidated comments were communicated to NPC.

Further NPC, CEA had furnished the consolidated SOP which would be taken to next NPC meeting.

SRPC/TCC noted the above

III. Inclusion of all HVDC systems as part of the "National Component"

a) In the 54th TCC and 57th SRPC meetings held on 16.03.2026 and 17.03.2026 it was concluded that the implications of recommending all HVDCs as part of National Component may be studied in CCM and recommendations may be discussed in next TCC/SRPC Meetings. The matter was deliberated in 66th Commercial Sub Committee Meeting held on 08.05.2026, TNPDCL stated that, based on the suggestion of the forum to examine the financial implications of the proposal along with the future transmission system, detailed case studies had been carried out for both the present scenario and the 2030–31 scenario, duly considering the tentative tariff of all proposed HVDC systems, including the Talcher–Kolar HVDC refurbishment. It was observed that there would be huge financial implications for SR beneficiaries if the waiver of transmission charges for RE projects is not withdrawn. Under these circumstances, it was requested to defer consideration of the proposal for declaring all HVDC systems under the National Component. After deliberation, it was agreed that the matter would be further discussed in a subgroup of states/UT under TNPDCL.

b) Subsequently TNPDCL vide mail dated 08.07.2026 had furnished the details to all the States/UT.

TCC Deliberations

TNPDCL convened a Subgroup meeting on 23.07.2026, wherein the issue of the significant financial implications for the Southern Region beneficiaries arising from the continued waiver of transmission charges for Renewable Energy (RE) projects was deliberated. All the participating States/UTs unanimously decided to take up the matter with their respective State Governments and pursue it with the Central Government for appropriate consideration. The issue will be discussed in detail under the relevant agenda item submitted by TNPDCL during this meeting.

SRPC noted the above

IV. Review of the secondary oil consumption of plants on a quarterly basis for FY 2024-25 and 2025-26

a) As per CERC Detailed Procedure for mechanism of compensation for degradation of Station Heat Rate, Auxiliary Energy Consumption and Secondary fuel oil consumption due to part- load operation and multiple start/stop of the units", the following has been stipulated:

Quote

(xvi) The Designated generating stations is to take all due care to keep a check on secondary oil use during part operations and during start-ups to the extent possible. ***The respective RPC Secretariat shall review the secondary oil consumption of plants on a quarterly basis, along with the concerned RLDC and designated generating stations, to find out high-consuming plants and reasons for high consumption and suggest measures to mitigate the excess use of secondary oil to the extent possible.***

Unquote

b) The matter was deliberated in the 65th and 66th Meetings of the Commercial Sub-Committee held on 23.01.2026 and 08.05.2026, respectively, during which station-wise reasons for higher oil consumption were reviewed. Data had been collected and analyzed, and the reasons for the higher consumption had been examined.

SRPC/TCC noted the above

V. Metering Requirements

a) CTUIL raised concerns that SRLDC is requesting the procurement of meters not only at ISTS interface points but also for all SEMs used for segregation of infirm and firm power, source-wise data, and related purposes. the following points have been discussed in 66th CCM:

Installation Responsibility:

Meter to be installed	Responsible Entity
ISTS interface points as defined in CEA Metering Regulations	CTUIL shall install SEMs
Meters used for Regional Commercial Accounting purposes, other than ISTS interface points	CTUIL shall install SEMs (Meters shall be mentioned in the Approved Metering Scheme)
Each generator and ESS shall be metered with Special Energy Meter (SEM) so that individual actual injection/drawal can be captured.	**WS sellers without ESS:** Respective Entity shall install SEMs conforming to the JC technical specifications approved by the NPC and the data shall be compatible with the RLDC format. **WS sellers with ESS:** CTUIL shall install SEMs for ESS feeders only, as it would be used for commercial accounting. Other Source meters to be installed by respective entity.
Bifurcation of firm and infirm power	Existing methodology of apportioning source wise firm and infirm energy in the ratio of respective firm and infirm capacities in line with the "Procedure for Segregation of Firm and Infirm Injection of RE Generators" approved by the Commercial Sub- Committee in its 51st Meeting held on 22.04.2022 shall be followed.
PSP/BESS not interacting with Grid	Respective Entity shall install SEMs conforming to the JC technical specifications approved by the NPC and the data shall be compatible with the RLDC format.
PSP/BESS interacting with Grid	CTUIL shall install SEMs
All Other Meters	Respective Entity shall install SEMs conforming to the JC technical specifications approved by the NPC and the

	data shall be compatible with the RLDC format.

Note: JC technical specifications approved by the NPC.

b) CTUIL commented that all interface meters installed at the points of interconnection with the Inter-State Transmission System (ISTS) for the purpose of electricity accounting and billing should be provided by the CTUIL. It was further stated that, the extant CEA Metering Regulations, did not explicitly cover this aspect, as it is an evolving framework. Bifurcation of losses and apportionment of reactive power had been carried out through regional accounting meters. SRLDC added that, with regard to WS sellers with ESS, CTUIL should install Special Energy Meters (SEMs) for all sources, including ESS feeders, as these would be used for commercial accounting purposes. The matter had been taken up with the NPC Commercial Sub Group, and the issue would be dealt with based on the decision taken therein.

c) CTUIL observations on above are enclosed at **Annexure-29V**.

TCC Deliberations

d) CTUIL informed that it would provide meters only at ISTS interface points for the purpose of electricity accounting and billing. However, SRPC and SRLDC opined that CTUIL is also required to provide meters at locations other than ISTS interface points for Regional Commercial Accounting purposes. It was stated that extending meter provision to all such locations would require maintaining a substantial inventory of meters.

e) CTUIL further stated that it would abide by the decision taken by the National Power Committee (NPC) forum. This requirement has been raised only by the Southern Region, while no other Region has raised a similar concern. CTUIL reiterated that it has been providing meters at locations mandated as per the CEA Metering Regulations. Once the NPC finalizes the matter, a uniform approach would be adopted on a pan-India basis. SRLDC also advocated that CTUIL should provide meters for Regional Commercial Accounting purposes at locations other than ISTS interface points. MS, SRPC enquired with SRLDC whether different practices are currently being followed across regions. ED, SRLDC replied that the matter would be checked and update.

f) After detailed deliberations, it was decided that the issue would be taken up in the NPC forum, where CTUIL, NLDC, and all RPCs would be represented, for arriving at a uniform decision applicable across all Regions.

SRPC noted the above

VI. Unified Accounting Software (UAS) for RPCs and NPC

a) PSDF grant for implementation of 'Unified Accounting Software for RPCs and NPC (Proposal no. 481) amounting to Rs. 31.298 crores (including GST) were sanctioned by the Ministry of Power vide its letter dated 03.07.2025. The grant shall be governed as per the guidelines/procedures for funding from PSDF. Accordingly, any

expenditure beyond Rs. 31.298 crore is to be provided by RPCs from their own resources.

b) The project includes a one-year warranty and six years of Extended Technical Service (ETS), with the additional two years of ETS estimated to cost ₹3.17 crore. Further, based on CSIRT-Power recommendations, a Web Application Firewall (WAF) has been incorporated into the DC-DR architecture to strengthen cybersecurity, resulting in an additional cost of about ₹1.35 crore.

c) Seven nos. of bids have been received on GeM till tender opening date against the tender for implementation of the UAS and are under evaluation by the committee. Committee members may examine the bids and take appropriate action accordingly.

d) Phase-II has been proposed, several operational modules have been identified, including LGBR, power supply position, transmission and generator outage planning, protection audit, communication audit, protection setting approvals, and protection data management, which may be taken up after the go-live of the core accounting modules. The matter was deliberated in 17th NPC meeting, it was decided that the implementation modalities of the LGBR, Power Supply Position, and generator/transmission outage planning modules may be deliberated and finalized in the Operation Sub-Group of NPC and submitted in the next NPC meeting for approval for implementation under phase-II of Unified Accounting Software.

TCC Deliberations

e) MS SRPC informed that a meeting of Operation Sub Group of NPC was held on 13.07.2026 regarding implementation of phase-II of Unified Accounting Software and MoM is awaited.

SRPC noted the above

VII. Refurbishment of Talcher - Kolar HVDC link Under Additional Capitalization

a) PGCIL SR-II vide email dated 27.04.2026 furnished the assessment reports for the refurbishment of the Talcher-Kolar HVDC link, including converter transformers, under Add Cap. In 66th Commercial Subcommittee meeting held on 08.05.2026, PGCIL SR-II updated that the order for the converter transformers was placed and the tendering process for the upgradation works was in progress. All constituents were requested to kindly go through the report furnished by PGCIL and share their comments, if any.

SRPC/TCC noted the above

VIII. Clarification sought on various issues observed in NTPC Kudgi Scheduling and DC Declaration

a) In the 54th TCC and 57th SRPC meetings, ED, SRLDC stated that SRLDC would take up the matter with NLDC for further clarification and necessary action, and feedback would be provided thereafter. In the 66th Commercial Sub-Committee Meeting held on 08.05.2026, SRLDC informed that, pursuant to the CERC Order in Petition No. 9/SM/2025, generating stations are required to declare both on-bar and off-bar DC, and all stations are now being scheduled based on on-bar DC. Accordingly, such

instances are not expected to recur. NLDC, Grid-India, and SRLDC were requested to exercise due care in the scheduling process.

SRPC/TCC noted the above

IX. Unit Shut Down (USD) and CERC Order dated 05.10.2025 in Suo-Moto Petiton No. 09/SM/2024

a. As per extant regulations, post implementation of CERC order dated 05.10.2025 in suo-moto Petiton no. 09/SM/2024, a generating station which gets a schedule below 50% of MCR for some or all time block (s) of 'D' day on 'D-1' day (after sale of un-requisitioned surplus in DAM), and which is not committed under SCUC, is eligible to take its generating station or unit thereof under USD.
b. In this scenario, if a state is in need of power and unit goes under USD on D-1 as per existing procedure, the State loses its share permanently from the unit under USD and no entitlement will be created either.
c. Further, if state doesn't need power, in the present USD procedure, the state continues to get power and even entitlement is created in its name. Therefore leading to part load compensation and additional commercial implications on forceful scheduling.
d. To overcome these difficulties, a draft RSD procedure was proposed, to facilitate beneficiaries who do not require power to surrender it for at least 72hrs on D-2 basis. Beneficiaries who require additional power to avail it from units under RSD/going under RSD, based on firm commitments of at least 24/48/72 hours on D-2/D-1 day so that power scheduling, dispatch and utilization are optimized. It may be noted similar RSD procedure was implemented in Southern Region with commercial implications.
e. Further, since part-load sharing is computed based on on-bar entitlements, surrendering a unit would enable the beneficiary to avoid part-load compensation charges.
f. In this regard a meeting was held on 28.04.2026 to discuss the draft RSD procedure for utilization in Southern Region.
g. Karnataka SLDC, Telangana SLDC, Puducherry SLDC, NTPC, NLCIL and NTPL had concurred with the proposal.
h. Kerala SLDC and Tamil Nadu SLDC had not yet concurred with the proposal.
i. Apprehensions were raised regarding the proposed commitment to surrender/revive power on D-2 basis. However, it was clarified that existing USD will continue and there is no compulsion to deploy the proposed RSD procedure. It provides an additional option which can be deployed to provide flexibility.

TCC Deliberations

MS, SRPC informed that there was no complete consensus among the SR states.

It will be followed up in sub-committee meetings.

SRPC noted the above

X. Submission of Partial Outage Data with Validation

a) In 66th Commercial Sub-committee meeting held on 08.05.2026, it was informed that ERPC has developed a procedure for furnishing requisite information by concerned entities regarding partial outages of generating units for subsequent consideration

under the DSM account. As per the procedure, the generating station is required to submit evidence for each partial outage event, such as SOE, logs, screenshots with time stamps, etc. Additionally, they must submit DAS data at 10-second intervals from 30 minutes prior to the partial outage to 30 minutes after the event, along with a declaration confirming that the submitted details are not attributable to reasons such as fuel quality variation. SRLDC informed that the matter needs to be discussed in the OCC forum and may be taken up further accordingly. Further, it would be discussed in upcoming Commercial Sub-committee meeting.

b) Subsequently the issue was deliberated in the 240th OCC Meeting held on 10.07.2026 and all were requested to furnish their observations by 20th July 2026.

SRPC/TCC noted the above

XI. Methodology for Apportionment of Additional SFC for <55% Schedules-Clarification under CERC Tariff Regulations, 2024- APPCC agenda

a) APPCC had submitted the agenda regarding Methodology for Apportionment of Additional SFC for <55% Schedules for deliberation in the 54th TCC and 57th SRPC meeting held on 16.03.2026 and 17.03.2026. It was suggested by TCC that commercial issues may initially be discussed in the Commercial Sub-Committee and then brought to TCC and SRPC.

b) The matter was deliberated in the 17th NPC meeting held on 27.02.2026, wherein it was decided that the energy required for compensation, along with the sharing ratio among beneficiaries, would be reflected in the REA on a cumulative basis.

c) In 66th Commercial Sub Committee Meeting held on 08.05.2026, it was informed that the Statement of Compensation for Secondary Fuel Oil Consumption (SFC), applicable whenever a Generating Station operates below 55% of its Effective Capacity, had been revised and issued based on a cumulative computation methodology. Accordingly, both the Energy Charges and the allocation ratio pertaining to the schedules of beneficiaries, SCED, and SCUC from ISGSs, for the periods during which the Generating Station operated and was scheduled below 55% of its Effective Capacity, were computed on a cumulative basis and issued for FY 2024-25 and FY 2025-26.

SRPC/TCC noted the above

XII. Compensation for Secondary Fuel Oil Consumption (SFC) for FY 2024-25

a) As per CERC approved Procedure for Mechanism of Compensation for Degradation of Station Heat Rate, Auxiliary Energy Consumption, and Secondary Fuel Oil Consumption due to part-load operation and multiple start/stop of units, additional compensation for secondary fuel oil consumption is to be calculated for operation of the generating station beyond seven (7) starts/stops in a year under Unit Shutdown, in terms of Regulation 47 of the Grid Code Regulations, 2023.

b) Based on the analysis of outage data for the period from April 2024 to March 2025, it is observed that NTPC Simhadri STPS-I is eligible for the said compensation for

FY 2024-25. The relevant details were sought vide email dated 30.01.2026. NTPC, vide email dated 18.02.2026, informed that the SFC for Simhadri Stage-I was 0.494 ml/kWh, which was lower than the normative SFC (0.5 ml/kWh).

c) ***Therefore, no generator was eligible for compensation towards Secondary Fuel Oil Consumption (SFC) for FY 2024–25.***

TCC Deliberations

d) MS, SRPC stated that for FY 2025–26, several entities have become eligible. Certain clarifications have been sought, and the matter is currently under discussion in the NPC Forum regarding whether outages should be considered on a unit-wise basis or a station-wise basis.

SRPC noted the above

XIII.Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

For the period from 01.04.2026 onwards:

a) As per Clause (4) of Regulation 8 of the DSM Regulations, 2024, the revenue-neutral tolerance band for Solar/ Wind-Solar Hybrid Generating Stations will change from +/- 10% to +/- 5%, and for Wind Generating Stations it will change from +/- 15% to +/- 10% from 01.04.2026 onwards.

(ii) Volume limit of a WS Seller for the period from 01.04.2026 onwards:

WS Seller	Volume Limit
A generating station based on solar or a hybrid of wind –solar resources	$VL_{WS}(1)$ = Deviation up to 5% D_{WS} $VL_{WS}(2)$ = Deviation beyond 5% D_{WS} and up to 10% D_{WS}
A generating station based on wind resource	$VL_{WS}(1)$ = Deviation up to 10% D_{WS} $VL_{WS}(2)$ = Deviation beyond 10% D_{WS} and up to 15% D_{WS}

b) Deviation in a time block for WS sellers shall be computed as follows:

Deviation-WS seller (DWS) (in MWh) = [(Actual Injection in MWh) – (Scheduled generation in MWh)];

Deviation-WS seller (DWS) (in %) = 100 x [(Actual Injection in MWh) – (Scheduled generation in MWh)] / [(X% of Available Capacity) + (100-X) % of Scheduled Generation):

Provided 'X' shall be stipulated by the Commission through separate order(s) after public consultation.

CERC vide Order in Petition No. 9/SM/2025 stated that for the period from 01.04.2026 to 31.03.2027, **X=100%.**

c) ***(5) Charges for Deviation, in respect of a Standalone Energy Storage System (ESS),*** shall be the same as applicable to a general seller (other than an RoR generating station and a generating station based on municipal solid waste) as specified in Clause (1) of this Regulation:

Provided that in the charging mode, deviation by way of over drawal shall be treated as under injection and deviation by way of under drawal shall be treated as over injection and the charges for deviation shall be settled accordingly:

Provided further that the charges for deviation including the formula for computation of Deviation, in respect of charging of a standalone ESS being pumped hydro storage plant shall be the same as applicable to a WS seller being a generating station based on solar resources, **for the period from the date of commencement of these regulations to 31.03.2026**.

d) Subsequently, National Solar Energy Federation of India (NSEFI), vide letter dated 04.05.2026 communicated that NSEFI, along with certain other Renewable Generating Companies, had filed Writ Petition No. 13260 of 2026 before the Hon'ble Karnataka High Court, challenging the vires of Regulations 6(2)(b) and 8(4) of CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 ("DSM Regulations"). Citing the order dated 27.04.2026, the High Court gave following interim directions:

   a) *Operation of Regulations 6(2)(b) and 8(4) of the DSM Regulations 2024 shall not be enforced to the extent of revised formula and enhanced penalties, till the next date of hearing.*
   b) *The petitioners shall continue under the earlier DSM regime and deviation up to 15% shall be governed in terms of the earlier framework and the petitioners shall pay deviation charges accordingly.*

e) Additionally, NTPC Green energy Ltd along with NTPC REL and NTPC had filed a writ petition WP(MD)No.15318 of 2026 & WMP(MD)Nos.11462 & 11464 of 2026 before the Madurai Bench of Madras HC challenging the vires of Regulations 6(2)(b) and 8(4) of CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 ("DSM Regulations").Hon'ble High Court vide Order dated 08.06.2026 has issued the following interim directions as quoted below:

> *"5. Considering the submission made by the learned Senior Counsel for the petitioners that the petitioners herein are willing to adhere to the earlier DSM regime and pay deviation charges accordingly including for deviation up to 15%, as was permissible under the last uncontested framework under the CERC (Deviation Settlement, Mechanism) Regulations, 2014, let the petitioners herein continue to pay the deviation charges as permissible under the earlier DSM regime and the impugned regulations shall not be enforced till the next date of hearing".*

f) Accordingly, compliance of Hon'ble Karnataka High Court Order dated 27.04.2026 passed in Writ Petition No. 13260 of 2026- Statement for eligible petitioners who have furnished the requisite documents are included as per the volume limits and

corresponding charges for deviation specified under the CERC (DSM and Related Matters) Regulations, 2015. Accounts issued pursuant to the interim order are subject to revision in accordance with any subsequent order, judgment, or direction issued by any competent judicial or regulatory authority in the matter. Compliance of Hon'ble Madras High Court Order dated 08.06.2026 passed in WP(MD)No.15318 of 2026 & WMP(MD)Nos.11462 & 11464 of 2026- Statement for eligible petitioners are issued w.e.f stay order date i.e. 08.06.2026.

SRPC/TCC noted the above

XIV.Congestion Statement for RE entities

A variation in the approach adopted by different regions in the treatment of RE generators during congestion scenarios was observed. In this regard, the matter was deliberated in the Commercial Sub-Group meeting and the 17th NPC meeting. During the discussions, it was agreed that Congestion Statements should include RE entities in accordance with the prevailing Congestion Regulations issued by CERC.

SRPC/TCC noted the above

XV.Contract Rate for QCA

a) The matter of determination of the contract rate for Qualified Coordinating Agencies (QCA) under the CERC Deviation Settlement Mechanism Regulations was discussed in 17th NPC meeting held on 27.02.2026. As per the said Regulations, where Wind/Solar (WS) generators are aggregated at a pooling station through QCA, the contract rate for the purpose of deviation settlement shall be the weighted average of the contract rates of all participating WS sellers. It was further clarified that the computation is to be carried out solely on the basis of the contracted rates specified in the respective Power Purchase Agreements (PPAs).

b) The complexities involved in the Deviation Settlement Mechanism (DSM) were discussed. It was noted that block-wise computation and varying tariff structures under Section 62 and Section 63 arrangements create practical challenges in implementation. In this regard, Chairperson, CEA/NPC emphasized the need to simplify the computational methodology while ensuring compliance with the applicable regulatory provisions. He further suggested that a common approach across all RPCs may be evolved. Accordingly, the matter was first deliberated in the 66th Commercial Sub-Committee Meeting of SRPC, wherein it was recommended that a single uniform rate may be considered for Sellers/QCAs.

c) The matter was discussed again in the Commercial Sub-Group meeting of NPC held on 29.06.2026. During the discussion, it was opined that, for the purpose of computing the weighted average rate for the QCA, the available capacity, along with the applicable contract rate, may be considered in place of schedules for entities whose tariff has been determined under Section 62 or Section 63. Further, for entities whose tariff has not been determined, it was suggested that the Daily Weighted Average Area Clearing Price (ACP) of the Integrated Day-Ahead Market (IDAM) segments of all Power Exchanges

for the respective day, as proposed in the CERC Draft Third Amendment of DSM Regulations, may be adopted.

d) The matter would be placed before the forthcoming NPC meeting for further discussion and finalization.

SRPC/TCC noted the above

XVI.Greenko injection related

M/s Greenko Solar commenced firm injection with effect from 20th March 2026. Greenko PSP and Greenko Solar have been considered separately, in line with the decision taken during the special meeting held on 20.11.2025. Computation is shown as below:

Greenko Solar:
Actual Data= Actual computed Value - (Internal Schedule Component/4)
Schedule Data= ISTS Schedule

Greenko PSP:
Actual Data= Actual computed Value + (Internal Schedule Component/4)
Schedule Data= ISTS Drawl Schedule + ISTS Injection Schedule

SRPC/TCC noted the above

XVII.Adoption of a uniform accounting methodology for Transmission Deviation Charges (RTDA) across RPCs for QCA

a) The matter was deliberated in the Commercial Sub-Group meeting of NPC held on 04.05.2026 to evolve a uniform approach for the computation of RTDA across all regions with respect to QCAs. It was observed that, in the NRPC and SRPC, the Transmission Deviation Charges are being computed separately for each individual generator, whereas in the WRPC, these charges are being computed at the QCA level.

b) In respect to Transmission Deviation charges, the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 and amendment thereof provides that:

> *"(1) Transmission Deviation, in MW, shall be computed as under: (a) For a generating station including ESS and captive generating plant, transmission deviation shall be net metered ex-bus injection, in a time block in excess of GNA of such entity:*
>
> .....

c) The matter was discussed again in the Commercial Sub-Group meeting of NPC held on 29.06.2026. During the discussion, it was opined that the clarification needs to be obtained from CTUIL as well as QCA. Further, the agreement between QCA and the RE generators contains provision for settlement of bills/accounts pertaining to DSM only.

d) After deliberations, it was opined that the RTDA may be issued at the QCA level instead of to the individual Generating Entities. Accordingly, it shall be the responsibility of

the respective QCA to ensure that the actual generation at the ISTS level remains within the available GNA and deemed T-GNA. Further, the payment of RTDA charges, wherever applicable, shall be settled by the respective QCA with CTUIL.

e) It is also informed that, as per Annexure-6 of the Electricity Grid Code (IEGC), 2023, titled "*Procedure Specifying Data, Forecasting and Scheduling for Renewable Energy Generating Stations (REGS) at the Inter-State Level," and the Detailed Procedure for Metering, Accounting and Scheduling of Entities issued under Regulations 5.6, 17.3, and 39.2 of the GNA Regulations, the Qualified Coordinating Agency (QCA), on behalf of the generating stations it represents, or the Lead Generator, shall undertake technical coordination among the generators connected to a pooling station. The QCA/Lead Generator shall also be responsible for metering, data collection, data transmission, scheduling, accounting, and coordination with RLDC, SLDC, RPC, CTU, and other concerned agencies in accordance with the IEGC and the extant CERC Regulations. In this regard, SRPC Secretariat vide mail dated 29.06.2026, sough the inputs from QCA in Southern Region."*

a) Further, the matter would be placed before the forthcoming NPC meeting for further discussion and finalization.

SRPC/TCC noted the above

XVIII.Compliance status of New Protection Audit Recommendations (PAR-New)

a) As per Clause 15(2) of IEGC 2023 regulations All users shall also conduct third party protection audit of each sub-station at 220 kV and above (132 kV and above in NER) once in five years or earlier as advised by the respective RPC.

b) The compliance of new Protection Audit Recommendations is regularly discussed in the PCSC Meetings and special meetings. The status of compliance is monitored/reviewed periodically by SRPC Secretariat. The latest status of compliance of various SR-Constituents as on June, 2026, for the Stations audited up to June 2026 is as below:

SL.NO	Entity	Total	Complied	Pending	Dropped	Compliance percentage
1	APGENCO	139	69	68	2	50.36
2	APTRANSCO	1376	700	577	99	54.82
3	TGGENCO	288	178	94	16	65.44
4	TGTRANSCO	1295	336	873	86	27.79
5	KPCL	273	204	64	5	76.12
6	KPTCL	1067	256	788	23	24.52

7	TNPGCL	26	22	3	1	88.00
8	TANTRANSCO	965	462	345	158	57.25
9	KSEBL	516	250	235	31	51.55
10	PGCIL SR-I	149	76	73	0	51.01
11	PGCIL SR-II	125	101	19	5	84.17
12	PED	133	64	65	4	49.61
13	NTPC	99	56	43	0	56.57
14	NTPL	9	6	3	0	66.67
15	NNTPP	14	12	2	0	85.71
16	NLCIL	230	77	153	0	33.48
17	NPCIL	101	36	64	1	36.00
18	JSWEL	20	19	1	0	95.00
21	SCCL	16	16	0	0	100.00
23	Others-Combined	39	21	18	0	53.85

- ***All the SR-Utilities are requested to comply with the pending remarks and update the status regularly along with the firm timelines for compliance.***

TCC Deliberations

a) NLC informed the forum that they would comply pending third party protection audit points at the earliest.

b) KPTCL and TGTRANSCO informed that they would update the progress.

c) KSEBL informed that most of the pending points are in relation to the infrastructure changes and has been taken up with the transmission wing.

d) PGCIL SR-I and SR-II informed that certain pending observations are general and not station-specific but pertains to protection philosophy and design practices. Accordingly, PGCIL requested that such observations should be dropped.

e) MS, SRPC informed that the observations furnished by the utilities, along with adequate technical justification and supporting reasons for the corresponding recommendations, would be duly examined and, wherever found justified, will be considered for dropping.

SRPC noted the above

XIX. Compliance status of Old Protection Audit Recommendations (PAR-Old)

a) CERC, vide order dated 15.12.2016 in Petitions filed by KSEBL (88/MP/2016) and KPTCL (135/MP/2016), granted last-chance time extensions to the SR Constituents for completing their respective Protection Audit Recommendations (PAR), and had directed SRPC to monitor the status of completion of PAR regularly in PCSC meetings and submit bimonthly report to the Commission confirming the completion of Phase-I and Phase II of PAR by the Constituents of Southern Region. Accordingly, the status report is being submitted to CERC on bimonthly basis by SRPC secretariat.

b) The pending PAR-Old recommendations to be complied by TANTRANSCO, as on June 2026, are as below:

SR Utility	Name of substation	Details of Protection Audit Observations	Latest Updates
TANTRANSCO	230 kV Arni SS	Second source of DC to be reviewed for connectivity.	Timeline requested up to 31.03.2025.
	230 kV Kayathar SS	Proper fire fighting and oil drain pit to be provided for transformers.	Estimate sanctioned. Tender to be floated. Timeline requested up to 31.12.2024.
	230 kV Pugalur	Possibility of providing CB for sectionalised bus to be explored.	Space constraint. Not feasible for providing Hybrid Breaker too.
	230 kV Singaperumal Koil SS	Strengthening of 230/110 kV bus to be examined (presently two conductors as 230 kV Bus and 1 conductor as 110 kV bus).	Timeline requested up to 31.12.2024
		Providing fire protection system for auto transformer to be examined.	Fire protection system provided for Auto 1 &4. Auto-2 included in the upcoming PSDF. For Auto-3 Fire Protection system is not feasible.
	400 kV Sunguvarchathiram SS & 230 kV SunguvarachathiramSS	Fire protection system is not provided for ICTs.	Timeline requested up to 31.12.2024
Note: Gas based IPPs in AP like Spectrum PGL, Konaseema, Vijjeswaram St-II & Lanco Kondapalli have not been in operation since long time, due to non-availability of gas and reported that most of them have been dismantled. Hence The pending audit points for those stations/entities are not monitored.			

- ***TANTRANSCO is requested to complete the works to comply with the pending PAR, at the earliest.***

TCC Deliberations

TANTRANSCO informed that they would take up with field official for addressing the old pending PAR points.

XX. Conduction of Third-Party Protection Audit (TPPA) in the Southern Region for 2024-25, 2025-26 & 2026-27

In line with IEGC Regulations, TPPA of Stations of SR-Utilities is being carried out on quarterly basis.

a) The details of the Stations audited during the FY 2024-25 are given at **Annexure-29XXA**.

b) The details of the Stations audited during the FY 2025-26 are given at **Annexure-29XXB**.

c) Requests for Third-Party Protection Audit (TPPA) for the year 2026–27 were received from 121 stations from SCTPPA entities. Subsequently, SRPC Secretariat, vide mail dated 14.03.2025, issued the schedule of Protection Audit of various 220kV & above substations/switch yards in the Southern Region for FY 2026-27 for SCTPPA. The scheduled audits have been taken up strictly as per the SCTPPA schedule to enable proper monitoring. The details of the Stations audited/to be audited during the FY 2026-27 are given at **Annexure-29XXC**.

- ***The entities, whose station(s) audits have been completed, are requested to take necessary action to comply with the protection audit remarks/recommendations given by the audit team.***

TCC deliberations

- ***Forum advised all the nodal officers from SR utilities to complete the SRPC Coordinated Third-Party Protection Audit (SCTPPA) for the year 2026–27 strictly as per the SCTPPA schedule to enable proper monitoring.***
- ***The entities, whose station(s) audits have been completed, are requested to take necessary action to comply with the protection audit remarks/recommendations given by the audit team.***

SRPC noted the above

XXI. Compliance of PCSC Recommendations

a) All tripping's involving 220 kV & above system, which inter alia, involves mal-operation/non-operation of protection systems in place are regularly discussed in the Meetings of Protection Coordination Sub-Committee (PCSC) of SRPC with a view to identify the root cause and scrutinize correctness of operation of protection systems put in place by the constituents concerned. In the process, appropriate measures required to be taken for system improvement are being suggested/ recommended for compliance by constituents concerned.

b) The constituents were also requested to report the compliance/action taken on the suggestions/recommendations of the PCSC in the subsequent meetings. These PCSC recommendations (P-Rec), which are yet to be complied with, are circulated regularly; vide (i) Agenda & Minutes of PCSC meetings and (ii) e-mails. In each PCSC meeting, status of Pending PCSC recommendations of

previous meetings are discussed and updated.

c) The latest status of PCSC Recommendations(P-Rec) received up to 143rd PCSC meeting held on 08.06.2026 and the detailed entity wise status of pending implementation of PCSC recommendations had been compiled and is available on SRPC website (as Annexure to Minutes of the Meeting of PCSC).

TCC Deliberations

➢ ***Forum advised all the SR entities to update the status of the pending PCSC recommendations in the P-Rec module of the SR-PMS portal.***

SRPC noted the above

XXII.Annual Review of SR Islanding Schemes

a) Due to the variation in generation and load growth in the already designed Islanding Schemes, the Annual Review of SR Islanding Schemes is being undertaken every year.

b) Accordingly, the review meetings of all SR Islanding Schemes were conducted as per the schedule given below:

Sl. No.	Islanding Scheme	Date of Review Meeting		
Review meetings →		1st Review	2nd Review	3rd Review
1	Hyderabad	11.06.2025	25.09.2025	17.02.2026
2	Bangalore	11.06.2025	09.12.2025	17.02.2026
3	Vijayawada	11.07.2025	25.09.2025	----
4	Visakhapatnam	11.07.2025	25.09.2025	17.02.2026
5	Chennai	15.07.2025	09.12.2025	17.02.2026
6	Neyveli	15.07.2025	16.12.2025	-----
7	Kudankulam	15.07.2025	16.12.2025	-----

Note:

- For Vijayawada, Visakhapatnam and Chennai IS reviewed Island documents are issued.
- For Neyveli & Kudankulam the Islanding review modified load data is awaited from SLDCs concerned for Neyveli and Kudankulam IS for issue of reviewed islanding scheme document.
- In case of Hyderabad IS, TGSLDC Vide mail dated 05.05.2026 have furnished the details regarding modified Hyderabad IS.

TCC deliberations

TCC noted that a few entities are yet to submit the requisite details. The concerned entities were requested to furnish the pending details at the earliest to facilitate issuance of the remaining reviewed Islanding Scheme documents.

SRPC noted the above

XXIII.Request by KPTCL to share PGCIL Fibre

a) In the 66th COMSR meeting held on 20.01.2026, KPTCL placed a request to PGCIL to share fibres on certain OPGW link installed by PGCIL under ISTS schemes, on PGCIL and KPTCL transmission lines.

b) CTUIL convened an online meeting on 13.02.2026 to discuss the matter. KPTCL submitted the FO map and Power map of KPTCL; PGCIL submitted existing fibre utilization on the links specified for analysis and deliberations to identify the links and number of fibres to be shared.

c) It was noted that as per CEA fibre sharing guidelines 2025 clause 4 (i) and 4(ii), CTU is the nodal agency for allocation of fibre from ISTS links constructed under different ISTS /ULDC schemes. SRPC Secretariat also emphasized that in line with CEA fibre sharing guidelines 2025, PGCIL to share the fibres as requested by KPTCL for power system application (grid operation) purpose. PGCIL stated that they need to take internal approval of their management before fibre sharing. CTUIL to write to PGCIL as per the deliberations, with a copy to KPTCL and SRPC Secretariat.

d) PGCIL vide mail dated 27.06.2026 has allocated fibres from the OPGW laid by PGCIL on KPTCL intra-state and ISTS lines under the ULDC scheme for establishment of FO links to KPTCL SLDC for SCADA.

e) As suggested by CTUIL, two fibre pairs (4 Dark Fibres) were identified & spared by KPTCL from the required KPTCL links, for sharing of dark fibres for provisioning alternate communication path to SRLDC. Subsequently, an alternate communication path was established from PGCIL 400 kV Somanahally Substation to SRLDC.

f) Subsequently, KPTCL vide communication dated 03.07.2026 shared the details of four fibre cores on Somanhally-Khodays-SBPura-Peenya-A Station fibre route with PGCIL, SR-II, facilitating the establishment of the alternate communication link to SRLDC.

TCC deliberations

g) MS, SRPC appreciated the successful completion of fibre sharing between PGCIL and KPTCL, which was facilitated through constructive deliberations and mutual cooperation between the two utilities.

h) It was informed that PGCIL SR-II has allocated fibres to KPTCL along the OPGW route between KPTCL intra-state and ISTS lines laid by PGCIL under the ULDC scheme. The fibres were shared for establishment of FO links to KPTCL SLDC for SCADA grid operations purposes.

i) Further forum noted that KPTCL has also shared four fibre cores on Somanahally-Khodays-SBPura-Peenya-A Stations (OPGW route) with PGCIL SR-II, facilitating the establishment of the redundant alternate communication path to SRLDC.

SRPC noted the above

XXIV.Southern Regional Physical Communication Audit

a) As per clause 10 of the CERC (Communication System for Inter-State Transmission of Electricity) Regulations, 2017, RPC shall conduct annual audit of the communication system as per the procedure finalized in the forum of the concerned RPC.

b) As per Final Standard Operating Procedure (SOP) for Communication audit of Substations finalized by NPC, the Audit would be conducted in two phases. In first phase scrutiny of the reports, documents etc. In the second phase physical verification shall be carried out.

- **Physical Communication Audit during the year 2024-25**

  a) 18 No. of Substations Communication audit was conducted during the period of February-March 2025.

  b) Monitoring of the status on the recommendations of the Communication Audits conducted in 18 substations has been commenced from 59th COM-SR held on 24.06.2025.

- **Physical Communication Audit during the year 2025-26**

  a) 25 No. of Substations Communication audit was conducted during the period of September 2025 - February 2026.

  b) Monitoring of the status on the recommendations of the Communication Audits by substations, has commenced from 62nd COM-SR held on 24.09.2025.

- **Physical Communication Audit during the year 2026-27**

  The following 25 No. of Substations have been identified to carry out the Communication audit during the period of July 2026 - January 2027.

SN	Name of the Station to be audited	Name of Utility being audited (Auditee)
1	220kV Donkarayi	APGENCO / APTRANSCO
2	220kV Purushotpatnam	APTRANSCO
3	400kV Thallayepalem	APTRANSCO
4	220kV A Station	KPTCL
5	220kV Yelahanka CPP	KPCL / KPTCL
6	220kV Mahalingapura	KPTCL
7	220kV Sedam	KPTCL
8	220kV Edappon	KSEB
9	220kV Ambalamugal	KSEB
10	230kV Thondamanatham	PED
11	220kV Tandur	TGTRANSCO
12	400kV Yedula	TGTRANSCO
13	400kV Srisailam LB	TGGENCO / TGTRANSCO
14	230kV Alagarkoil	TANTRANSCO

15	230kV Kanchipuram	TANTRANSCO
16	230kV Mambakkam	TANTRANSCO
17	765kV Maheswarem	PGCIL SR-I
18	765kV C'Peta	PGCIL SR-I
19	500kV Talcher HVDC	PGCIL SR-II
20	400kV Trivendrum	PGCIL SR-II
21	400kV Kaiga GS	NPCIL-KAIGA
22	220kV Green Infra, Kanakagiribad	Green Infra
23	220kV Ramagundam Solar	NTPC-Ramagundam
24	230kV JSW Savalaperi	JSW-RE Tuticorin
25	400kV JSW Thermal	JSWEL

TCC deliberations

j) MS, SRPC informed the Forum that 25 substations in the Southern Region have been identified for conducting the Communication Audit during the period from July 2026 to January 2027.

k) Forum noted that Communication audit from FY 2026-27 is commenced from 24th July 2026 with the audit of 220 kV Yelahanka CPP KPTCL SS and SRPC requested all the concerned utilities to extend necessary active cooperation and coordination to ensure the successful commencement and completion of the scheduled audits.

SRPC noted the above

XXV.Compliance status of Communication Audit Recommendations

The statuses of compliance of Communication Audit Recommendations are discussed in the COMSR Meetings. The status of compliance is monitored/reviewed periodically by SRPC Secretariat. The latest status of compliance by various SR-Constituents (as on June, 2026), for the Stations audited up to the year 2025-26 is as below:

Entity	Total	Complied	Pending	Dropped	Compliance percentage
ADANI	7	6	1	0	85.71%
APTRANSCO	22	14	7	1	66.67%
Ayana	14	0	14	0	0.00%
Betam Wind	6	0	6	0	0.00%
BHAVINI	24	0	24	0	0.00%
Greenko	11	6	5	0	54.55%
GRT Solar	5	3	2	0	60.00%
INDIGRID	9	6	3	0	66.67%
KPTCL	23	12	8	3	60.00%
KSEBL	44	15	28	1	34.88%
NLCIL	13	2	11	0	15.38%
NTPC	34	28	6	0	82.35%
PED	13	9	4	0	69.23%

PGCIL SR-I	20	12	6	2	66.67%
PGCIL SR-II	41	27	13	1	67.50%
RENEW	9	5	4	0	55.56%
TANTRANSCO	34	14	19	1	42.42%
TGTRANSCO	27	10	15	2	40.00%
Veena-Gadag	6	3	3	0	50.00%

TCC deliberations

- ***All the entities were requested to comply with the communication audit recommendations.***

SRPC noted the above

XXVI. Testing of Power system equipment for use in the supply system and network in the country for Cyber Security

As per Ministry of Power Order No. 12/34/2020-T&R dated 24.12.2021 and August 2025, all power system equipment used in the supply system and network in the country are required to undergo Communication Protocol and Cyber Security Conformance testing through designated laboratories. The details of the Equipment, Test details and designated Laboratories are mentioned in the order (at *Annexure-1* and *Annexure -2 of the order)* **Annexure-29XXVI.** As these tests are mandatory for both imported and indigenous equipment, these tests need to be carried out to validate the communication and security of the products as per IEC standards mentioned in the MoP Order.

TCC deliberations

l) It was informed that the subject under discussion was already deliberated in COMSR meeting and requested all the members to note the details for necessary Compliance.

SRPC noted the above

XXVII. Assessment of Requirement of Reactive Compensation of SR/SR states

a) Requirement of Reactive Compensation of SR/SR states is required to be carried out annually. The same would be carried out in line with the deliberations of 102nd & 103rd Protection Sub-Committee Meetings.

b) SRLDC, vide email dated 12.09.2025, furnished the State-wise instances of Low voltage scenario at 400kV level (based on SCADA data) that occurred in the year 2024-25 as below

State	Date and Time	Max_UV_Index
ANDHRA PRADESH	2024-08-08 07:27	16.05
KARNATAKA	2024-08-24 10:43	132.28
KERALA	2024-05-02 22:23	111.48
TAMILNADU	2024-04-25 09:53	78.91
TELANGANA	2025-02-20 07:05	17.47

c) All States were requested to furnish the converged PSSE cases for above instances along with the other details as specified above by 21.09.2025. If any better low voltage instances at 220kV level have been observed by AP, KAR, TN, KER, TG & PED, the corresponding cases (converged) may be given accordingly

d) However, in this regard the converged PSSE case files are still pending from APTRANSCO, TANTRANSCO & TGTRANSCO.

- ***APTRANSCO, TANTRANSCO & TGTRANSCO to furnish the data immediately.***

TCC deliberations

m) TCC noted that as on 24th July 2026 APTRANSCO and TANTRNSCO have not furnished the respective data, for reactive compensation studies for SR.

SRPC deliberations

n) Forum noted that APTRANSCO and TANTRANSCO have furnished the respective data on 25th and 26th July 2026 respectively as requested. It was informed that the studies were carried out by using Method 1, subsequently studies would be taken up using Method 2.

XXVIII.Cyber Security

(i) Chapter 8 (CYBER SECURITY) of CERC (Indian Electricity Grid Code) Regulations 2023, envisages as follows:

Quote

50. GENERAL

…..

(2) All users, NLDC, RLDCs, SLDCs, CTU and STUs, power exchanges, QCAs, SNAs, shall have in place, a cyber-securityframework in accordance with Information Technology Act, 2000; CEA (Technical Standards for Connectivity) Regulations, 2007; CEA (Cyber Security in Power Sector) Guidelines, 2021and any such regulations issued from time to time, by an appropriate authority, so as to support reliable operation of the grid.

51. CYBER SECURITY AUDIT

All users, NLDC, RLDCs, SLDCs, CTU and STUs, power exchanges, QCAs, SNAs, shall conduct Cyber Security Audit as per the guidelines mentioned in

the CEA (Cyber Security in Power Sector) Guidelines, 2021 and any other guidelines issued by an appropriate Authority.

52. MECHANISM OF REPORTING

1)All entities shall immediately report to the appropriate government agencies in accordance with the Information Technology Act, 2000, as amended from time to time, and CEA (Cyber Security in Power Sector) Guidelines, 2021, in case of any cyber-attack.
2)*NLDC, RLDCs, SLDCs, RPCs and the Commission shall also be informed by such entities in case of any instance of cyber-attack.*

Unquote

(ii) Article 14 of CEA (Cyber Security in Power Sector) Guidelines, 2021 amended to date are reproduced as below:

Article 14 Cyber Security Audit

a) The Responsible Entity shall implement Information Security Management System (ISMS) covering all its Critical Systems.

b) The Responsible Entity shall through a CERT-In Empanelled Cyber Security OT Auditor shall get their ***IT system audited at least once in every 6 (six) months*** *and* ***OT System audited at least once in a year.*** *The Responsible Entity shall close all critical and high vulnerabilities within a period of one month and medium as well as low non-conformity before the next audit. Effective closure of all non-conformities shall be verified during the next audit.*

c) The Cyber Security Audit shall be as per ISO/IEC 27001 along with sector specific standard ISO/IEC 27019, IS 16335 and other guidelines issued by appropriate Authority if any. These mentioned standards shall be current with all amendments if any and in case if any standard is superseded, the new standard shall be applicable. CISO shall ensure immediate closure of non-conformance, based on the criticality and by means all non-conformances are to be closed before the next audit.

d) The Responsible Entity shall ensure that CISO has all the required systems and documents in place, as mandated by NSCS for base line cyber security audit.

- ***All Entities shall, through a CERT-In Empanelled Cyber Security OT Auditor, get their IT system audited at least once in every 6 (six) months and OT System audited at least once in a year.***

TCC Deliberations

- ***All the Southern Region utilities to ensure their IT systems are audited at least once every six months and OT systems are audited at least once every year through a CERT-In empanelled Cyber Security OT Auditor.***

SRPC noted the above

XXIX.Regulatory compliance of CERC and CEA Regulations

a) Alignment of the State Grid Code with the Indian Electricity Grid Code

CERC in its Order dated 15.10.2025 in Petition No 9/SM/2024 had suggested

Alignment of the State Grid Code with the Indian Electricity Grid Code

It is observed that the incentive provisions are not aligned with the CERC Regulations; therefore, the intra-state generators are reluctant to participate in AGC and part-load operation of thermal generating units. The Commission has notified the new Grid Code, which contains various provisions with respect to AGC, Reserve requirements and part load compensation for thermal generating stations. The state SERCs may align their respective State Grid Code with the 2023 Grid Code of CERC expeditiously.

In light of increasing penetration of RE, there is an immediate need for SLDCs to ensure that RE-generating stations comply with CEA Technical Standards prior to getting integrated with the grid. HVRT, LVRT and reactive compliances should be ensured, particularly prior to allowing the RE generating station to connect to the State system, by SLDC. There is a need to monitor the primary response provided by the intra-state generating stations by SLDCs, as is being done by RLDCs for regional entities under the Grid Code, to ensure that adequate primary response is available.

Maintaining adequate Reserves

It is noted that no state is actually maintaining reserves, and even in cases where states claim to have reserves, these are scheduled during peak hours, defeating the very purpose. It was informed that from 1st April 2026, NLDC will begin maintaining reserves on a state-wise basis; however, this could prove costly for states, as NLDC may need to maintain reserves in costlier gas-based plants. Hence, states are urged to maintain their own reserves. States are required to meet the expected demand as well as keep the necessary reserve so that any load loss may not occur in case of any contingency.

The update received from SLDCs are as below:

S.No	State	Reference	Response on Alignment of state & central Grid code
1	Karnataka	Vide email dtd 11.04.2026	The Hon'ble KERC has issued the Karnataka Electricity Grid Code, 2025, which came into effect from 21st July 2025. The KEGC-2025 is largely aligned with the IEGC, 2023, including the First Amendment to IEGC.
2	Telangana	Vide email dtd 12.04.2026	The existing State grid code is in line with IEGC-2010 & Planning to align the same in line with IEGC-2023. First round of discussions with all state stake holders has been completed. A second meeting is planned in this month. The draft of the

			revised State Grid Code, aligned with IEGC 2023, will be submitted to TGERC in a month.
Subsequently **it was noted that 8th GCC meeting was held on 19.06.2026 in which the Draft IEGC prepared was presented and views/suggestions of Stake holders were sought. SRPC and SRLDC also present as the Committee members.**			
3	Andhra Pradesh	Vide email dtd 13.04.2026	Draft Grid code is submitted to APERC which is under discussion. However, as per clause 1.10 of APCTI (AP Code of Technical Interface) that if any clause of AP CTI (AP Grid Code) contradicts the provision of IEGC during a real situation the IEGC takes precedence.
4	Kerala	Vide email dtd 13.04.2026	KSEBL has yet to initiate action to align the existing grid code with latest IEGC.
5	Tamil Nadu	Vide email dtd 13.04.2026	TNERC has notified state Grid Code on 13.02.2026
6	Puducherry	Vide email dtd 14.04.2026	In exercise of the powers conferred by the Electricity Act 2003 the Central Government constituted a Joint Electricity Regulatory Commission for all Union Territories including Puducherry (subsequently joined by the State of GOA also) to be known as "Joint Electricity Regulatory Commission (for the State of Goa and Union Territories)". The provisions of the JERC State Grid Code 2010 and its **amendments** are partially aligned with the principles, operational philosophy, and regulatory framework of IEGC 2023, particularly with respect to grid security, scheduling & dispatch, metering, protection, and system operation, However, in the areas where the JERC is yet to come up with regulations such as Cyber Security Guidelines, Energy Storage systems, Market based ancillary services regulations, SCED etc., the Electricity Department, Puducherry complies to the provisions of the IEGC 2023 and ensures consistency with the IEGC 2023.

- ***SLDCs may note for compliance.***

TCC Deliberations

- MS SRPC stated that the information sought by MoP was furnished by SRPC, as tabulated above.

➢ ***TCC concluded that the concerned State/UT regulators and utilities shall expedite the review and alignment of their respective State Grid Codes with the IEGC, 2023 and subsequent amendments, wherever not already aligned, and take necessary action to ensure consistency in grid operation, reserve requirements, AGC/primary response, and RE compliance requirements.***

SRPC noted the above

b) Periodic Testing of Generators, HVDC/FACTS Devices

a. Regulation 40 (1) of CERC (IEGC) Regulations, 2023 stipulate that there shall be periodic tests, as required under clause (3) of this Regulation, carried out on power system elements for ascertaining the correctness of mathematical models used for simulation studies as well as ensuring desired performance during an event in the system.

b. **Name of the test for Periodic Testing of Generators**

1) Real and Reactive Power Capability assessment.
2) Assessment of Reactive Power Control Capability as per CEA Technical Standards for Connectivity
3) Model Validation and verification test for the complete Generator and Excitation System model including PSS
4) Model Validation and verification of Turbine/Governor and Load Control or Active Power/ Frequency Control Functions.
5) Testing of Governor performance and Automatic Generation Control.

Name of the test for HVDC & FACTS:

1) Reactive Power Controller (RPC) Capability for HVDC/FACTS
2) Filter bank adequacy assessment based on present grid condition, in consultation with NLDC.
3) Validation of response by FACTS devices as per settings.

c. As per provisions of Regulation 40 of IEGC-2023 the following are mandated:

Regulation 40 (2) (a):

"***The owner of the power system element shall be responsible for carrying out tests*** *as specified in these regulations and for submitting reports to NLDC, RLDCs, CEA and CTU for all elements and to STUs and SLDCs for intra-State elements.*"

Regulation 40 (2) (b):

"***All equipment owners shall submit a testing plan for the next year to the concerned RPC by 31st October*** *to ensure proper coordination during testing as per the schedule. In case of any change in the schedule, the owners shall inform the concerned RPC in advance.*"

Regulation 40 (2) (c):

"***The tests shall be performed once every five (5) years*** *or whenever major retrofitting is done. If any adverse performance is observed during any grid event, then the tests*

shall be carried out even earlier, if so advised by SLDC or RLDC or NLDC or RPC, as the case may be"

d. In this regard, it is observed that periodic testing of generating units, as mandated under Regulation 40 of IEGC-2023, has not been carried out by a large number of generators. The matter has been continuously highlighted and sensitized through the standing agenda in OCC meetings since 207th meeting held in October-2023 and 49th TCC/ 52nd SRPC meeting held in August-2024.
e. Further, vide letter dated 03.06.2025 (***Annexure-29XXIXA***), the generators which had not furnished testing schedules for 2024-29 period, as well as, generators which had furnished testing schedules for FY 2024-25 but had not carried out the testing were informed regarding the non-compliance of Regulation 40 of IEGC-2023.
f. Subsequently, vide letter dated 27.05.2026 (***Annexure-29XXIXB***), generators that had still not furnished testing schedules for the 2024-29 period were again informed of the non-compliance and were requested to furnish the testing schedules immediately.
g. Further, vide letter dated 27.05.2026 (***Annexure-29XXIXC***), generators who had furnished schedules for FY 2024-25, FY 2025-26 and FY 2026-27, but have not competed the testing activities as per indicated timeless were requested to carry out the mandated testing. They were advised to complete the testing in a phased manner so that the activities are appropriately distributed over the remaining period up to March 2029 and do not accumulate towards the end of the prescribed five-year cycle (2024-29).
h. In view of the above, a meeting was held on 18.06.2026 through Video Conference to deliberate on the above Regulation 40 compliance with conventional generators (Thermal, Hydro, Gas). The MoM is at **Annexure-29XXIXD**

- ***Generators/ HVDC to note for compliance.***

TCC Deliberations

a) MS, SRPC stated that a special meeting was held on 18.06.2026 with conventional generating stations to deliberate upon issues relating to periodic testing of generators. The related issues concerning RE generating stations were subsequently discussed during the 5th RE Sub-Committee Meeting held on 24.06.2026. Generating stations were advised to take necessary action as per the recommendations recorded in the respective MoMs and carry out periodic testing as per the prescribed schedule.

➢ ***TCC concluded that all generating stations shall comply with the recommendations of the respective meetings and ensure completion of periodic testing as per the prescribed schedule, with the test results furnished to the concerned SLDC/SRLDC as applicable.***

Issues wrt PG Testing & IEGC mandated Periodic Testing

i. Generating stations are required to carry out Performance Guarantee (PG) Tests and periodic tests mandated under the IEGC. As per the IEGC, the owner of the power system element is responsible for conducting these tests, while the RPC is entrusted with coordinating among the concerned stakeholders.

j. For Central Generating Stations (CGSs), testing schedules are generally discussed in OCC meetings and finalized in consultation with beneficiaries to minimize operational impact. However, it has been observed that schedules agreed upon during OCC deliberations are not always honored during real-time operation, resulting in deferment or non-conduct of the planned tests. Consequently, generating stations face difficulties in completing PG Tests and complying with the periodic testing requirements under the IEGC.

k. Beneficiaries have also raised concerns regarding the declaration of full Declared Capability (DC) during time blocks approved for PG Tests and other IEGC-mandated periodic tests. They submitted that DC should reflect any temporary generation restrictions arising from such mandatory testing, as the generating station may not be capable of supplying its full available output during the test. Otherwise, beneficiaries may incur fixed charge liabilities corresponding to the full declared capacity despite the station being unable to supply the same during the approved testing period.

l. However, the generation restrictions during these periods arise solely due to testing schedules approved through the OCC after consultation with the concerned beneficiaries. They do not result from any outage, deration, equipment failure, or reduction in the inherent capability or availability of the generating station, but are a consequence of mandatory regulatory compliance and performance testing.

m. Accordingly, there is a need for regulatory and operational clarity regarding the treatment of Declared Capability (DC) during such approved testing periods and the associated commercial implications.

TCC Deliberations

- TCC noted the concerns regarding scheduling and conduct of PG Tests and IEGC-mandated periodic tests, including the treatment of Declared Capability (DC) during approved testing periods and the associated commercial implications. The matter may be examined at the appropriate forum for necessary regulatory and operational clarity.

- MS SRPC informed that the issue had been raised as an agenda item in the forthcoming CERC interaction meeting with Stakeholder- RPCs.

SRPC note of the above

c) Operational Planning Study

(i) As per IEGC (Regulation 33) on Operational Planning Study the following is to be noted by all concerned:

TIME HORIZON FOR OPERATIONAL PLANNING STUDY

Time horizon of operational planning study	Agency	Means for carrying out study
Real time and Intra-	NLDC, RLDC and SLDC	For various operating conditions using online/offline SCADA/EMS

day		system
Day-ahead	NLDC, RLDC, andSLDC	For various operating conditions using offline tools
Weekly	NLDC, RLDC, andSLDC	For various operating conditions using offline tools
Monthly/Yearly	RPC	For various operating conditions using offline tools

(ii) IEGC 2023 Regulation 33 (6) – "*Operational planning study shall be done **to assess whether the planned operations shall result in deviations** from any of the system operational limits defined under these regulations and applicable CEA Standards. **The deviations, if any, shall be reviewed in the monthly operational meeting of RPC** and significant deviations shall be monitored by RPC for early resolution*".

(iii) IEGC 2023 Regulation 33 (8) – "*NLDC, RLDCs, RPCs and SLDCs shall have operating plans to address potential deviations from system operational limit identified as a result of the operational planning study. These operating plans shall be communicated to users in advance so that they can take corrective measures. **In case any user is unable to adhere to such an operating plan,** it shall inform the respective SLDC, RLDC and NLDC in advance with detailed reasons and explanations for the non-adherence. **These detailed reasons and explanations shall be discussed in the monthly operation sub-committee of the respective region and a quarterly report shall be submitted by the respective RPC to the Commission and CEA***"

(iv) SLDCs, RLDCs and NLDC shall perform day-ahead, weekly, monthly and yearly operational studies for:

(v) Assessment of TTC and ATC at inter-regional, intra-regional, and inter-state levels.

- **Planned outage assessment;**
- **Special scenario assessment;**
- **System protection scheme assessment;**
- **Natural disaster assessment; and**
- **Any other study relevant to operational scenarios**

- ***All the entities to note the time horizons for different activities and adhere to the same.***

SRPC/TCC noted the above

d) Primary Response Requirement as per Indian Electricity Grid Code – 2023

(i) As per IEGC, 2023 Regulation 30 (10) (d) – "The generating stations and units thereof shall have electronically controlled governing systems or frequency controllers in accordance with the CEA Technical Standards for Connectivity and are mandated to provide PRAS. The generating stations and units thereof with governors shall be under Free Governor Mode of Operation."

(ii) SRLDC had highlighted that as per IEGC Regulations 2023, all the generating units shall provide primary frequency response as mentioned in the below table.

Sl. No	Fuel/ Source	Minimum unit size/Capacity	Up to
1	Coal/Lignite Based	200 MW and above	±5% of MCR
2	Hydro	25 MW and above	±10% of MCR
3	Gas based	Gas Turbine above 50 MW	±5% of MCR (corrected for ambience temperature)
4	WS Seller (Commissioned after the date as specified in the CEA Technical Standards for Connectivity)	Capacity of Generating station more than 10 MW and connected at 33 kV and above	As per CEA Technical Standards for Connectivity

(iii) The following units are still operating under **Restricted Governor Mode of Operation (RGMO)**. The status updates from the 54th TCC meeting:

Generating Station	Capacity (MW)	FGMO/ RGMO status	Update
Rayalaseema D	1 x 600	RGMO	53rd TCC: Logic is being prepared and would be implemented within one month. **54th TCC:** FGMO kept in service from 10.01.2026
Krishnapatanam (SDSTPS) -III	1 x 800	RGMO	53rd TCC: Implementation being planned on 15.11.2025 **54th TCC**: FGMO kept in service from 05.12.2025
Nagarjunasagar RCPH	3 x 30	RGMO	The present governor system is not capable of FGMO mode. It is possible only after R&M works and R&M works are still under consideration by management.
HNPCL	2 x 520	RGMO	APSLDC needs to insist on HNPCL to adhere to the IEGC.
Raichur TPS	7 x 210 + 1 x 250	Partial	Unit 1: After unit restoration Unit 2, 3 & 8: Under FGMO Unit 4: R&M works completed. Logic is ready and will be implemented within a week Unit 5-7: in contact with BHEL for implementation of FGMO and will be taken up along with AOH
Yeramarus TPS	2 x 800	Partial	Unit 1: FGMO Unit 2: HP control valve and stop valve vibration problem. M/s BHEL and M/s Siemens are working to resolve the issue. After attending the issue, the unit will be put on FGMO.

			53rd TCC: BHEL and Siemens are working to resolve the issues.
Kadra	3 x 50		Some issues are being faced in software and tuning of EHGC at both power houses. Presently, in consultation with BHEL. Budgetary provision is made and work order needs to be placed. Expected to be implemented by Oct-Nov 2025
Kodasalli	3 x 40		
Sharavati	Unit 2: 103.5 MW	Unit 1, 3-10 are in FGMO	Unit 2 have issues with unit processor controller of governor system. The procurement process is under progress. Implementation timeline is dependent on supply of UPC from M/s GE.
Supa	2 x 50		During the R&M works of Supa power house in FY 2024-25. It is proposed to take up replacement of existing EHGC system with new Digital governor and auto sequencer system with RFGMO/FGMO feature. Expected to be completed by March 2026.
NCTPP Stage II	2 x 600	RGMO	Problems with control system. BHEL had not yet responded. In the meantime, NCTPP II stated that the in-house team is planning try and implement FGMO in consultation with other plants by December-2025.
Neyveli STCMS (TAQA)	1 x 250		TNSLDC had instructed to implement FGMO along with AOH
SEPC	1 x 525	RGMO	53rd TCC: TNSLDC informed that SEPC has yet to shift to FGMO mode
Valuthur Gas Turbine Power Station (VGTPS)	Phase I: 59.9+35.1 Phase II: 58.5+33.7		TNSLDC stated that implementation of FGMO is not feasible in the current setup. SRLDC also sought technical clarifications regarding how the control system was designed without incorporating governor control.
Nagarjunasagar	Unit 1: 110 MW	Unit 2-8: already under FGMO	Unit 1: Capital overhaul is under progress and is expected to be completed in 2 months. Purchase order is placed for governor system with BHEL. Implementation of FGMO will be taken up immediately after capital overhaul. Expected **by** September 2025.
Simhadri STPS Stage I	2 x 500	Unit 1-2: RGMO	53rd TCC: Unit-1: Expected by November 2025. Unit-2: Will be taken up at the earliest opportunity. Although the scheduled shutdown is in December 2026, the activity will be completed earlier as committed in the special meeting. Some DCS modifications are required.

Neyveli TS II	7 x 210	Unit 4-7: RGMO	Stage 1: implemented Stage 2: Load unsettling issues are persisting due to the mill. Once, it settles down, FGMO implementation will be taken up**:**
CEPL (TN)	2 x 600	RGMO	APL had recently acquired the units and both the units were under bad condition. With the help of OEM, FGMO will be implemented soon **54th TCC:** FMGO in service from: Unit 1 – 24.02.2026 Unit 2 – 18.02.2026

- ***Generators still under RGMO mode are requested to expedite change over to FGMO mode. Generators are requested to provide the updated FGMO implementation status.***

(iv) A Special Meeting of the Southern Regional Power Committee (SRPC) on **Free Governor Mode of Operation (FGMO)** is convened on **31st July 2026** through **Video Conference (VC).**

TCC Deliberations

(v) Member Secretary, SRPC, informed that implementation of Free Governor Mode of Operation (FGMO) is being regularly followed up in the OCC meetings, and a special meeting is convened on 31.07.2026 specifically to review the operation and implementation of FGMO.

(vi) It was noted that some generating units are still operating under Restricted Governor Mode of Operation (RGMO)**.** The concerned generating entities were requested to expedite migration to FGMO on priority and ensure that the prescribed control logic is correctly implemented and validated**.**

(vii) During the meeting, the SLDCs were requested to present the performance of STU-connected generating units**,** while SRLDC would present the performance of ISTS-connected generating units in the special meetings on FGMO**,** to facilitate a comprehensive review of governor response performance in the Southern Region.

SRPC noted the above

e) SPS Proposals/Approvals

The Clause 29.14 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023 to be adhered:

NLDC, RLDCs, SLDCs, CTU, STUs or users may identify the requirement of System Protection Schemes (SPS) (including inter-tripping and run-back) in the power system to operate the transmission system within operating limits and to protect against situations such as voltage collapse, cascade tripping and tripping of important corridors/flow-gates. Any such SPS at the intra- regional level shall be finalized by the concerned RPC.

f) Submission of self-audit reports by Southern Regional Users, QCAs and SNAs to SRLDC

a. As per IEGC 2023, Chapter Monitoring and Compliance code - clause 56

(c) "The self-audit reports by users, QCAs, SNAs shall be submitted to the concerned RLDC or SLDC".

(g) "The monitoring agency for users shall be the concerned RLDC or SLDC on the basis of their respective control area. The monitoring agency shall track the progress of compliances of users, and exceptional reporting for non-compliance shall be submitted to the appropriate Commission".

b. As per the discussion in the 238th OCC Meeting, an online awareness workshop was conducted by **SRLDC on 13.05.2026** to facilitate better understanding and compliance by the constituents. Monitoring and Compliance Chapter of IEGC 2023 was briefed to all the entities. The sample format of Self Audit Compliance Report was also shared with all the constituents.

- ***All Users to furnish Self Audit reports to SRLDC/SLDC at the earliest (by 31st July 2026) as it a regulatory requirement.***

TCC Deliberations

- Users, QCAs and SNAs were reminded to furnish Self Audit reports by 31.07.2026 as mandated by Regulations.
- A sample proforma was shared by SRLDC during the awareness workshop conducted by SRLDC on 13.05.2026 which may be used as a reference, if needed.

SRPC noted the above

XXX. CEA (Flexible Operation of Coal Based Thermal Power Generating Units) Regulation 2023

i. CEA issued a Gazette Notification dated January 30, 2023, regarding the flexible operation of coal-fired thermal generating units, stating that these units must have flexible operation capabilities with a minimum power level of 55% within one year of Notification , i.e.by January 2024 and with a minimum power level of 40 % (as per the Phasing Plan specified by the authority from time to time) at the following Ramp rate:

From	To	Ramp Rate
40%	55%	1%
55%	70%	2%
70%	100%	3%

ii. CEA has prepared a roadmap for achieving the minimum load operation in a phased manner. Initially, it was proposed to implement flexibilization in a few thermal units of Central/State/Private sector on a pilot basis in 2023.

iii. **The following Central/State/Private sector in Southern Region had been included in the proposal to implement flexibilization on a Pilot basis in 2023:**

Phase	Sector	Organization	Name of Project	Unit No.	Capacity (MW)
Pilot	**Central**	**NTPC**	**Simhadri STPS**	**3**	**500**
Pilot	**Central**	**NLCIL**	**Neyveli New TPS**	**2**	**500**
Pilot	**State**	**KPCL**	**Yermarus TPS**	**1**	**800**
KPCL-Yeramarus TPS had received an exemption up to 5% more than Benson Point.					
Pilot	**Private**	**CEPL**	**Muthiara**	2	**600**
APL had received an exemption for MPGL (erstwhile CEPL) and nominated Raigarh TPP in its place.					

iv. CEA vide notification dated 15.12.2023 had published the Final Phasing Plan as approved by CEA. **Five (5)** Phases (including Pilot) had been specified. The following needed to be ensured:

Phase	Period	No. of Units	Total Capacity of SR Generators
Pilot Phase	Up to March 2024	4	2400 MW
Phase 1	July 2024 – June 2026	31	18405 MW
Phase 2	July 2026 – June 2028	5	2980 MW
Phase 3	July 2028 – December 2029	20	7560 MW
Phase 4	January 2030 – December 2030	43	10040 MW

PHASE-IV: Duration: January, 2030 to December, 2030 (In case the utilities comprehend that 40% operation of units having age more than 40 years under this phase is not viable/possible, the utilities may opt for ***2-shift operation*** by suitable retrofits/study/tests. However, the duration for the retrofits including the study/test of this phase shall be the same.)

v. CEA vide communication dated 30.05.2024 had intimated that Minimum Power Level of **55%** is effective in the country from **01.02.2024**.

vi. MoP vide communication dated 28.08.2024 enclosing a detailed Note on thermal

vii. The State wise Phase wise segregation is given below:

Entity	Phase 1	Phase 2	Phase 3	Phase 4
APGENCO & STU connected IPPs	3520	1180	1130	1680
TGGENCO & STU connected IPPs	3080	600	1000	250

KPCL & STU connected IPPs	1500		3260	1520
TNPGCL & STU connected IPPs	2325		250	2520
NTPC & NTECL	4400		1000	2600
NLCIL & NTPL units	1000		920	1470
ISTS connected IPPs	2580	1200		

- ***Phase-1 identified generators to furnish latest updates via email to SRPC Secretariat /CEA***
- ***State GENCOs to approach respective SERCs for compensation mechanism as proposed at ISTS Level.***

viii. CERC in its Order dated 15.10.2025 in Petition No 9/SM/2024 had suggested

Some of the state generating stations with a total capacity of 29,364 MW are not able to achieve the MTL of 55% due to commercial as well as technical reasons. It is suggested that the States' generators may have interactive sessions with ISGS to troubleshoot the issues, where older units of 210 MW are able to operate at an MTL of 55%. State Generators may also visit the older generating stations of ISGS, like NTPC and others. Enablement of backing down of all thermal generating units till MTL of 55% shall result in availability of additional down reserves. The States should also come up with a partload compensation mechanism for thermal power plants and also explore the possibilities for the two-shift operation of the thermal generating stations, keeping in view the large RE integration in the country.

ix. A review meeting was held under the chairmanship of PCE-II, CEA on 21.01.2026 to review the progress and status of the Pilot Phase and Phase-I of the phasing plan for achieving 40% MTL operation of thermal power generating units.

x. The **status of Units identified under Phase 1 (July 2024 – June 2026 is at** (**Annexure-29XXX**).

xi. In this context, a meeting was conducted to review the status of implementation of measures for achieving operation at 40% MTL in units covered under the Pilot Phase and Phase-I, under the chairmanship of PCE-II on 01.07.2026. MoM is awaited.

TCC Deliberations

- ***Generators identified under Pilot Phase and Phase I were requested to take steps to ensure necessary compliance.***

SRPC noted the above

XXXI. Ramp Rate compliance framework and Scheduling Methodology for the coal-based power plant

CEA had noted that during the review of the implementation of CEA Flexible Operation Regulations, generating companies such as NTPC and RVUN highlighted that block-wise scheduling and DSM compliance often compel thermal units to

achieve actual ramp rates higher than their rated capability, with no stabilization period between continuous ramps, resulting in increased equipment stress. Series of meetings were held in this regard. CEA vide the communication dated 02.07.2026(**Annexure-29XXXI**) had communicated the deliberations of the meetings along with conclusions.

- ***SLDCs are requested to kindly furnish their views/comments***

TCC Deliberations

- ***TCC forum noted the matter regarding ramp-rate compliance and scheduling methodology for coal-based generating stations. SLDCs shall furnish their views/comments on the matter to SRPC secretariat within one week for further examination and consolidation.***

SRPC noted the above

XXXII.Automatic Under Frequency Load Shedding (AUFLS) and df/dt Scheme

a) In accordance with the recommendation of the Task Force, CEA - NPC Secretariat has calculated the relief quantum at each stage of AUFLS (Automatic Under Frequency Load Shedding) scheme for year 2026-27 for implementation in all the regions. The relief quantum pertaining to Southern Region are as follows:

b) In accordance with the methodology recommended by the Task Force, State/UT Stage wise AUFLS in MW for FY 2026-27 is as follows:

State	State/UT contribution	State Demand Contribution	Stage-1	Stage-2	Stage-3	Stage-4	Total
Andhra Pradesh	0.184	13590	585	702	819	819	2923
Telangana	0.221	16301	701	842	982	982	3506
Karnataka	0.231	17068	734	881	1028	1028	3671
Kerala	0.074	5448	234	281	328	328	1172
Tamil Nadu	0.282	20829	896	1075	1254	1254	4480
Puducherry	0.008	569	25	29	34	34	122
Total	1.000	73805	3175	3810	4445	4445	15874

- ***SLDCs are requested to take necessary action for implementation of new quantum of load relief settings of AUFLS scheme at the earliest and inform SRPC and SRLDC accordingly***

Low frequency operations/Furnishing the feeders tripping details for the Low frequency incidents on 03.03.2026, 13.05.2026 were deliberated and incidences were analysed for remedial actions.

The events analyzed were as follows:

03.03.2026 18:52 hrs frequency touched 49.42 Hz.	**13.05.2026 14:09 hrs frequency touched 49.40 Hz**

AUFR load relief was observed as follows:

State	Tripping Details of 03.03.2026
Andhra Pradesh	Nil
Telangana	74 MW
Karnataka	Nil
Tamil Nadu	Nil
Kerala	46.4 MW
Puducherry	Nil

AUFR load relief is observed as follows

State	Tripping Details of 13.05.2026
Andhra Pradesh	432 MW
Telangana	243 MW
Karnataka	131 MW
Tamil Nadu	26 MW
Kerala	160 MW
Puducherry	11 MW

The following remedial action emerged out of the analysis.

i. Use of NPC-Task Force recommended correction factor methodology for calculating the desired AUFLS load relief in future events.

ii. All constituents shall examine the performance of AUFLS relays configured at 49.41 Hz that did not operate and take necessary corrective action.

iii. The forum recommended that 50% of the load relief may be configured at 49.41 Hz with a time delay of 2–3 cycles. Wherever relays exhibited some delay in operation or sluggishness, based on their performance, these may be configured at 49.41 Hz.

iv. All states were requested to complete the works pertaining to relief visibility and SCADA mapping expeditiously. RTU upgradation, wherever required may be taken up on priority.

v. APTRANSCO to examine the feasibility of bridging the identified deficit of about 85 MW in AUFR-based relief and identify suitable additional loads, considering existing constraints such as islanding schemes and emergency service feeders.

vi. KPTCL to identify additional loads to realize additional relief of about 400 MW to bridge the deficit in released relief.

vii. TGSLDC was requested to reassess the declared quantum, suitably revise the relief considered from the existing feeders based on realistic loading levels, and identify additional feeders to bridge the remaining deficit.

a) **AUFLS operation of PSP and ESS plants**

Based on the operational experience of tripping of PSPs, BESS and Lift Irrigation loads during the low frequency incidents, the functioning of AUFLS was reviewed, and the following action points emerged:

i. All constituents shall ensure that following are configured to disconnect at 49.50 Hz

- **PSPs operating in pumping mode**

- **ESS operating in charging mode**
- **major Lift Irrigation loads**

ii. All constituents shall ensure that PSPs operating in generation mode and ESS operating in discharging mode are configured to disconnect at or below 47.50 Hz.

iii. All constituents shall ensure that the tripping time is within 3–5 cycles (approximately 50–75 ms) and not in the range of seconds.

iv. The load relief from PSPs and Lift Irrigation loads is implemented over and above the prescribed AUFLS load relief quantum.

TCC Deliberations

c) Member Secretary, SRPC, appraised the forum regarding the revised AUFLS relief quantum for the year 2026–27, which has been specified as 15,875 MW for the Southern Region. He informed that the implementation and preparedness with regard to the revised AUFLS quantum would be taken up and followed up regularly in the OCC meetings.

➢ ***All constituents were advised to ensure that the identified loads are appropriately configured for automatic disconnection at the respective frequency settings allocated under the AUFLS scheme. The constituents were further requested to verify the correct configuration, relay settings, tripping logic and communication/inter-tripping arrangements, wherever applicable, and ensure that the required AUFLS response is available and functional during system frequency decline. In particular, the following loads/resources shall be configured to trip at 49.5 Hz accordingly:***

- ***Pumped Storage Plants (PSPs) operating in pumping mode****;*
- ***Energy Storage Systems (ESS) operating in charging mode****; and*
- ***Major Lift Irrigation loads****.*

➢ ***The compliance and preparedness of the constituents would be reviewed in the OCC meetings.***

SRPC noted the above

XXXIII. Meeting of Protection System Analysis Group (PSAG-01/2026) for 400 kV Simhadri / Gajuwaka / Hinduja / Kalpakka

i) In view of the recurring protection and communication-related issues observed at the 400 kV Simhadri, 400 kV Gajuwaka, 400 kV Hinduja and 400 kV Kalpaka substations, and considering that approximately 57 tripping incidents have occurred at these substations during the period January 2026 to June 2026, SRPC has convened Protection System Analysis Group Meeting – PSAG 01/2026.

ii) The PSAG 01/2026 comprises representatives from NPC, NLDC, SRLDC, CTUIL, SRPC, APTRANSCO, TGTRANSCO, PGCIL SR-I, PGCIL SR-II, NTPC Simhadri and Hinduja, with the objective of carrying out a comprehensive analysis of the protection and communication-related issues, identifying the root causes, and recommending appropriate corrective measures.

iii) The tentative programme for PSAG 01/2026 is as follows:

- **30th July 2026 (Thursday):** Site visits to 400 kV Kalpaka Substation (APTRANSCO), 400 kV Gajuwaka Substation (PGCIL SR-I) and 400 kV Simhadri Switchyard (NTPC Simhadri).
- **31st July 2026 (Friday) – Forenoon:** Presentation of observations from the site visits, discussion on the identified issues, and finalisation of recommendations.
- **31st July 2026 (Friday) – Afternoon:** Finalisation of the **PSAG 01/2026** report.

TCC deliberations

Forum noted that a PSAG scheduled on 30th and 31st July 2026 was assigned to analyse frequent tripping incidents reported in the last few months at Simhadri, Kalpakka, Gazuwaka and HNPCL along with operational issues in the locality.

SRPC noted the above

XXXIV. Special Meetings held

i. Special Meeting was held on 28.04.2026 to discuss RSD Procedure for utilization in SR.

ii. A meeting with the Secretaries of Regulatory Commissions was held under the chairmanship of Additional Secretary (R&R), MoP on 16.04.2026 and with respect to the Southern Region, inputs were sought on the alignment of Central and State Grid Codes, and the information received from the States was compiled and furnished to Central Electricity Authority for onward submission to the Ministry of Power.

iii. A special meeting of stakeholders to discuss the Draft Guidelines for Battery Energy Storage Systems (BESS) was conducted in hybrid mode on 15.05.2026, at Moolamattom, Idukki.

iv. DP&T Division, CEA convened a meeting under Chairmanship of Member (GO&D) on 13th May 2026 to discuss the DC Meter requirements for Solar & BESS projects. In the meeting, it was decided that NPC after consultation with all RPCs and other stakeholders may specify the requirements of DC meters for energy accounting and scheduling purposes.

v. A special meeting was held on 26.03.2026 with the participation of CTUIL, SRLDC, and the SRPC Secretariat to deliberate on the way forward for the metering scheme and SEM meter procurement.

vi. A meeting on the Pan-India Captive Generating Capacity was held under the Chairmanship of the Joint Secretary (Distribution), Ministry of Power, on 03.06.2026 through virtual mode.

vii. The 5th Meeting of the Renewable Energy (RE) Sub-Committee was held on 24.06.2026.

viii. Minutes of the 17th Meeting of NPC held on 27.02.2026 at Vizag, Andhra Pradesh were issued on 15.04.2026. The follow up items in various committees

were being discussed. The points relevant to SR region were taken up in various sub-committee meetings of SRPC.

ix. Pursuant to the decision of the 17th NPC Meeting held on 27.02.2026, a meeting was held on 04.06.2026 among representatives of CEA, RPCs, and NLDC to deliberate on the draft guidelines for harmonic measurements at the transmission level prepared by NLDC.

x. The minutes of the 40th NCT Meeting, held on 15.04.2026, were issued on 27.04.2026. During the meeting, the following two proposals were approved: (a) implementation of URTDSM Phase-II for ISTS, and (b) development of the AMR system, wherein the AMR component shall be developed by CTUIL/PGCIL, while the MDP component shall be developed by Grid India.

xi. Minutes of the meeting of the Standing Committee of the Experts to discuss the failure of 220 kV and above voltage level Transformers during period of July, 2025 to December, 2025 held on 20.02.2026 was issued by PSE&TD division, CEA on 01.04.2026.

xii. Minutes of the meeting of Standing Committee of Experts on failure of EHV transmission towers failed during the period from July 2025 to December 2025 held on 10.03.2026 was issued by PSE&TD division, CEA on 06.04.2026**.**

xiii. Record Notes of the Special Meeting held on 13.03.2026 to deliberate on Monitoring of Pan-India Captive Power Generation with Southern Region Constituents was issued on 01.04.2026.

xiv. HPP&I Division of Central Electricity Authority (CEA) convened a meeting under the chairmanship of Chairperson, CEA on 30.03.2026 to review the commissioning of the 1500 MW Pinnapuram Solar Project, with participation from SRPC, NLDC, SRLDC, and Greenko Group.

xv. SRLDC issued MoM of 9th Meeting of Southern Regional Cyber Security Coordination Forum - Grid Operation (GO-SR-CSCF) held at Bangalore on 27th Feb 2026 on 18.03.2026.

xvi. OPM Division, CEA held a meeting under the chairmanship of the Chairperson, CEA**,** on 17.03.2026 to discuss the issues related to partial outages of power plants**.**

xvii. Regional Committee Meeting on Cyber Security held by NTPC SRHQ on 11.03.2026 with SR Power utilities- CERT Thermal. The minutes were issued on 16.03.2026. All thermal units in the Southern Region station wise are requested to give nominations to NTPC.

xviii. A team of officers from SRPC, TANTRANSCO, PGCIL(SR-II) and CPRI visited Madurai Substation on 06.04.2026 to inspect the failure of the 400 kV / 500 MVA ICT-III, which had occurred on 27.03.2026**.**

xix. The 44th Consultation Meeting for Evolving Transmission Scheme in Southern Region was held on 09.03.2026 through virtual mode.

xx. The 45th Consultation Meeting for Evolving Transmission Scheme in Southern Region was held on 13.03.2026 through virtual mode.

xxi. The 46th Consultation Meeting for Evolving Transmission Scheme in Southern Region held on 27.03.2026 through virtual mode.

xxii. The 47th Consultation Meeting for Evolving Transmission Scheme in Southern Region held on 26.05.2026 through virtual mode

xxiii. The minutes of the 41st NCT Meeting, held on 18.05.2026, were issued on 09.06.2026. a) NCT approved the communication scheme "*Comprehensive Scheme for OPGW installation on the existing lines of ISTS in Southern Region- Part A & B". b) NCT approved the communication scheme "Replacement of 12 no. of FOTE at critical ISTS locations in Southern Region*" for implementation under RTM mode.

XXXV.System Studies Meetings Held

Major System Study Meetings convened by PSPA-I Division of CEA		
State/Entity	**Meeting Date**	**Brief Agenda**
TANTRANSCO	24.03.2026	To discuss TANTRANSCO proposal for charging of Taramani & Guindy 400/230 kV substations
TGTRANSCO	04.05.2026	To discuss the intra-state proposals of Telangana regarding augmentation at 400/220 kV SS Maheswaram (TGTRANSCO)
M/s NGEL	04.05.2026	To discuss the issues raised by M/s NGEL regarding ISTS connectivity to its Green Hydrogen Hub at Pudimadaka, Andhra Pradesh
KPTCL	11.05.2026	To discuss Optimised Transmission System for Connectivity of Saundatti 1600 MW PSP with CTU and STU Grid
M/s Adani	11.05.2026	Power Connectivity for Hyderabad Data Centers via LILO of 765 kV Mittampalli to Maheshwaram TL
APTRANSCO & TGTRANSCO	15.05.2026	1. Proposal of APTRANSCO regarding construction of 400/220/132 KV Sub-Station at Ramakuppam and connected transmission network in Chittoor District, Andhra Pradesh 2. Proposal of TGTRANSCO regarding extension of supply with a CMD of 2000 MVA at 400kV level to M/s. CTRLS Data Centers Ltd. at Meerkhanpet (V), Kandukur (M), Rangareddy District 3. RA Plan of APTRANSCO and TGTRANSCO
Major System Study Meetings convened by CTUIL		
Period		**Brief Agenda**
28th to 30th April 2026 (SRPC, Bengaluru		Joint study Meeting: 1. Reconductoring of Gooty – Kurnool 400kV S/c line with HTLS conductor 2. Reverse power flow in Talchar-Kolar HVDC line. 3. Constraints in Kudgi ICTs 4. Constraints in Raichur (New) ICTs 5. High short circuit level at Kurnool. 6. Transmission system for grant of connectivity to NLC at Neyveli complex

	7. Kaiga ICTs overloading 8. Additional connectivity to Kerala 9. Transmission system for reliable power supply to Puducherry 10. Transmission system for integration of additional RE potential of 1.5 GW at Bijapur 11. Transmission system for integration of additional RE potential of 0.5 GW at Davangere 12. Review of Transmission system for integration of Ananthapuram-III Phase-II • Additional 400kV feed to Ramakuppam (APTRANSCO) from proposed Malur 765/400 kV substation 13. Transmission system for integration of Kadapa-II Phase-II 14. SRPC agenda points • Gazuwaka East Bus (Low Voltage) • Line Loadings of 220 kV Sullurpet – Gummidipundi S/C & 220kV Chittoor –Tiruvallam S/C - CTUIL may propose a 400 kV ISTS line, as a long-term solution to the issue. • Overloading of 220kV Sedam-Tandur line
20.05.2026 (VC)	To explore the margins available for making the connectivity effective for generators at various RE Pooling Stations in SR without Narender - Pune 765 kV D/c line.
25.06.2026 (VC)	Joint Study meeting of SR constituents for study analysis of various ISTS proposals in SR

XXXVI.Training/Workshops held

i. A National Workshop on **"RE Integration through ESS – Phase II"** was conducted in hybrid mode at Western Regional Power Committee, covering key aspects of Renewable Energy (RE) integration through Energy Storage Systems (ESS), including safety, standards, grid integration, BESS applications, grid-forming inverters, sizing methodologies, operational experiences, private sector participation, rooftop solar with BESS, end-of-life management, and emerging research initiatives. During the workshop, it was highlighted that, as per the Ministry of Power/Central Electricity Authority (CEA) projections, India would require 16 GW/82 GWh ESS by 2026–27, 74 GW/411 GWh by 2031–32, and about 320 GW/2380 GWh by 2047 to support reliable and stable grid operation with large-scale Renewable Energy integration.

ii. CEA, in association with NTPC, organised a workshop titled "*Shanti Act, 2025: Enabling India's 100 GW Nuclear Power Roadmap through Public-Private Partnership*" on 17.04.2026. The workshop focused on the policy, regulatory, financial, and technological framework required for achieving India's targeted 100 GW nuclear power capacity through enhanced participation of the private sector under the proposed Shanti Act, 2025.

iii. Online Knowledge Sharing Workshop was organized by BIMSTEC Energy Centre, Bengaluru on "*Best Practices in Planning of New Transmission Systems*" on 13.05.2026.

iv. SRLDC held an online Workshop on Assessment of Quantum of Secondary & Tertiary Reserve Capacity, Information Exchange and Timelines under CERC (IEGC) Regulations, 2023 for SR constituents on 18.03.2026.

v. Online Knowledge Sharing Workshop on "*Best Practices in the Implementation of Planned Transmission Systems"* was organized by the BIMSTEC Energy Centre, Bengaluru, on 09.06.2026.

vi. Workshop on "*Capacity Markets*" was conducted through video conferencing mode on 03.06.2026. The session was delivered by Chief (Regulatory Affairs), CERC.

XXXVII.Regulations/ Orders/ Rules/ Guidelines Notified/ Important correspondences

MoP

i. Ministry of Power has invited comments on the draft Electricity (Rights of Consumers) Amendment Rules, 2026, notified on 12.03.2026, the last date for submission was 11.04.2026. The draft amendments focus on optimizing the net metering framework and reducing cross-subsidization, integrating energy storage, improving the functioning of Consumer Grievance Redressal Forums (CGRFs), aligning electricity connection timelines for Municipal Corporation areas with those applicable to Metropolitan areas, extending Time-of-Day (ToD) tariffs to industrial, commercial, and subsequently domestic consumers to encourage greater electricity consumption during solar hours, providing for automatic review of abnormally high or low electricity bills, and facilitating the adoption of Demand Response Programmes.

ii. Electricity (Amendment) Rules, 2026 shall come into force on the date of their publication in the Official Gazette (13.03.2026); however, sub-rule (2)(d)(ii), (iii) and sub-rule (4) of Rule 3 shall come into force with effect from 01.04.2026. The draft amendments cover provisions relating to ownership requirements, the verification period, captive generating plants established by an Association of Persons (AoP), captive status verification, treatment of Cross Subsidy Surcharge (CSS) and Additional Surcharge (AS) pending captive status verification, and the applicability of the amendments.

iii. MoP Office vide Memorandum dated 06.04.2026 has notified the introduction of Insurance Surety Bonds (ISBs) as an alternative to Bank Guarantees/Bid Security across all power procurement frameworks.

iv. MoP extended timeline for submission of FY 2024–25 Renewable Consumption Obligation (RCO) compliance details by two months, up to 31.05.2026, considering requests from obligated entities.

v. MoP has revised Minimum Local Content (MLC) requirement for HVDC Substation (LCC Type) projects, prescribing a phased increase from 30% (up to March 2028) to 60% by April 2032–March 2035 under Make in India policy.

vi. Ministry of Power (MoP), vide letter dated 20.05.2026, has notified the implementation of decriminalisation measures under the Jan Vishwas (Amendment of Provisions) Act, 2026. The Act, inter alia, provides for the decriminalisation of certain provisions under the Electricity Act, 2003 and the Damodar Valley Corporation Act, 1948, and introduces a rationalised penalty framework. The initiative is aimed at promoting ease of doing business, reducing compliance burden, improving regulatory efficiency, and fostering a trust-based governance framework while ensuring continued adherence to statutory and regulatory requirements. The constituents were requested to take note of the above and ensure compliance with the revised provisions, as applicable.

vii. MoP issued Amendments in the Supplementary Guidelines for payment of compensation in regard to Right of Way (RoW) for transmission lines issued by MoP on 21.03.2025 specifically pertaining to land valuation methodology.

viii. MoP issued directions under Section 11 of the Electricity Act, 2003 on 22.03.2026 to Coastal Gujarat Power Ltd. (CGPL) from 01.04.2026 to 30.06.2026 mandating imported coal-based plants to operate at full capacity, with tariff determination through a committee and provision for sale of surplus power in exchanges.

ix. The Ministry of Power, vide letter dated 22.06.2026, sought comments on the draft National Electricity Data Sharing Framework within 30 days, i.e., by 21.07.2026. The framework aims to enable secure, structured, and non-discriminatory sharing of electricity sector data for planning, operations, regulation, and research; standardize dataset classification; establish a transparent institutional mechanism for implementation, including principles for data classification and fee determination; ensure anonymization and de-identification of consumer-related or personally identifiable data before sharing; facilitate interoperable data sharing with allied sectors and compatibility with the India Datasets platform (data.gov.in); and enable data sharing with third-party service providers through a consent mechanism aligned with the India Energy Stack or similar framework.

x. MoP vide letter dated July 2026 invited comments on draft amendments to the notification on Corporate Average Fuel Efficiency (CAFÉ) Cycle I

CEA

i. CEA, vide letter dated 15.05.2026, has issued an advisory regarding the use of Ester Oil as an insulating and cooling fluid in transformers, reactors and other associated equipment. As per the advisory, all Central, State and Private Transmission Utilities have been advised to adopt Ester Oil in at least 10% of new Transformers, Reactors and other equipment of 33 kV and above voltage class proposed for procurement/installation. CEA has further recommended that, wherever feasible, the adoption may preferably comprise 5% Natural Ester Oil and 5% Synthetic Ester Oil to facilitate wider operational experience and assessment of the technology. CEA has also requested all utilities to implement the advisory at the earliest, considering the

prevailing West Asia geopolitical crisis scenario and the need to enhance the resilience, safety and sustainability of the power system. The constituents were requested to take note of the advisory and initiate necessary action for its implementation in future procurement and augmentation plans.

ii. CEA, vide notice dated 19.05.2026, has invited comments and suggestions on the Central Electricity Authority (Manual on Transmission Planning Criteria), 2023 (Amendment-II). Stakeholders were requested to furnish their comments to CEA by 08.06.2026. The proposed amendment seeks to incorporate various enhancements in the transmission planning framework to address emerging grid requirements and future system expansion needs. Key proposals include the introduction of planning criteria for 1,150 kV Ultra High Voltage (UHV) AC transmission systems, aimed at facilitating large-scale power transfer over long distances and supporting future growth of the national transmission network.

   a. The draft amendment also proposes classification of Data Centres as Critical Loads, requiring 100% redundancy in power supply arrangements to ensure high reliability and continuity of service. In addition, the amendment includes updates to planning standards and criteria to strengthen grid resilience, accommodate evolving load patterns, support large-scale renewable energy integration, and facilitate development of future-ready transmission infrastructure.
   b. The constituents were requested to take note of the proposed amendments and furnish their comments/suggestions to CEA within the stipulated timeline, if not already submitted.

iii. CEA, in coordination with the All India Discoms Association (AIDA), has released Standard Technical Specifications for Single-Phase and Three-Phase Cold-Rolled Grain-Oriented (CRGO) Core Distribution Transformers. The guidelines have been developed to standardize the design, technical parameters, procurement practices and permissible loss levels of distribution transformers with a view to improving efficiency, minimizing technical losses in distribution networks and promoting uniformity in procurement across utilities. The specifications are expected to facilitate deployment of energy-efficient distribution transformers and contribute towards reduction of aggregate technical losses in the power distribution system.

iv. CEA had released the report of the workshop titled "*SHANTI Act, 2025: Enabling India's 100 GW Nuclear Power Roadmap through Public–Private Partnership*" on 11.05.2026. The workshop deliberated on the role of the proposed SHANTI Act, 2025 in facilitating accelerated development of nuclear power capacity in the country through enhanced participation of private sector entities and innovative public–private partnership (PPP) models. The discussions focused on the policy, regulatory, financial and institutional measures required to support India's long-term objective of achieving 100 GW of nuclear power capacity, while ensuring safety, security, sustainability and efficient project implementation. The report highlights the importance of creating an enabling framework for greater private sector participation across various segments of the nuclear power value chain, strengthening investment mechanisms, streamlining project development processes, and leveraging advanced

nuclear technologies to support India's clean energy transition and long-term energy security objectives.

v. CEA, vide document dated 12.05.2026, issued the draft framework on "*Need for National Framework for Rationalizing Fixed Charges and Tariff Redesig*n" to address the evolving financial challenges of DISCOMs. The framework proposes phased enhancement of fixed charge recovery, standardized two-part tariffs, uniform billing demand methodology, adoption of kVAh billing, separate tariff categories for net-metering consumers, and introduction of standby charges for open access and captive consumers.

vi. PSE&TD division, CEA issued Clarification on Acceptance of In-House Type Testing of any Electrical Equipment/Material in NABL-Accredited Laboratories as per clause 3(d) of CEA's Type Test Guidelines (19.03.2026).

vii. CEA published the National Generation Adequacy Plan (2026–27 to 2035–36) to assess the optimal generation mix required to meet the projected electricity demand over the next ten years, based on various technical and financial assumptions pertaining to different generation technologies.

viii. Transmission Plan for Integration of over 900 GW Non-Fossil Fuel Capacity by 2035–36 was issued by CEA.

The transmission plan has been prepared to facilitate integration of over 900 GW of non-fossil fuel capacity by 2035–36 by strengthening the Inter-State and Intra-State Transmission Systems. Based on CEA projections, peak demand is expected to reach about 459 GW with an energy requirement of 3,365 BU and an installed capacity of about 1,121 GW, including around 786 GW of non-fossil capacity. The plan envisages development of about 1,37,500 ckm of transmission lines and 8,27,600 MVA of transformation capacity during 2026–27 to 2035–36, involving an estimated investment of ₹7.93 lakh crore. It also provides for evacuation of renewable energy from major RE hubs across Rajasthan, Gujarat, Andhra Pradesh, Karnataka, Telangana, and Maharashtra, including 10 GW of offshore wind capacity (5 GW each in Gujarat and Tamil Nadu).

ix. CEA, vide communication dated 01.04.2026, notified the Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2026, mandating Smart Meters for all consumers in communication-covered areas within the timelines prescribed by the Central Government, enabling prepayment metering in non-communication areas, and prescribing revised metering arrangements for open access consumers, including Smart Meters as interface meters for consumers at voltage levels up to 650 V.

x. CEA notified Central Electricity Authority (Measures relating to Safety and Electric Supply) Amendment Regulations, 2026. They shall come into force on 1st April, 2027.

Chapter on Additional safety requirements for Battery Energy Storage System is included. Some of points are: The battery energy storage systems shall be designed with two-fault tolerance to prevent catastrophic failures under all conditions, including but not limited to overcharge, over-discharge, short circuit, and operation outside specified temperature limits; Fire and explosion protection at the levels of

Cell, Module, Rack, Container and site-specific installation, shall be as per the relevant standards.

xi. CEA published the "*Report of the Committee on the Use of Green GIS Technology in the Indian Grid*" on 13.04.2026. The report highlights that conventional Gas Insulated Substations (GIS) predominantly use SF_6 gas, which has a very high global warming potential, and emphasizes the adoption of environmentally sustainable Green GIS technologies using alternative insulating media while maintaining comparable operational performance and reliability.

xii. Report of the Committee on addressing insulator failures on transmission lines (May 2026). The Committee submitted a comprehensive report on addressing insulator failures on transmission lines, covering failure analysis, improvements in technical specifications and quality assurance, installation of protective fittings (corona/grading rings and arcing horns), storage and handling practices, operation and maintenance procedures, and recommendations to enhance the reliability and service life of transmission line insulators.

xiii. CEA vide letter dated 12.06.2026 issued General implementation timelines for Inter-State Transmission System (ISTS) projects.

xiv. CEA vide letter dated 16.06.2026 issued Public Notice Inviting comments/suggestions from stakeholders on the draft "Compendium of Definitions" by 25.07.2026.

xv. CEA circulated Report of the National Workshop on RE integration through ESS Phase-II.

xvi. CEA vide letter dated 26.06.2026 circulated Guidelines on advanced methodologies for adoption during investigation, tender and construction stages of hydel projects for minimizing geological uncertainties in long water conductor systems.

xvii. CEA vide letter dated 06.07.2026 issued advisory for distribution utilities for prevention of load shedding during peak demand periods and improving the reliability of power supply.

a. The advisory aims to:
   - Minimize consumer outages and load shedding.
   - Prevent transformer and feeder overloading. Thus reduction in the failure rate
   - Improve reliability indices.
   - Enhance preparedness for seasonal demand growth.
   - Strengthen distribution network resilience

xviii. Central Electricity Authority (CEA), pursuant to the review of the national power supply position by the Secretary (Power) on 11.03.2026, had issued an advisory on the Optimal Utilization of Generating Stations during Non-Solar Peak Hours for Summer 2026. The advisory emphasized continuous monitoring of the demand-supply position by RPCs from 01.04.2026, strict adherence to approved maintenance schedules, implementation of preventive maintenance and health monitoring of generating units, periodic review of generation and transmission system availability, and maintenance of adequate coal stocks to maximize generation availability during evening peak hours. Utilities were also advised to promptly report operational

constraints, including fuel-related issues, to the OCC/SRPC and, wherever required, escalate such issues to CEA for timely intervention.

xix. Central Electricity Authority (CEA), vide letter dated 29.05.2026, has constituted a Standing Committee on Renewable Energy (RE) Integration to address issues related to the integration of variable renewable energy sources into the power system. The Committee will deliberate on the technical, operational, protection, and communication aspects associated with the large-scale integration of renewable energy into the grid. CEA has also requested the concerned stakeholders to nominate suitable representatives for participation in the Committee.

xx. **New SRPC Website** has been made operational, with all agenda notes, minutes of meetings, reports, circulars, and other documents being uploaded from May 2026 onwards. Constituents were requested to access the new website, update their records accordingly, and disseminate the information within their respective organizations. The new website can be accessed at www.srpc.gov.in

CTUIL

i. CTUIL notified the "*Detailed Procedure for Grant of Connectivity and General Network Access (GNA)*" under the Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 on 10.04.2026. The detailed procedure outlines the modalities, application process, timelines, operational requirements, and implementation framework for grant of Connectivity and GNA to entities seeking access to the inter-State Transmission System (ISTS).

ii. CTUIL issued the list of Renewable Energy (RE) connectivity applications wherein in-principle intimation has been granted but transmission systems could not be identified due to transmission planning constraints/issues, vide communication dated 27.04.2026. The list highlights RE connectivity cases pending final system identification owing to ongoing transmission planning and augmentation requirements in the inter-State transmission network.

iii. CTUIL issued a public notice dated 23.06.2026 Draft Detailed Procedure for Connectivity and GNA for Cross Border Trade of Electricity formulated in terms of Regulation 33A of the Central Electricity Regulatory Commission (Cross Border Trade of Electricity) Regulations, 2019. Last date for submission of the comments/suggestions/objections is 08.07.2026.

iv. CTUIL vide letter dated 26.06.2026 issued advisory to TSPs regarding Instructions for Handling Force Majeure (FM) and Change in Law (CIL) Events

CERC

i. Central Electricity Regulatory Commission has notified the *Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) (First Amendment) Regulations, 2026* vide Gazette dated 01.04.2026. The amendment covers key provisions relating to Designated Consumer, Renewable Consumption Obligation (RCO), Virtual Power

Purchase Agreements (VPPA), Certificate Multiplier for different RE sources, and the principles for determination of such multipliers

ii. Central Electricity Regulatory Commission (CERC), vide notification dated 25.05.2026, has issued the Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (Third Amendment) Regulations, 2026 and invited comments/suggestions from stakeholders. The last date for submission of comments and suggestions is 26.06.2026. Public hearing on the above subject was held on 30.06.2026
    a. The draft amendment, inter alia, proposes revisions in the methodology for determination of deviation charges by replacing the existing time-block-wise Average Clearing Price (ACP) with the daily weighted average ACP. The draft also introduces revised provisions for renewable energy and energy storage systems, including stricter applicability requirements for wind and solar generating stations commissioned after 2029 or awarded through bids conducted after 2027, and links deviation charges for energy storage systems to the energy charges determined under the applicable tariff regulations.
    b. Further, the draft provides for settlement of infirm power at applicable DSM rates subject to a ceiling of ₹2/kWh and proposes removal of the existing 10-day payment timeline, with settlement and payment processes to be governed through the DSM Pool Account procedures. The constituents were requested to take note of the draft regulations and submit their comments/suggestions to CERC, if any, within the stipulated timeline.

iii. CERC, vide notification dated 20.05.2026, issued the Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) (Fourth Amendment) Regulations, 2026, inviting stakeholder comments by 22.06.2026 and scheduling a public hearing on 23.06.2026. The draft amendments provide for dual connectivity between ISTS and intra-State systems, additional connectivity flexibility for existing GNA grantees, and withdrawal of connectivity with refund of bank guarantees under specified conditions. Last date of submission of comments and suggestions was extended upto 29.06.2026

iv. CERC issued a proposal dated 06.05.2026 regarding the mechanism for treatment of connectivity granted under the Connectivity and General Network Access (GNA) Regulations based on Letter of Award (LoA) cases where the Power Purchase Agreement (PPA) has not been signed within 12 months from the date of issuance of the LoA.

v. CERC issued Draft Procedure for levying compensation charges for permitting additional time to achieve milestones under the Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022

vi. CERC issued the Draft Central Electricity Regulatory Commission (Power Market) (Second Amendment) Regulations, 2026. The draft regulations primarily cover provisions relating to Power Market Coupling Procedure (PMCP) to be carried out by Grid India, including designation of the Market Coupling Operator, scope of market

coupling, bid collection and aggregation, price discovery mechanism, and operational procedures for implementation of market coupling in the power market.

vii. CERC issued Staff Paper on "*Shortening the scheduling Timeline for Real Time Markets in India"*

viii. CERC issued Staff Paper on "*Capacity Market for Electricity in India*". The paper discusses various options for capacity contracting in India and proposes a framework that departs from the existing contracting design by appropriately allocating risks between buyers and sellers, while also linking capacity contract terms, dispatch, and pricing with the energy market mechanism

ix. Central Electricity Regulatory Commission (Terms and Conditions for Purchase and Sale of Carbon Credit Certificates) Regulations, 2026.

x. CERC notified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2026 on 20.03.2026, which were subsequently published in the Gazette on 10.04.2026. The amendment, inter alia, includes provisions under Clauses 49 and 50 relating to consideration of Flexible Shunt Compensation (FSC), Thyristor Controlled Series Reactor (TCSR), and Energy Storage Systems (ESS) in transmission system availability calculations. The availability of the above-mentioned elements would be computed from 10.04.2026. The transmission licenses who are owning these assets may furnish the outage data accordingly to SRLDC for verification.

xi. CERC, vide Suo-Motu Petition No. 9/SM/2025 dated 31.03.2026, determined the value of "X" for computation of permissible deviation limits for Wind and Solar (WS) Sellers under the DSM Regulations, 2024, effective from 01.04.2026. The order aims to align deviation limits with the growing penetration of renewable energy, promote improved forecasting and scheduling accuracy, and strengthen grid discipline while facilitating reliable integration of renewable generation.

NLDC

i. NLDC, vide letter dated 08.05.2026, circulated the Draft Procedure for Assessment of Utilization of Connectivity or General Network Access (GNA) Quantum. The draft establishes a uniform framework for assessing utilization of granted Connectivity/GNA by ISTS users to ensure optimal utilization of the transmission network, facilitate efficient transmission planning, and address underutilization of granted transmission access. The constituents were requested to take note of the draft procedure and provide their comments/suggestions to NLDC.

ii. NLDC, vide letter dated 01.06.2026, circulated the Draft Procedure for Verification of Captive Status for Inter-State Transactions. The draft prescribes the framework for verification of captive status, including ownership and consumption criteria, data submission requirements, exemption from Cross-Subsidy Surcharge (CSS) and Additional Surcharge (AS) pending verification subject to prescribed declarations, and a grievance redressal mechanism.

iii. NLDC circulated the revised Detailed Procedures for the Secondary Reserve Ancillary Service (SRAS) and Tertiary Reserve Ancillary Service (TRAS), incorporating changes based on operational experience and the evolving regulatory and operational framework.

iv. Procedure for Grant of Temporary General Network Access (T-GNA) to the inter-State Transmission system through National Open Access Registry (NOAR) – updated on 24.06.2026

v. NLDC, vide its letter dated 24.03.2026, had issued an advisory on Transmission System Preparedness for Summer 2026 in view of the anticipated All-India peak demand of 270–275 GW during solar hours, above-normal temperatures forecast by IMD, and the associated operational risks to the transmission system. The advisory emphasized timely completion of preventive maintenance, condition monitoring, thermal scanning, vegetation management, enhanced patrolling, fire safety preparedness, adequate restoration resources, weather-based contingency planning, and verification of system defense mechanisms to ensure secure and reliable grid operation. During the discussions, concerns were also expressed regarding heavy loading on critical transmission corridors, conductor sag under elevated temperatures, the need for continuous weather monitoring, and timely reporting of generation outages to facilitate effective system operation.

30.SRPC ESTABLISHMENT RELATED MATTERS

A. Actual Expenditure Statement of "SRPC Establishment Charges" for the 4th quarter [Q4] of the year 2025-26 (1st January 2026 – 31st March 2026) & for the year 2025-26

(i) As stipulated in the Southern Regional Power Committee (Conduct of Business) Rules, 2023 [clause 5.2(h)], the statement for the quarterly expenditure incurred from the "RPCs Internal Budget" for the period of 4th quarter [Q4] of the year 2025-26 is put up for intimation / approval as shown in **Annexure – 30A**.

- It may be noted that the office expenditure against the sanctioned budget of ₹.4.36 Cr under "Office Expenditure" Head has been underutilised for an amount of ₹.2.85 Cr with a savings of ₹.1.51 Cr.

✓ ***Forum noted the above actual expenditure statement for the 4th quarter (Q4) of the Financial Year 2025-26.***

B. Reimbursement of expenditure incurred from the "Salary Head" of CEA's Budget into the Exchequer Bank Account for the year 2025-26

(i) The Southern Regional Power Committee (Conduct of Business) Rules, 2023 [clause 5.2(c)] stipulate that CEA shall provide budget to RPCs for "Salary" head only. All expenditure of "Salary" head is being met from the budget provided by CEA and the same shall be reimbursed to CEA by SRPC Secretariat annually. Therefore, CEA Budget is being utilised from 01.10.2023 also for the expenditure under "Salary Head" and the remaining Heads of expenditures are being incurred from "SRPC Establishment Fund".

(ii) It may be noted that reimbursement of actual expenditure was settled quarterly up to 2023-24 as per the clause 2.1 of SoP issued by CEA vide Deputy Director (B&A), Budget Section letter No. 1/1/2023 – Bud (CEA)/1302-08 dated 01.05.2023, attaching therewith the minutes of the meeting held on 06.04.2023 chaired by Chairperson, CEA. The said clause 2.1 of the SoP has been amended vide Deputy Director (B&A), Budget Section letter No. 1/1/2023 – Bud (CEA) / 243-252 dated 31.05.2024 **[Annexure-30B1]**, as per the provision contained vide clause 9 of the SoP, as follows :

"All expenditure of 'Salary' head shall be met by budget provided by CEA. The same shall be reimbursed by RPCs (except NERPC) to CEA annually on and before by 30th April of succeeding year as guided by the O/o CCA, MoP"

(iii) In view of the above amendment in the SoP, the reimbursement of actual expenditure was made annually. The reimbursement of expenditure incurred under Salary Head, calculated as on 31st March, 2026, **as ₹. 3,39,31,615.00** [Rupees Three Crore, Thirty Nine Lakhs, Thirty One Thousand, Six Hundred and Fifteen Only] was communicated to CEA's Budget Section vide SRPC's letter No. SRPC/Establishment/2026/353-57 dated 09.04.2026 **[Annexure-30B2],** has been deposited to Exchequer Bank Account. Hence, SRPC has settled all the dues up to 31st March 2026.

(iv) The above settlement is subject to reconciliation by PAO, Bangalore and the same is awaited by them.

✓ ***Forum noted the above settlement of expenditure incurred under Salary Head, calculated as on 31st March, 2026.***

C. Actual Expenditure Statement of "SRPC Establishment Charges" for the 1st quarter [Q1] of the year 2026-27 (1st April 2026 – 30th June 2026)

i. As stipulated in the Southern Regional Power Committee (Conduct of Business) Rules, 2023 [clause 5.2(h)], the statement for the quarterly expenditure incurred from the "RPCs Internal Budget" for the period of 1st quarter [Q1] of the year 2026-27 is put up for intimation / approval as given in the [**Annexure-30C**].

ii. It may be noted that the office expenditure against the sanctioned budget of ₹.5.21 Cr under office expenditure has been underutilised for an amount of ₹.37.29 Lakh due to the delay in the following major works :

- SRPC Rest Room Renovation Works – These works were not completed by June, 2026 and hence the final payment of about ₹.7.38 Lakhs could not be made during the quarter 1 (1st April 2026 – 30th June 2026). These works were completed by July, 2026 and the SRPC Rest Rooms were handed over by the contractor to SRPC on 31.07.2026. The final settlement of ₹. 7,38,000.00 was made on 06.08.02026.

✓ ***Forum noted the above actual expenditure statement for the 1st quarter (Q1) of the Financial Year 2026-27.***

D. Pending Payment of Membership Fee in respect of SRPC Establishment Fund

(i) SRPC Secretariat has requested the paying members of SRPC to make the payment of the membership fee in respect of the establishment expenditure for the year 2025-26. As approved in the 56th meeting of SRPC held on 15.11.2025 and Southern Regional Power Committee (Conduct of Business) Rules, 2023, the reimbursement of annual expenditure of SRPC Secretariat is to be made by the members, as per the following provisions:

5.1 All the Members of SRPC except CEA, NLDC, CTUIL and SRLDC shall equally contribute in the SRPC Establishment Fund in the beginning of the financial year.

5.2. The Constituents shall deposit the contribution on annual basis by the end of April every year in the Bank Account named "SRPC Establishment Fund" opened and operated by SRPC Secretariat in a Nationalised bank, the amount intimated by SRPC Secretariat. Surplus of a particular year would be retained in the SRPC Establishment Fund or as decided by the Committee. Management of surplus fund shall be at the sole discretion of the Committee.

5.3 The payments shall be made by the member utilities in respect of the members from the respective utility as communicated by SRPC Secretariat.

5.8 If the payment for the reimbursement are not received by June, 2026, 1% per month would be charged from 1st April 2026 onwards.

(ii) The membership fee was sought SRPC's letter dated 16th April 2026 and subsequent reminders dated 11th June 2026 & 29th June 2026. The membership fee is not yet received from the following members. Therefore, the said payment may please be made urgently through Demand Draft / NEFT / RTGS, under intimation to SRPC [Mail ID : mssrpc-ka@nic.in , seadmsrpc@gmail.com].

(iii) As per the provisions contained in clause 5(5) – Appendix II, 6 (iv) of the Guidelines for the "SRPC Establishment Fund", the outstanding dues as on 1st July of the current financial year for which the expenditure is pertaining, shall attract penalty at the rate of 1.00 % per month, calculated as simple interest from 1st April. Hence, Penal interest calculated from 1st April 2025 will be charged during the next year (2026-27) in respect of the payment received from 1st July 2025 onwards.

(iv) The Demand Draft may be drawn in favour of "SRPC Establishment Fund" or the payment may be made through online transaction to the following Bank :

Name of the Account: SRPC Establishment Fund

Type of Account: Government Body Current Account [CA- GOVT DEPT-AUTO BODY-INR]

Name of the Bank: State Bank of India, Race Course Road, Bangalore

Account Number: 42141582756

IFSC Code: SBIN 000 6198

MICR Code: 560 00 2038

(v) The list of members who have not paid the membership fee as on 02.07.2026 for the year 2026-27 is as follows:

SL	Organisation	No of Members (2026-27)	No of Membership, for which payment is pending as on 02.07.2026	Total amount due (Rs)
1	**M/s. Koppal - Narendra Transmission Ltd [KNTL]**	**1**	**1**	**26,07,903.00**

(vi) The actuals for the year 2022-23, 2023-24 & 2024-25 had already been adjusted in the demand letter issued for the year 2025-26 and the actuals for the previous year 2025-26 has been adjusted for the year 2026-27.

✓ ***Constituent members may kindly arrange to make the pending payments.***

E. Pending Payment of Annual Subscription Fee in respect of SRPC Sub-Committee Meeting Fund

(i) This office had requested to send the Annual Subscription towards the SRPC Subcommittee Meetings, amounting to Rs. 1,00,000/- (Rupees One lakh only), for the year 2026-27 vide SRPC's letter dated 21.04.2026 and subsequent reminders dated 12.06.2026 and 29.06.20265 in accordance with clause 26 of "Southern Regional Power Committee (Conduct of Business) Rules, 2023, to collect the annual subscription from the constituents to meet the expenditure for conducting the various meetings by SRPC Secretariat and also to provide working facilities.

(ii) The said amount has not yet been received in this office from the following paying members. The subscription may be paid in the form of NEFT / RTGS / Cheque / Demand Draft, payable in favour of the **"Chief Engineer, KPTCL & Asst. Secretary, SRPC"**. The total pending payment including the subscription for the year 2026-27 as on 02.07.2026 is as follows :

SL	Organisation	Subscription per year (Rs)	Pending Years	Total amount due (Rs)
1	The Chief Engineer (Ele), SLDC, KPTCL	1,00,000.00	**2026-27**	1,00,000.00

(iii) The above payment through Demand Draft / Cheque may kindly be arranged to send to "The Member Secretary, S.R.P.C, No.29, Race Course Cross Road, Bangalore - 560009". The details for RTGS Transaction :

Account Name :Chief Engineer, KPTCL & Asst. Secretary, SRPC

Bank Name:STATE BANK OF INDIA

Branch Name & Address:RACE COURSE ROAD BRANCH, NO. 29/4 TRADE CENTER, RACE COURSE ROAD BANGALORE – 560001

Phone No:080 -2 226 2421 / 2 226 7734

E-Mail:sbi.06198@sbi.co.in

Account No:30250300130

BSR CODE:0006198

Branch IFSC Code (RTGS):SBIN 000 6198

MICR Code of Bank:56000 2038

- ✓ ***Constituent members may kindly arrange to make the pending payments.***
- ✓ ***It was requested that the intimation of the online transaction with complete details may please be forwarded to SRPC secretariat office to enable us to acknowledge the receipt of your payment.***

31.SRPC MEMBERSHIP OF ELECTRICTY TRADER

a. As per MoP Resolution dated 3rd December 2021, Clause- 3(vii), SRPC membership envisages "One member representing the **electricity traders** in the region by alphabetical rotation, which have trading volume of more than 500 million units during the previous financial year"

b. CEA vide Letter dated 07.04.2026 nominated M/s Adani Enterprises Ltd. as member of SRPC for FY 2026-27.

c. The nomination was communicated to M/s Adani Enterprises Ltd., and the company was requested to furnish its nominations. Follow-up communications were also made through email and telephonically.

d. M/s Adani Enterprises Ltd. vide email dated 01.07.2026 informed that M/s Adani Enterprises Limited had transferred the trading licensee to M/s PowerPulse Trading Solutions Limited, which was nominated for membership to WRPC. M/s PowerPulse Trading Solutions Ltd. accepted the membership in WRPC for FY 26-27. Therefore, M/s Adani Enterprises Ltd shall not be availing the membership in SRPC for FY 26-27.

e. In view of the above, there will be no member of Electricity Traders in SRPC for the year 2026-27.

- ***In view of the above, there will be no member of Electricity Traders in SRPC for the year 2026-27.***

SRPC Deliberations

It was informed that there will be no representative from the Electricity Traders category in SRPC for the year 2026–27. However, M/s PTC will continue to be treated as the permanent Trader Member of SRPC, and the same has been intimated to CEA.

ADDITIONAL AGENDA

32.DOCO OF PARTIAL ASSETS AND RECOVERY OF TRANSMISSION CHARGES BY WRSR POWER TRANSMISSION LIMITED

a) WRSR Power Transmission Limited of M/s Adani Energy Solutions vide letter dated 13.07.2026 (**Annexure-32A)** had requested SRPC to recommend that WPTL

may declare part COD / DOCO of the commissioned scope from the date of successful trial run in compliance with the provisions of Regulation 27(1)(c)(ii) of the IEGC, 2023; and to facilitate proportionate recovery of transmission charges for the commissioned elements, in line with Schedule 2 of the TSA and the applicable CERC Sharing Regulations, 2020.

b) Regulation 27(1)(c)(ii) of the CERC (Indian Electricity Grid Code) Regulations, 2023 states

(ii) The COD of a transmission element of the transmission system under Tariff where found Based Competitive Bidding shall be declared only after the declaration of the COD of all the pre-required transmission elements as per the Transmission Services Agreement:

Provided that in case any transmission element is required in the interest of the power system as certified by the concerned RPC(s), the COD of the said transmission element may be declared prior to the declaration of the COD of its prerequired transmission elements.

c) NLDC/SRLDC/CTUIL may apprise the forum.

TCC Deliberations

- Early commissioning of assets has been proposed by M/s Adani as per provisions of the prevailing regulatory framework.
- ***TCC concluded that he matter shall first be deliberated in the Operation Sub-Committee and Commercial Sub-Committee meetings. Thereafter, based on the outcome of the discussions, it will be placed before the Forum in the next meeting for further consideration.***

SRPC noted the above

33.CONSTRAINTS IN REVISING SCHEDULE UNDER T-GNA

a) The issue was deliberated during 66th Commercial Sub Committee meeting held on 08.05.2026 wherein TNPDCL highlighted the operational constraints associated with the revision of schedules under Temporary General Network Access (T-GNA).

b) TNPDCL submitted that the primary objective of introducing T-GNA was to facilitate optimal utilization of the transmission network and power market instruments for economical power procurement. However, the present operational framework does not provide adequate flexibility for revising schedules under T-GNA, thereby limiting its intended benefits. It was further submitted that, to maintain grid discipline and ensure efficient real-time balancing, all possible operational flexibilities should be available, including revision of generation schedules during high and low frequency conditions (i.e., under/over drawal and under/over injection), irrespective of whether the transaction is under GNA or T-GNA.

c) With regard to the restriction on revision of T-GNA, TNPDCL clarified that the restriction envisaged under the CERC GNA Regulations pertains only to the revision of the reserved transmission capacity and not to the revision or backing down of the scheduled generation. The relevant provisions of the GNA Regulations are reproduced below:

"32.1. TGNA granted under exigency application category (or) under advance application category for a period not exceeding one month cannot be revised."

"32.2. TGNA granted under advance application category for a period of more than one month may be reduced for the balance period, with a notice period of one month by the TGNA grantee."

TNPDCL stated that the above provisions do not explicitly prohibit the backing down of generation or revision of schedules. However, it has been observed that schedules under T-GNA cannot presently be revised through the NOAR portal operated by RLDC/NLDC.

d) SRLDC replied that, the CERC IEGC Regulations, 2023, clearly states that TGNA schedules cannot be revised. Regulation 49 (4)(a) of IEGC Regulations, 2023 is quoted below:

(4) Revision of schedules on request of buyers which are GNA grantees:

(a) SLDCs on behalf of intra-state entities, regional entity ESSs as drawee entities, beneficiaries, regional entity buyers or cross-border buying entities may revise their schedules under GNA as per sub-clauses (b) and (c) of this clause in accordance with their respective contracts:

Provided that scheduled transactions under T-GNA once scheduled cannot be revised other than in case of forced outage as per clause (7) of this Regulation.

e) During the discussions, it was opined that power exchange schedules cannot be revised. However, in cases where both the buyer and the seller mutually agree, withdrawal of T-GNA schedules may be considered, particularly in view of the increasing integration of intermittent generation into the grid. It was further stated that, where both parties consent to the revision of schedules, there should be no difficulty in permitting such revisions. It was also noted that, even if the schedules are not availed, the applicable capacity charges, transmission charges, and operating charges would continue to be payable, and no relaxation in such charges would be admissible. TNPDCL raised a concern regarding how the drawee entity would balance its drawal in the absence of such operational flexibility. It was further observed that the introduction of a Capacity Market may also pose significant operational challenges.

f) All States recommended that provision for revision of TGNA schedules may be allowed, where there are no contract-wise restrictions, except for power exchange schedules. ***The matter would be placed before the SRPC/TCC in the next meeting for further deliberation and subsequently may be taken up with the Commission, if decided so by SRPC.***

g) TNPDCL vide letter dated 20.07.2026 (**Annexure-33A**) submitted an agenda item concerning the issue of revision of schedules under T-GNA. TNPDCL highlighted the Commission's observations, as explained in the Statement of Reasons (SoR), as follows:

(i) Need for Scheduling Certainty:

(ii) Protection of Transmission Rights:

(iii) Flexibility Available Prior to Day-Ahead Scheduling

(iv) Recognition of Renewable Energy Variability

(v) Recognition of Dynamic Grid Operation

(vi) Future Evolution of Market Design

h) In view of the above, TNPDCL submitted the following:

(i) The present restriction is inconsistent with the fundamental objectives of the GNA framework, namely optimal utilisation of ISTS, operational flexibility and market efficiency.

(ii) The Statement of Reasons itself acknowledges that modern grid operation requires increasing operational flexibility due to large-scale renewable integration.

(iii) The regulatory framework already permits schedule revisions under several situations, thereby recognising that scheduling cannot remain static in a dynamic power system.

(iv) Distribution Licensees face operational uncertainties comparable to those faced by renewable generators and therefore deserve similar regulatory flexibility.

(v) The existing prohibition results in avoidable DSM liabilities, increased deployment of Ancillary Services, inefficient utilisation of transmission capacity and higher procurement costs for consumers.

(vi) The concerns expressed by the Commission regarding transmission security can be adequately addressed through existing operational safeguards available with RLDCs, without imposing an absolute prohibition on bilateral T-GNA schedule revisions.

i) **TNPDCL recommended to review the Regulation 49(4)(a) of the CERC (Indian Electricity Grid Code) Regulations, 2023 to permit revision of schedules under bilateral T-GNA transactions, subject to the following safeguards:**

- Revision shall be limited to the already sanctioned T-GNA quantum without modification of transmission rights;
- Availability of transmission capacity;
- Absence of transmission congestion;
- Maintenance of grid security;
- Compliance with contractual obligations;
- Adherence to prescribed gate closure timelines;
- Exclusion of collective transactions undertaken through Power Exchanges; and
- Approval by the concerned RLDC.

j) Such a calibrated regulatory framework would preserve transmission security while improving operational flexibility, ensuring equitable treatment of buyers and generators, reducing DSM and Ancillary Services deployment, facilitating least-cost power procurement, promoting optimal utilisation of the ISTS and strengthening overall grid reliability in a power system with increasing renewable energy penetration.

TCC Deliberations

k) TNPDCL stated that the issue of revising the schedules under the TGNA was deliberated in 66th Commercial Sub Committee meeting held on 08.05.2026. The primary objective of introducing T-GNA was to facilitate the optimal utilization of the transmission network and power market instruments for economical power procurement. However, the present operational framework does not provide adequate flexibility for revising schedules under T-GNA, thereby limiting the realization of its intended benefits. To maintain grid discipline and ensure efficient real-time balancing, all possible operational flexibilities should be available, including the revision of generation schedules during both high- and low-frequency conditions, irrespective of whether the transaction is under GNA or T-GNA.

In this context, it was observed that Regulation 32.1 of the GNA Regulations restricts the revision of T-GNA granted under the Exigency Application Category and under the Advance Application Category for a period not exceeding one month. Further, Regulation 32.2 provides that T-GNA granted under the Advance Application Category for a period exceeding one month may be reduced only for the balance period, subject to a notice period of one month by the T-GNA grantee. These provisions limit the operational flexibility available to market participants for revising T-GNA schedules in response to real-time grid requirements.

TNPDCL initially stated that the restriction under the Regulations pertains only to the revision of T-GNA and not to the revision of generation schedules associated with T-GNA transactions.

However, SRLDC subsequently clarified that Regulation 49.4(a) of the IEGC Regulations permits revision of schedules, upon the request of buyers who are GNA grantees, by SLDCs on behalf of intra-State entities, Regional Entity ESS as drawee entities, beneficiaries, Regional Entity buyers, or cross-border buying entities, in accordance with their respective contracts. The Regulation specifically provides that scheduled transactions under T-GNA, once scheduled, shall not be revised except in the case of a forced outage, as provided under Clause 7 of the said Regulation. Accordingly, SRLDC stated that the existing regulatory provisions do not permit revision of schedules for T-GNA transactions, except under the specified circumstances.

After detailed deliberations in 66th Commercial Subcommittee meeting, it was agreed that where both the buyer and the seller mutually consent to the revision of schedules, there should not be any restriction on such revisions. All the participating States supported the proposal raised by TNPDCL. MS, SRPC also concurred with the view that, where both the buyer and the seller agree to the revision, there should not be

any restriction on the revision of generation schedules under T-GNA.

Accordingly, it was decided to place the matter before the TCC and SRPC forum for further action. Subject to the concurrence of the TCC and SRPC members, the issue may thereafter be taken up with the CERC for appropriate consideration and necessary regulatory resolution.

Under the circumstances, it was emphasized that the requirement for permitting revision of schedules under T-GNA needs to be examined from the perspective of providing adequate operational flexibility under prevailing system conditions. It was further noted that the Statement of Reasons issued by the Hon'ble Commission along with the IEGC Regulations recognizes the need to revisit the timelines for revision of generation schedules, particularly the existing provisions relating to the 7th and 8th time blocks. In view of the above, it was felt that the regulatory framework may also be reviewed to provide appropriate flexibility for revision of schedules under T-GNA.

l) It was observed that there is no technical limitation in permitting the revision of schedules under T-GNA and that only the existing regulatory provisions require appropriate amendment.

m) Accordingly, it was proposed that, subject to the concurrence of the TCC, the matter may be taken up by the Chairperson, SRPC with the Chairperson, CERC in this regard. TNPDCL further informed that a detailed justification had already been furnished in the agenda note for the consideration of the constituents. Since the proposal had already been recommended by the Commercial Sub-Committee, the constituents were requested to endorse the recommendation and request CERC to make suitable amendments to the IEGC Regulations and the GNA Regulations to permit the revision of schedules under T-GNA.

n) ED, SRLDC stated that, at present, the revision of schedules under T-GNA cannot be permitted due to the absence of enabling regulatory provisions. Once the necessary provisions are incorporated into the regulatory framework, the same can be implemented.

o) After deliberations, TCC forum recommended the following:

- ***Chairperson SRPC may take up the matter with Chairperson, CERC regarding the revision of the schedules under TGNA for the consented entities without affecting other conditions/liabilities.***

SRPC Deliberations

- ✓ ***Chairperson, SRPC agreed the recommendation of the TCC forum and stated that Chairperson, SRPC would take up the matter with Chairperson, CERC regarding the revision of the schedules under TGNA for the consented entities without affecting other conditions/liabilities.***

34. TNPDCL AGENDA ITEMS

a) TNPDCL vide letter dated 20.07.2026 (*refer Annexure-33A*) submitted the following agenda for deliberations:

A. Review of Cost Allocation Framework for ISTS HVDC Systems and Transmission Charge Implications of Upcoming Renewable Energy-linked HVDC Projects

1) The issue of declaring all ISTS HVDC systems under the National Component, irrespective of reverse power transfer capability, was deliberated as Agenda Items 14, 15, and 18 during the 57th SRPC Meeting held on 16–17 March 2026 at Hyderabad. TNPDCL emphasized that HVDC systems are critical national transmission infrastructure and highly capital-intensive assets; therefore, the methodology adopted for allocating HVDC transmission charges has a significant impact on the ISTS transmission charges borne by Distribution Licensees and, ultimately, electricity consumers.

2) TNPDCL has undertaken a comprehensive assessment of the transmission charge implications under multiple regulatory scenarios considering:

   i. all existing HVDC systems;
   ii. six new HVDC systems presently proposed/under implementation, predominantly intended for Renewable Energy evacuation;
   iii. refurbishment of the Talcher–Kolar HVDC System;
   iv. the prevailing provisions of the Sharing Regulations;
   v. possible outcomes of the pending litigation relating to the R–P–T HVDC System; and
   vi. continuation or rationalisation of the ISTS transmission charge waiver available to Renewable Energy projects.

   The assessment has been carried out for the current scenario (2026) as well as the 2030 planning horizon.

3) The analysis establishes that the future transmission charge liability of Distribution Licensees is primarily influenced by:

   i. the regulatory treatment of the Raigarh–Pugalur–Thrissur HVDC System; and
   ii. the methodology adopted for allocation of transmission charges of the upcoming Renewable Energy-linked HVDC systems.

4) It is observed that six new HVDC systems, proposed primarily for Renewable Energy evacuation, involve an estimated capital investment of about ₹1.36 lakh crore (excluding the Port Blair project).

5) The analysis demonstrates that if:

   i. the Raigarh–Pugalur–Thrissur HVDC System is accorded National Component status pursuant to the pending litigation; and
   ii. the upcoming Renewable Energy-linked HVDC systems are allocated under the Regional Component based on the principle of cost causation, together with rationalisation of the existing ISTS

transmission charge waiver.

6) If the above is considered, the annual HVDC transmission charge liability of **TNPDCL is estimated to reduce to approximately ₹1,095 crore, representing a reduction of nearly ₹1,570 crore per annum compared to the existing regulatory trajectory.**

7) TNPDCL requested to consider the following:

   i. National Component Status for **Raigarh–Pugalur–Thrissur HVDC System**

   ii. Regional Component-based Allocation for Future RE-linked HVDC Systems

   It may recommend that the proposed HVDC systems developed primarily for Renewable Energy evacuation should not automatically be classified under the National Component. Instead, their transmission charges may be allocated in accordance with the principles of cost causation, beneficiary pays, and equitable sharing of transmission charges, with appropriate treatment under the Regional Component, unless otherwise determined through a comprehensive regulatory review.

   iii. Review of the ISTS Transmission Charge Waiver Framework

   Recommended for constitution of an appropriate Committee to comprehensively revisit the existing ISTS transmission charge waiver framework, including the methodology for cost allocation of Renewable Energy-linked transmission systems and HVDC projects.

TCC Deliberations

a) TNPDCL convened a Subgroup meeting on 23.07.2026, wherein the issue of the significant financial implications for the Southern Region beneficiaries arising from the continued waiver of transmission charges for Renewable Energy (RE) projects was deliberated. The key findings of the Subgroup before the TCC were presented, as enclosed at **Annexure-34A**.

b) TNPDCL informed that, pursuant to the directions of SRPC in its previous meeting, a detailed study comprising various case studies and scenario analyses had been carried out to assess the impact of HVDC systems on the transmission tariff liability. It was stated that the issue of transmission tariff sharing of RPT is presently sub judice before the Hon'ble APTEL and the Hon'ble Supreme Court. Further, it was informed that six HVDC systems, proposed primarily for the evacuation of Renewable Energy (RE) power in other Regions, involving an estimated capital investment of about Rs.1.36 lakh crore, had been considered in the analysis.

   Based on different scenarios, TNPDCL submitted that if all future RE-linked HVDC systems are classified under the National Component, the transmission tariff liability of TNPDCL is estimated to increase to approximately Rs.2,665 crore by the 2030 timeframe. On the other hand, if such RE-linked HVDC systems are classified under the Regional Component, the tariff liability would be around Rs.1,095 crore. TNPDCL stated that the studies indicated a substantial

increase in tariff liability under most scenarios. The most optimal outcome, as per the study, would be to classify the Raigarh–Pugalur–Thrissur (RPT) HVDC system under the National Component, on par with the Bishwanath Chariali–Agra HVDC system, while classifying other future RE-linked HVDC systems under the Regional Component based on the cost causation principle.

Regarding the categorisation of the Raigarh–Pugalur–Thrissur (RPT) HVDC system, it was highlighted that, depending upon the outcome of the ongoing litigation before the Hon'ble APTEL and the Hon'ble Supreme Court, or if the Ministry of Power declares the RPT HVDC system as a Strategic National Asset, the transmission tariff liability of the Southern Region beneficiaries would reduce significantly. Otherwise, the additional annual transmission tariff liability could be around Rs.1,800 crore, which would similarly impact all Southern Region beneficiaries.

Study demonstrated the need for an equitable cost allocation mechanism for future RE-linked HVDC systems to avoid a significant increase in transmission tariff payable by Distribution Licensees and, consequently, the end consumers.

Accordingly, TNPDCL proposed the following matter to take up:

i. the RPT HVDC system may be declared a strategic National Asset and classified under the National Component;

ii. future RE-linked HVDC systems may be classified under the Regional Component based on the principles of cost causation and beneficiary pays, rather than being automatically treated as National Components; and

iii. the issue of waiver of transmission charges for RE-based projects, which has significant financial implications for Distribution Licensees, may once again be taken up with the Ministry of Power.

TNPDCL further requested that forum may recommend the constitution of a Committee by the Ministry of Power to comprehensively examine the issues relating to the transmission charge waiver framework, the cost allocation methodology for future RE-linked HVDC systems, and the classification of the RPT HVDC system under the National Component.

TNPDCL informed that the above proposals had been discussed in the Subgroup meeting held on 23.07.2026, where all the participating States/UTs concurred with the views and supported taking up the matter with the Ministry of Power for appropriate consideration.

c) All States concurred with the proposals put forth by TNPDCL. During the discussion, it was resolved that all the participating States/UTs would take up the matter with the Ministry of Power through their respective State Governments also. It was felt that a coordinated approach by all the States would facilitate early consideration of the issue by the Ministry of Power and expedite the constitution of a committee to examine the matter comprehensively.

- ***After deliberation, TCC forum recommended that Chairperson, SRPC may take up the matter with Secretary, Power on behalf of all States.***

SRPC Deliberations

- ✓ ***Chairperson, SRPC accorded the decision of the TCC forum and stated that Chairperson, SRPC would take up the matter with MoP on behalf of States on following matter:***

  i. ***National Component Status for Raigarh–Pugalur–Thrissur HVDC System***
  ii. ***Regional Component-based Allocation for Future RE-linked HVDC Systems***
  iii. ***Review of the ISTS Transmission Charge Waiver Framework***

B. Recurring Non-Compliant Billing Practices by NTPC through the PRAAPTI Portal and the Need for Regulatory Compliance

1) TNPDCL highlighted the recurring practice of NTPC raising invoices through the PRAAPTI Portal for claims that are either pending adjudication before the Hon'ble CERC or are not supported by specific tariff orders. It was submitted that such claims, when billed along with regular monthly energy charges, create operational, financial, and regulatory challenges for beneficiary Distribution Licensees and are inconsistent with the CERC Tariff Regulations, which permit recovery only in accordance with the applicable Regulations and Commission orders. TNPDCL further stated that this recurring issue across various tariff components warrants deliberation at the SRPC level to evolve a uniform approach ensuring regulatory compliance and protecting the interests of beneficiary utilities.

   i. Recovery of Ash Transportation Expenses Without Regulatory Approval

   ii. AFC Billing for FY 2026–27 – Deviation from Regulation 10(4) of the CERC Tariff Regulations, 2024

   iii. Recovery of FGD Expenditure Prior to Regulatory Approval

2) It was submitted that the above billing practices have been causing recurring operational and financial challenges for TNPDCL and other beneficiary Distribution Licensees.

3) In view of the above, the matter may be deliberated, and the following recommendations may be considered:

   i. Generating Companies shall raise through the PRAAPTI Portal only those invoices that are expressly admissible under the applicable CERC Regulations or have been specifically approved by the Hon'ble CERC through tariff orders or other regulatory orders.

   ii. Claims that are pending adjudication before the Hon'ble CERC, subject to prudence check, or otherwise awaiting regulatory approval shall not be uploaded through the PRAAPTI Portal until their admissibility is determined by the Commission.

iii. Pending such regulatory determination, disputed, etc shall not be clubbed with regular monthly energy bills, thereby ensuring that payment of undisputed energy charges is not adversely affected and beneficiaries continue to receive eligible rebate.

iv. PRAAPTI agency may be requested to provide a separate invoice category or tagging mechanism for disputed claims, so that such claims are excluded from FIFO adjustment and do not attract the provisions of the Late Payment Surcharge Rules until they attain regulatory finality.

v. SRPC may take up the matter with the Hon'ble CERC and the Ministry of Power for issuance of appropriate regulatory directions and / or procedural guidelines to ensure uniform billing practices by all Inter-State Generating Stations, strict compliance with the CERC Tariff Regulations and Orders, and protection of the legitimate interests of beneficiary utilities.

TCC Deliberations

a) It was noted that a reconciliation meeting between TNPDCL and NTPC had been proposed. NTPC stated that the matter had already been discussed with the officials of TNPDCL, and both parties had agreed to convene the meeting in the next week, wherein all the pending issues would be deliberated.

b) TNPDCL stated that, although the reconciliation meeting had been proposed for the following week, NTPC had recently been raising invoices through the PRAAPTI portal towards claims that were either pending adjudication or had not been supported by any specific order of the Hon'ble CERC. TNPDCL cited the claims relating to ash transportation charges for FY 2024–25 and FY 2025–26, which are presently under adjudication. It was further stated that, while the proposed meeting is intended to resolve the issues amicably, the agenda had been placed before the SRPC Forum as a preventive measure and to bring the matter to the notice of the Forum.

c) It was noted that the discussions would be recorded in the Minutes. However, TCC emphasized that the issues should be resolved bilaterally between TNPDCL and NTPC.

SRPC noted the above

35.PGCIL SR-I ADDITIONAL AGENDA

A. Proposal for replacement of 7 Nos 400KV reactors based on asset ageing under Add-Cap:

i) Replacement of 400kV 3-ϕ, 50MVAR Vijayawada-1 Line reactor at 400kV Nellore Substation.

Equipment details:

Element name: 400kV, 3-ϕ, 50MVAR, Vijayawada-1 Line reactor
Make: BHEL, Sr. No:6005102Year of commissioning:1992

The reactor was originally commissioned at Trichy SS as Trichy-Neveyli-1 LR. During the commissioning of 400kV Nellore substation, the reactor was shifted to Nellore and recommissioned as 400kV Vijayawada-Nellore-1 line reactor at Nellore end. The reactor has served for more than 34 years.

ii) **Replacement of 400kV 3-ϕ, 50MVAR Warangal Line reactor at 400kV Khammam Substation.**

Equipment details:

Element name: 400kV, 3-ϕ, 50MVAR, Warangal Line reactor
Make: BHEL, Sr. No:6005053, Year of commissioning: 1992

The reactor is commissioned at Khammam Substation as a Khammam-Warangal Line reactor. The reactor has served for more than 34 years.

iii) **Following aged (>35 Years)** reactors are proposed for replacement due to NO support from OEM and non-availability of spare bushings as these are non-standard type. This may lead to operational eventuality in future:

a) Replacement of 400kV 3-ϕ 50MVAR, Nagarjuna Sagar Line reactor# 2 at 400kV Kadapa Substation.

Equipment details:

Element name: 400kV, 3-ϕ, 50MVAR, Nagarjuna Sagar#2
Line Reactor , Make: MELCO, Sr. No:8754700102
Year of commissioning: 1989

The associated transmission line is approximately 272 km in length, making the line reactor critical for effective reactive power management. Further, this reactor has been in service for more than 37 years.

In view of the above considerations, the above reactors are proposed for replacement under the ADDCAP scheme and accordingly agenda has been put up in 237th OCC. During 237th OCC deliberations, the forum technically recommended for replacement and it was advised that the existing line reactors may be augmented with a higher-capacity reactor of either 80 MVAR or 125 MVAR, preferably with a switchable configuration through a circuit breaker, to provide greater operational flexibility as bus reactor for system support. In this regard, CTU may carry out detailed system studies and recommend the appropriate reactor rating. Subject to CTU concurrence on the suitable reactor capacity, POWERGRID shall proceed with the augmentation with either 80 MVAR or 125 MVAR with a switchable breaker arrangement.

b) Replacement of 400kV 3-ϕ, 50MVAR Ramagundam#2 Line reactor at Nagarjuna Sagar Substation.

Equipment details: Element name: 400kV, 3-ϕ, 50MVAR, Ramagundum#2

Line reactor Make: MELCO, Sr. No:8654600104
Year of commissioning:18/12/1987

c) **Replacement of 400kV 3-ϕ, 50MVAR Nagarjuna Sagar#1 Line reactor at Kadapa Substation**.

Equipment details: Element name: 400kV, 3-ϕ, 50MVAR, Nagarjuna Sagar#1

Line reactor, Make: ACEC, Sr. No:57ST25013/2,
Year of commissioning:19/02/1986

d) Replacement of 400kV 3-ϕ, 63MVAR Mahabubnagar Line reactor at Nagarjuna Sagar Substation.

Equipment details: Element name: 400kV, 3-ϕ, 63MVAR, Mahabubnagar

Line reactor, Make: MELCO , Sr. No:8754800102
Year of commissioning:21/06/1989

e) Replacement of 400kV 3-ϕ, 63MVAR RTPS Line reactor at Munirabad Substation.

Equipment details: Element name: 400kV, 3-ϕ, 63MVAR, RTPS

Line reactor, Make: MELCO , Sr. No:8754800101
Year of commissioning:31/10/1989

Approximate cost estimate for replacement of above 7-Nos reactors is enclosed at annexure – 1. However, exact cost estimate will be submitted

B. Proposal for replacement of 5 No's Transformers based on asset ageing (>35 Years) under Add-Cap:

a) Over the years, these transformers have been subjected to numerous through-faults, switching surges, and over-voltage conditions. Consequently, the residual life of these assets has significantly diminished. Condition monitoring results indicate deterioration in insulation health, with several units exhibiting increasing trends in Dissolved Gas Analysis (DGA) parameters and Tan Delta values of bushings, pointing towards accelerated aging and a higher probability of failure.

b) A major concern associated with these aged assets is the presence of Oil Impregnated Paper (OIP) bushings of non-standard and obsolete designs. Compatible spare bushings are presently not available within the region, and the original equipment manufacturers are no longer able to supply replacements for many of these models. This situation poses a significant challenge in undertaking

timely repairs and restoring equipment to service in the event of a bushing failure.

c) In recent years, several instances of sudden transformer and reactor outages have been observed, with bushing failures emerging as one of the primary causes. Such failures can escalate into catastrophic events, resulting in extensive damage to the transformer/reactor, prolonged outages, substantial restoration costs, and adverse impacts on system reliability.

i) 400kV 315 MVA ICT-1 at Vishakapatnam

Make: TELK, Sr. No.: 140060, Year of commissioning: 20/09/1984

Initially this transformer was commissioned in Hyderabad in 1984. Later on in 2011, this ICT was shifted to Vigaz. Now, oil leakages are observed from multiple locations along with violation in R-Phase HV bushing and neutral bushings. Gases are in increasing trend since July 2025. H2 has exceeded the limit. Bushings are of non-standard type.

ii) 400kV, 3x105 MVA ICT-1 at Nagarjunsagar

Make: TELK, Sr. No.: 140062-1, Year of commissioning: 19/08/1985

Also, oil leakages from multiple locations including radiator banks fins have been observed.

iii) 400kV, 315MVA ICT-1 at Kadapa

Make: BHEL, Sr. No.: 6004656, Year of commissioning: 19/02/1986

Replacement of 3 Nos. HV, 3 Nos. IV and 1 No. LV bushings were carried out in Jan’ 2022 along with overhauling of OLTC and replacement of bell tank gaskets. H2 gas is around 526 PPM. Also, oil leakages from multiple locations including radiator banks fins observed.

iv) 400kV, 315MVA ICT-1 at Munirabad

Make: Telk, Sr. No.: 140077, Year of commissioning: 30/10/1989

In 2011 B-ph HV bushing was replaced due to violation. In Jan'2018 major overhauling works were carried out due to leakages. R-ph HV bushing was replaced in 2023 due to violations. OLTC overhauling works were carried out due to crack in 2023. Oil leakages from multiple locations including radiator banks fins observed.

v) 400kV, 315MVA ICT-2 at Hyderabad

Make: CGL, Sr. No.: 24986, Year of commissioning: 27/05/1990

Complete gasket replaced due to multiple leakages in June'2024. Also, oil leakages from multiple locations including radiator banks fins are observed.

Considering the above, the matter was deliberated during the 240th OCC Meeting, and the forum agreed in principle for replace the same. However, the forum advised that the existing transformers/reactors may be augmented with higher-capacity units to cater to future system requirements and recommended that the matter be taken up with CTU for carrying out detailed system studies:

- The advanced age of these transformers and reactors;
- The reduction in residual life due to prolonged service and repeated system disturbances;
- The deteriorating insulation condition as evidenced by DGA and Tan Delta trends;
- The increasing risk of catastrophic failures associated with obsolete OIP bushings; and
- The non-availability of compatible replacement bushings and critical spares,

Based on the outcome of the system studies and concurrence from CTU regarding the suitable transformer/reactor rating and configuration, POWERGRID shall proceed with the replacement/augmentation. TCC/SRPC forum may kindly concur the same.

TCC Deliberations

a) POWERGRID informed the Forum that 7 nos. of 400 kV reactors and 5 nos. of transformers, which are 35–40 years old and have become obsolete, are proposed for replacement. The existing equipment is of Mitsubishi Electric (MELCO)/ACEC make. The replacement of this equipment was agreed upon during the 237th and 240th OCC Meetings. POWERGRID requested the Forum to accord consent for the replacement and sought CTUIL's review on whether the equipment should be replaced with equipment of similar ratings or with upgraded ratings.

b) MS, SRPC recalled that the proposal for replacement of 7 nos. of 400 kV reactors and 5 nos. of transformers, as informed by POWERGRID, had been deliberated in the 237th and 240th OCC Meetings. The following were suggested/recommended during the OCC deliberations:

- The **OCC Forum acknowledged the need for replacement** of the above-mentioned equipment. However, POWERGRID (SR-I & SR-II) was advised to furnish the requisite details to CTUIL and GRID-INDIA for carrying out necessary studies to:

  (i) recommend the optimal capacity of the replacement reactors and examine the feasibility of higher-capacity reactors, such as 80 MVAr/125 MVAr;

  (ii) examine the requirement for switchable and convertible reactors, including the feasibility of operating the line reactors as bus reactors, wherever required; and

  (iii) determine the appropriate rating of the replacement ICTs.

- SRLDC/CTUIL was requested to recommend the optimal ratings/sizes based on the study.

- POWERGRID was advised to submit a detailed proposal/agenda for the replacement of the equipment, including the technical justification, relevant study details and cost estimates, to the forthcoming OCC and CCM meetings for further examination.
- Subsequently, the matter would be placed before the SRPC Forum for further deliberation and appropriate decision.

c) SRLDC and CTUIL agreed to furnish their observations after receipt and examination of the details submitted by POWERGRID.

TCC Conclusion

- ***POWERGRID (SR-I & SR-II) shall furnish the requisite details to CTUIL and Grid-India for carrying out necessary system studies to:***
  - ***Recommend the optimal capacity of the replacement reactors and examine the feasibility of higher-capacity reactors, such as 80 MVAr/125 MVAr;***
  - ***Examine the requirement and feasibility of switchable and convertible line reactors, capable of being operated as bus reactors, wherever required; and***
  - ***Determine the appropriate rating of the replacement ICTs.***
- ***POWERGRID shall furnish the finalized equipment ratings, along with the corresponding cost estimates, for placing the proposal as an agenda item in the forthcoming OCC and CCM meetings for further deliberation.***

SRPC deliberations

d) MS SRPC sought clarification from POWERGRID regarding the disposal and utilization of the old assets. It was recalled that, in an earlier SRPC meeting, it had been decided that such assets should first be offered to the constituent States before being disposed of as scrap. MS, SRPC further stated that if the assets were proposed to be scrapped, the constituent States should be given the first right of acceptance.

e) TGTRANSCO observed that the lead time for procurement and delivery of major electrical equipment, such as transformers and reactors, has increased considerably due to prevailing market conditions and the high demand for such equipment. In view of the extended procurement timelines and the Government of India permitting import of power equipment, TGTRANSCO suggested that the feasibility of reutilising the existing equipment, including those which are 30–35 years old, may be examined through a detailed technical study. It was further suggested that replacement may be considered in a phased manner only where reutilisation is found to be technically infeasible. TGTRANSCO also observed that certain older transmission equipment has demonstrated better quality and durability compared to some of the newer equipment available in the market. Further, TGTRANSCO emphasised the need for maintaining adequate/additional spare equipment to cater to contingencies, considering the long procurement and delivery lead times.

f) ED, SR-I POWERGRID stated that many of the old assets are no longer supported by the Original Equipment Manufacturers (OEMs), and that this aspect would also need to be considered during the deliberations.

g) MS SRPC observed that age alone may not be the sole criterion for replacement and agreed that the feasibility of continued utilization with suitable modifications could be studied. However, it was also noted that the prolonged lead time for replacement equipment poses a significant operational risk, particularly since reactors and ICTs are installed at critical load centers.

He requested SR-I POWERGRID and SR-II POWERGRID to submit a detailed proposal supported by technical studies. The proposal, including the equipment sizing requirements, would be examined by SRLDC and CTUIL. The finalized equipment ratings, along with the corresponding cost estimates, would be placed by POWERGRID as an agenda item in the forthcoming OCC and CCM meetings for discussion and would subsequently be submitted to SRPC for further consideration.

SRPC Deliberations

- ✓ ***SR-I, POWERGRID and SR-II, POWERGRID shall submit a detailed proposal duly supported by technical studies, including the requirement and sizing of the replacement equipment. The proposal shall be examined by SRLDC and CTUIL.***
- ✓ ***The finalized equipment ratings, along with the corresponding cost estimates, shall thereafter be placed by POWERGRID as an agenda item in the forthcoming OCC and CCM meetings for further deliberation and subsequently submitted to the TCC/SRPC for consideration.***

C. Refurbishment of Gajuwaka Back to Back HVDC Pole-II and clubbing with HVDC pole-I refurbishment project for cost effectiveness and operational convenience

a) HVDC Back to Back Pole-1 was commissioned in September 1999 and Pole-2 was commissioned in March 2005. The 52nd TCC forum recommended for approval of the Gajuwaka HVDC Pole-I refurbishment with a cost estimate of Rs 853 crores, as the HVDC system is essential for supplying critical loads in the Vizag area. Accordingly, POWERGRID has taken up the refurbishment project.

b) Further Pole-2, supplied by M/s ABB (now M/s Hitachi) had been commissioned in year 2005 and is completing its useful life in 2030 as detailed below:

- ❖ The Pole-2 Vizag HVDC 1X800MW Back-to-Back station was designed, manufactured, supplied and commissioned by M/s ABB, SWEDEN in the month of March 2005. The basic components of Pole-2 are hereunder:

  a) Valve hall Modules & its associated equipment
  b) Control & Protection Equipment
  c) 6 nos Converter transformers
  d) AC Switchyard Equipment & AC Harmonic Filters;
  e) Valve Cooling System
  f) Auxiliary supply systems.

c) As Pole-2 has also completed 21 years of service, the spare and service support from OEM has diminished over the years. Hence, difficulties are being faced during troubleshooting of problems and routine O&M works. Further, OEM has informed

that they are unable to provide further spare & service support due to technology obsolescence and proposed for upgradation of Pole-2 of HVDC Vizag.

d) Hence, POWERGRID has assessed that it would be prudent to undertake the refurbishment of HVDC Pole-II along with HVDC Pole-I upgradation due to following operational constraints:

e) **Integrated operations of two LCC Blocks:** The integrated operation of two LCC HVDC systems at the same location is challenging when the two systems are implemented by different OEMs. There could be issues with control and protection coordination, interaction between control algorithms, pole and station protection logic, communication interfaces, etc.

f) **Constraints in Operation and Maintenance:** The O&M of two different OEMs of HVDC pole at a single place may require two sets of inventory and expertise.

g) The proposed refurbishment of Pole-II under the same contract offers the following advantages:

- **Cost optimisation:** Procurement of supplies for both poles under a single contract would result in better commercial terms and overall cost effectiveness.
- **Time Optimisation:** Presently Pole-I refurbishment schedule is 36-40 months. Pole-I & Pole-II simultaneous refurbishment can be carried out in same time frame thereby optimising the project time schedule.
- **Integrated control architecture:** Implementation by the same OEM would facilitate a common master control system for both poles, as against maintaining independent control systems.
- **Ease of operation and maintenance:** Common control and protection platforms would simplify maintenance activities, improve reliability, and enhance availability of spare parts and technical support.
- **Inventory Management:** Both Poles upgradation by single OEM will help in optimizing inventories.

h) In view of the above technical, operational, and commercial benefits, refurbishment of HVDC Pole-II may also be considered along with the ongoing refurbishment programme of HVDC Pole-I, under the same contract. POWERGRID shall submit the estimated cost accordingly. TCC/SRPC forum may kindly concur the same.

TCC Deliberations:

a) PGCIL noted the following:

✓ HVDC Back-to-Back Pole-I at Gazuwaka was commissioned in September 1999, while Pole-II was commissioned in March 2005.

✓ In the 52nd TCC meeting, the forum had recommended approval of the Gazuwaka HVDC Pole-I Refurbishment Project with an estimated cost of ₹853 crore, and the tendering process is presently under progress.

✓ Pole-II has also completed more than 21 years of service, and the availability of spares and technical support from the OEM has significantly reduced due to

technology obsolescence. Accordingly, refurbishment/upgradation of HVDC Gazuwaka Pole-II has been proposed.

- ✓ Execution of refurbishment of Pole-I and Pole-II under a single contract would provide several advantages, including optimization of project cost and implementation time, establishment of a common control architecture, simplification of operation and maintenance activities, improved availability of spares and technical support, and optimized inventory management.
- ✓ If approved, the refurbishment would be carried out sequentially by taking shutdowns of Pole-I and Pole-II separately. After completion and restoration of Pole-I, refurbishment of Pole-II would be taken up to minimize the impact on system operation.

b) MS, SRPC enquired about the balance undepreciated amount for the existing asset. PGCIL informed that the balance tariff recovery is approximately ₹150 crore. MS, SRPC requested PGCIL to furnish the detailed cost estimate to facilitate consideration of the proposal by the forum.

c) APTRANSCO conveyed its concurrence to PGCIL's proposal for carrying out refurbishment of Pole-II under the same contract as Pole-I.

d) KPTCL, TANTRANSCO, TGTRANSCO and KSEBL informed that the proposal would be examined internally and their views would be communicated subsequently. They observed that the agenda item had been circulated at a later stage and sufficient time was required to examine the proposal, including the detailed cost implications.

SRPC Deliberations

e) PGCIL requested the forum to accord approval for refurbishment of Gazuwaka HVDC Pole-II under the same package as Pole-I.

f) The forum requested PGCIL to furnish the detailed cost estimate for the proposed works.

g) After deliberations, the SRPC observed that the agenda had been circulated at a later stage and the detailed cost estimate was not available for examination. Accordingly, the forum decided that the proposal may first be deliberated in the concerned SRPC Sub-Committee(s) and, thereafter, be placed before the TCC/SRPC in the next meeting for consideration.

SRPC conclusion

- ✓ ***The proposal may first be deliberated in the concerned SRPC Sub-Committee(s) and, thereafter, be placed before the TCC/SRPC in the next meeting for consideration.***

36.ADDITIONAL AGENDA -CTUIL

CTUIL vide communication dated 23rd July 2026 had submitted the agenda item **(Annexure-36A)** in regard to ISTS network expansion schemes for views of SRPC.

ISTS NETWORK EXPANSION SCHEMES FOR VIEWS OF SRPC

S.No	Name of Scheme	State (s)
1	Transmission System for integration of Ananthapuram-III REZ Phase-II	AP, Karnataka & TN

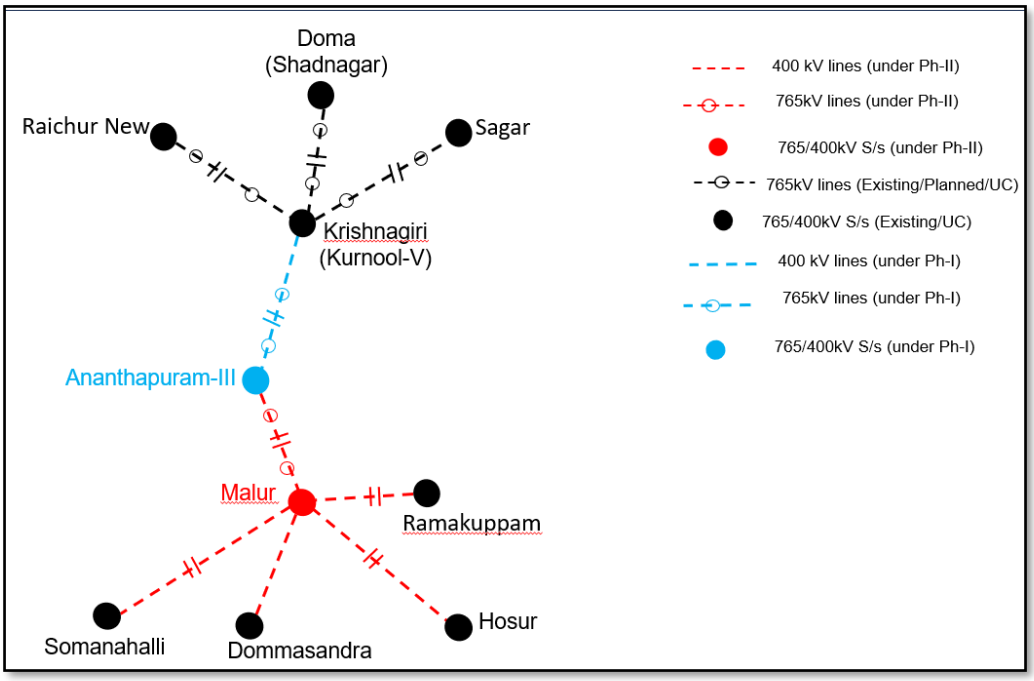
- Augmentation of 3x1500 MVA, 765/400 kV and 7x500 MVA, 400/220kV ICTs (8th to 14th) at Ananthapuram-III PS
- Establishment of 3x1500 MVA, 765/400 kV GIS substation near Malur with 1x240 MVAr (765 kV) bus reactor with space provision for establishment of 220 kV switchyard at Malur
- Ananthapuram-III – Malur 765kV D/c line with 240 MVAr SLR (convertible) at both ends on both circuits
- ± 300 MVAr STATCOM at Malur
- Malur – Hosur 400 kV (quad) D/c line [utilization of existing RoW of Kolar- Hosur line, S/c to M/c wherever required]
- Malur – Dommasandra (KPTCL) 400 kV (quad) S/c line [utilization of RoW of Kolar-Dommasandra S/c line]
- Malur – Somanahalli 400 kV (quad) D/c line [utilization of existing RoW of Gooty – Somanahalli 400kV S/c line and conversion of part S/c towers as M/c towers]
- Malur – Ramakuppam (APTRANSCO) 400 kV (quad) D/c line

Note :

a) APTRANSCO shall implement 400/220 kV Ramakuppam substation in matching timeframe of the ISTS scheme.

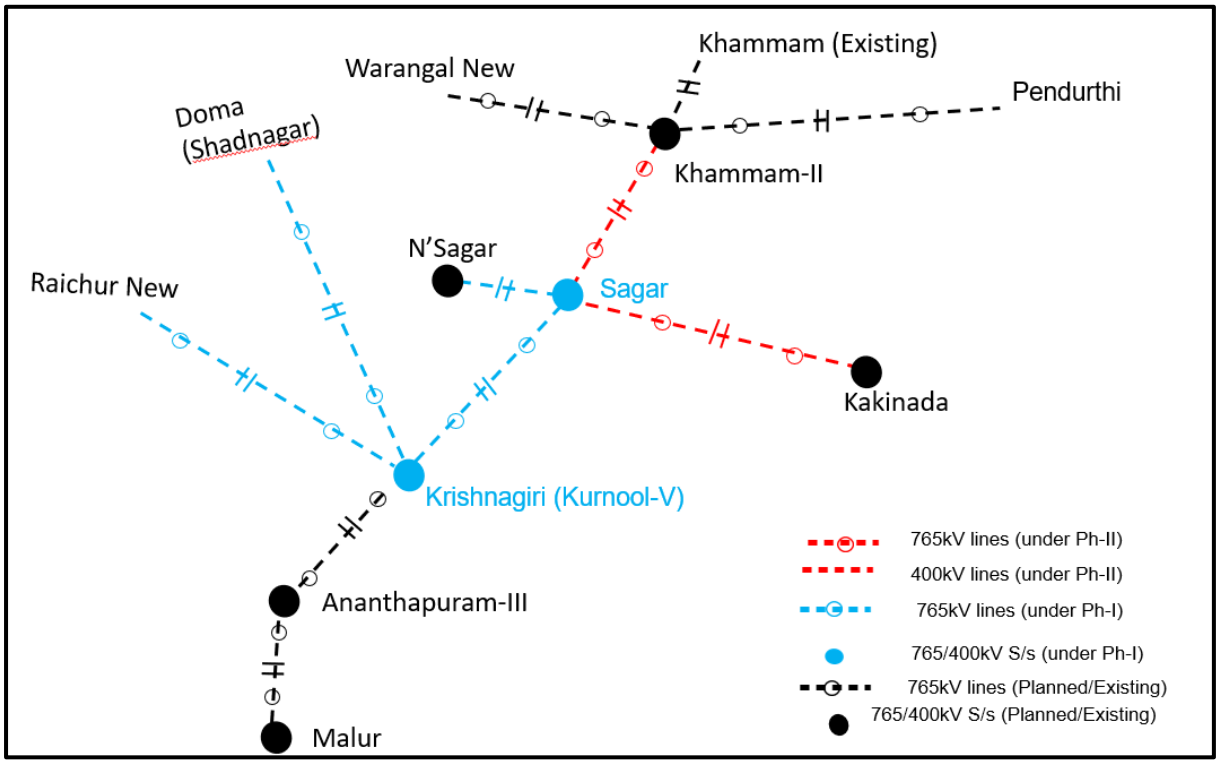
b) For termination of Malur – Hosur 400 kV (Quad) D/c line at Hosur, shifting of existing bus reactor or construction of new Indoor GIS dia at Hosur is required.

c) For termination of Malur – Somanahalli 400 kV (Quad) D/c line at Somanahalli, new Hybrid GIS or Indoor GIS dia at Somanahalli is required.



S.No	Name of Scheme	State (s)
2	Additional transmission system for grant of connectivity at Krishnagiri PS under Phase-I scheme	AP
	Augmentation of 4x500 MVA, 400/220 kV ICTs (6th to 9th) at Krishnagiri PS	

S.No	Name of Scheme	State (s)
3	Transmission system for integration of Krishnagiri REZ - Phase-II (3 GW)	AP & Telangana
	✓ Augmentation of 2x1500 MVA, 765/400 kV and 4x500 MVA, 400/220kV ICTs at Krishnagiri Pooling Station ✓ Khammam-II – Sagar 765 kV D/c line (150 km) 1x240 MVAr SLR (convertible) at Khammam-II end on both circuits ✓ Sagar – Kakinada 765 kV D/c line (300 km) 1x330 MVAr SLR (convertible) at Sagar end on both circuits and 1x240 MVAr SLR (convertible) at Kakinada end on both circuits	



TCC Deliberations:

a) CTUIL informed that the above transmission schemes were scheduled for deliberation in the 48th CMETS-SR meeting to be held on 29.07.2026. It was informed that, after deliberation in the CMETS, the finalized transmission schemes along with the estimated cost would be communicated to the constituents.

b) KPTCL enquired whether the 400kV Gooy –Somanahally Line will be reconductored in this scheme. CTUIL stated that the portion of Gooty – Somanahalli 400kV S/c line corridor which shall be utilised for implementing Malur – Somanahalli 400kV D/c line will be converted from S/c towers to Multi circuit towers along with replacement of Gooty – Somanahalli 400kV S/c line section with HTLS conductor.

c) TANTRANSCO enquired regarding the availability of STATCOM at Krishnagiri. CTUIL clarified that the STATCOM has already been considered under the Krishnagiri Phase-I scheme.

➢ ***After deliberations, the forum concluded that, upon receipt of the approved transmission schemes and estimated cost from CTUIL, no special meeting of SRPC would be convened for their approval. Instead, the finalized schemes would be circulated to all SRPC members through e-mail for obtaining their views, and the consolidated views of SRPC would thereafter be communicated to CTUIL.***

SRPC Deliberations

✓ ***The Chairperson, SRPC stated that, upon receipt of the official communication from CTUIL containing the finalized transmission schemes and the outcome of the 48th CMETS-SR meeting, the proposals would be circulated to all SRPC***

members for obtaining their views. The consolidated views of SRPC would thereafter be communicated to CTUIL within 45 days.

37.DATE AND VENUE OF NEXT PHYSICAL MEETING

Next physical meeting of SRPC & TCC is proposed on 21.11.2026 and 20.11.2026 (Saturday and Friday). Power Utilities of Tamil Nadu may need to host the meeting.

- ***Power Utilities of Tamil Nadu may please confirm the same.***

Subsequent physical meeting of SRPC & TCC are to be hosted by PGCIL

- ✓ ***Power Utilities of Tamil Nadu agreed to host the physical SRPC and TCC meetings on 21.11.2026 & 20.11.2026.***

SRPC Deliberations

As the number of entities has increased, the roster has been revised and reworked as follows:

ROSTER for Hosting Physical Meetings			
1	Tamil Nadu	9	Karnataka
2	PGCIL	10	NTECL
3	Telangana	11	Suzlon/Renew
4	NPCIL	12	Kerala
5	JSWEL/SEIL	13	PTCIL
6	Andhra Pradesh	14	NLCIL/NTPL
7	NTPC	15	HNPCL /IL&FS
8	APL/Greenko		

SRPC noted the above

TCC Conclusion

- Chairperson, TCC extended her appreciation to all the members, delegates and stakeholders for their active participation and valuable contributions during the meeting. She appreciated the members for their constructive deliberations, technical inputs and collaborative approach in addressing various issues concerning the Southern Region power system. She noted that the meeting had deliberated on several important matters relating to grid operation, transmission planning, renewable energy integration, system strengthening, protection and communication systems, HVDC systems and overall grid reliability and security. She stated that the deliberations and recommendations emerged from the meeting would be taken forward to the SRPC forum for consideration and approval, wherever required. She expressed confidence that the continued coordination and collective efforts of all the utilities and stakeholders would further strengthen the reliability, security, resilience and efficient operation of the Southern Region power system.
- MS, SRPC thanked the Chairperson, TCC, for her guidance, support and valuable contributions towards the functioning of the TCC and for steering the

deliberations in a constructive manner. He also placed on record his appreciation to all the members, utilities and stakeholders for their continued cooperation and active participation in the TCC deliberations.

SRPC conclusion

a) The Chairperson, SRPC, expressed his appreciation for the fruitful, constructive, and meaningful deliberations held during the meeting, which enabled a comprehensive review of the status of various projects and initiatives, collection of requisite information, and identification of clear timelines for the activities requiring follow-up. He observed that the discussions also facilitated identification of issues requiring attention and helped in arriving at a clear and coordinated way forward on several important technical and operational matters concerning the Southern Region power system.

He noted that the 58th Meeting of SRPC had been highly productive and successful, with active participation and valuable inputs from all members and stakeholders. He placed on record his appreciation for the participation and cooperation extended by the Central and State Government entities, utilities, generating stations, transmission licensees, SLDCs, SRLDC and other stakeholders, which contributed significantly to the effective deliberations and successful conduct of the meeting.

The Chairperson also placed on record his appreciation for the Member Secretary, SRPC, and the SRPC Secretariat for the meticulous coordination and formulation of the agenda and for conducting the proceedings in an effective, collaborative, and cordial manner.

He expressed confidence that the decisions and action points emerging from the meeting would be pursued by the concerned entities within the agreed timelines. He also expressed his pleasure at the prospect of meeting all the SRPC forum members in person during the next physical meeting and looked forward to continued constructive engagement and cooperation in taking forward the objectives of SRPC.

b) MS, SRPC conveyed his sincere thanks to the Chairperson, SRPC, for his guidance, encouragement and continued support in conducting the proceedings of the forum in a focused and constructive manner. He acknowledged the valuable leadership and contributions of the Chairperson in facilitating effective deliberations and in guiding the forum in addressing various important issues relating to the Southern Region power system.

MS, SRPC also appreciated all the members, utilities, generating stations, transmission licensees, SLDCs, SRLDC and other stakeholders for their active involvement, cooperation and valuable technical inputs throughout the meeting.

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