**Email/Website**

| भारत सरकार<br>केंद्रीय विद्युत प्राधिकरण<br>दक्षिण क्षेत्रीय विद्युत समिति<br>29, रेसकोर्स क्रास रोड<br>बेंगलूर- 560 009 | सत्यमेव जयते | Government of India<br>Central Electricity Authority<br>**Southern Regional Power Committee**<br>29, Race Course Cross Road<br>Bengaluru-560 009 |
|---|---|---|
| Email: mssrpc-ka@nic.in | Web site: www.srpc.gov.in | Phone:080-22282516 |

| सं/No. | SRPC/SE(O)/241st OCC/2026-27/3829-79 | दिनांक/ Date | **21.08.2026** |
|---|---|---|---|

**सेवा मे / To**

**संलग्न सूची के अनुसार/ As per the enclosed list**

विषय: दक्षेविस की प्रचालन समन्वय उप - समिति की 241 वी बैठक के कार्यवृत्त के संबंध मे।

**Subject: Minutes of the 241st Meeting of Operation Coordination Sub- Committee -reg.**

महोदय /महोदया / Sir/Madam

संलग्न, दिनांक **11 अगस्त 2026** को आयोजित दक्षिण क्षेत्रीय विदयुत समिति की प्रचालन समन्वय उप समिति की 241 वीं बैठक की कर्यवृत्त संलग्न है। यह दक्षेविस के वेबसाइट (www.srpc.gov.in) पर उपलब्ध है।

Enclosed, please find the Minutes of the **241st Meeting of Operation Coordination Sub-Committee of SRPC held on 11th August 2026 through VC.** The same is available on SRPC website (www.srpc.gov.in).

The 242nd Meeting of the Operation Coordination Sub-Committee of SRPC will be held on **11.09.2026 (Friday) at Hampi, Vijayanagar, Karnataka.**

भवदीय /Yours faithfully,

Malini
21/08/2026

(एन एस मालिनी / N S Malini)

अधीक्षक अभियंता/**Superintending Engineer (O, P&C)**

**पिती सूची / Mailing List (Operation Coordination Sub-Committee SRPC)**

1. Chief Engineer (GO), APTRANSCO, Vijayawada
2. Chief Engineer (Generation), APGENCO, Vijayawada
3. Chief General Manager (OCS, Civil, EA & CGRF works), APEPDCL, Visakhapatnam
4. Chief Engineer (E), SLDC, KPTCL, Bengaluru
5. Chief Engineer (ED), KPCL, Bengaluru
6. Joint Director (Projects), PCKL, Bengaluru (jdppckl2018@gmail.com )
7. Chief Engineer (TSO), KSEBL, Kalamaserry
8. Chief Engineer (Opn.), TANTRANSCO, Chennai
9. Chief Engineer (Mech), TNPGCL, Chennai
10. Chief Engineer (NCES), TNGECL, Chennai (cences@tnebnet.org)
11. CFC, TNPDCL, Chennai
12. Chief Engineer (GO), TGTRANSCO, Hyderabad
13. Chief Engineer (Generation), TGGENCO, Hyderabad
14. Director (Operation, P&MM, IPC&RAC and Energy Audit), TGSPDCL, Hyderabad
15. Superintending Engineer - I, Electricity Department, Puducherry
16. General Manager (O&M), SRTS–I, PGCIL, Secunderabad.
17. General Manager (O&M), SRTS- II, PGCIL, Bengaluru.
18. General Manager (OS), SRHQ, NTPC, Secunderabad
19. AGM (EEMG), RSTPS, NTPC, Ramagundam
20. AGM(EEMG), Talcher STPS Stg - II, NTPC, Talcher
21. AGM (EEMG), Simhadri STPS, NTPC, Simhadri
22. AGM (EEMG), Kudgi STPS, NTPC, Kudgi.
23. General Manager, Telangana STPS, NTPC
24. General Manager(O&M), NTECL, Vallur
25. Chief General Manager, Neyveli TPS-II, Neyveli
26. General Manager, NNTPS, Neyveli
27. General Manager, TPS-I Expansion, Neyveli
28. General Manager, TPS-II Expansion, Neyveli
29. Chief General Manager (Ele), NLC Tamil Nadu Power Limited (NTPL), Tuticorin
30. Operation Superintendent, MAPS, Kalpakkam
31. STE (E&I), Kaiga G.S. Stage - I, Kaiga
32. STE (E&I), Kaiga G.S. Stage - II, Kaiga
33. Operation Superintendent, KKNPP, Kudankulam
34. AGM, JSWEL Vijayanagar Plant, Torangallu, Bellary
35. Associate Vice President (P&M), APL, Udupi, (Manoj.taunk@adani.com)
36. Head (O), SEIL Phase-I, Hyderabad
37. Head (O), SEIL Phase-II, Hyderabad
38. Plant Head, IL& FS Tamil Nadu Power Company Limited, Cuddalore
39. Sr.Vice President (O&M), HNPCL, Hyderabad
40. Sr. Deputy General Manager, CTUIL, Gurugram (anilsehra@powergrid.in)
41. Executive Director (Commercial), NPCIL, Mumbai (nrchoudhary@npcil.co.in)
42. Dy. General Manager, KNTL, IndiGrid Ltd, Noida (abhishek.kukreja@indigrid.com)
43. M/s Adani Enterprises Limited
44. Joint Sr. Vice President, Greenko Group, Hyderabad (venkateswarlu.a@greenkogroup.com)
45. General Manager, Renew Power Private Limited, Gurugram (vogesh.rao@renew.com, manjunatha.h@renew.com, basappa.d@renew.com )
46. Lead, OMS, Engineering, Suzlon Energy Limited, Pune (Rajendra.deshapande@suzlon.com)
47. Executive Vice President, PTC India Limited, New Delhi (hlchoudhary@ptcindia.com)
48. Director, GM Division, CEA, New Delhi
49. Director, NPC Division, CEA, New Delhi
50. Executive Director, NLDC, Grid-India, New Delhi
51. Executive Director, SRLDC, Grid-India, Bengaluru

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# SOUTHERN REGIONAL POWER COMMITTEE (SRPC)

## Minutes of the 241st Meeting of Operation Coordination Sub-Committee (OCC) held on 11th August 2026

### 1. Introduction

1.1 The **241st Meeting of the Operation Coordination Sub-Committee (OCC)** of the Southern Regional Power Committee (SRPC) was held on 11th August 2026 through Video Conference. The list of participants is attached as ***Annexure-1a***

1.2 **Smt. N. S. Malini, SE(O), SRPC**, warmly welcomed all the participants to the 241st OCC Meeting of SRPC. In her opening remarks, she highlighted the need for a more action-oriented approach in the deliberations of the OCC, particularly in respect of agenda items being carried forward from previous meetings. She emphasized that, for such continuing agenda items, the submissions should not be confined to a mere statement of the present status. The following aspects should be clearly brought out:

- Operational impact of the issue since the previous OCC meeting;
- Corrective actions taken and the progress achieved;
- Present operational status;
- Any impact on grid security and reliability;
- Interim arrangements being followed, wherever applicable; and
- A firm and time-bound plan for resolution and closure of the issue.

She observed that several agenda items have been carried forward through multiple OCC meetings with repeated status updates, but without tangible progress towards resolution. She emphasized that the OCC should not merely serve as a forum for periodic status reporting, but should facilitate identification of specific corrective actions, assignment of responsibility, monitoring of progress and timely resolution of issues.

She also highlighted concerns regarding prolonged transmission outages and repeated shutdowns. In this context, she specifically referred to the prolonged outage of the 400 kV Jeypore–Gazuwaka line due to NHAI diversion works, which remained under outage from 15.05.2026 to 06.08.2026, and the tower collapse of the 400 kV Kaiga–Guttur line, which was yet to be restored. The need for expeditious restoration of the Kaiga–Guttur corridor, particularly in view of the concerns raised by Kaiga Generating Station regarding evacuation security, was emphasized.

With regard to low-frequency incidents, she emphasized that the analysis should not be limited to the frequency profile during the disturbance. The analysis should also establish the actual load relief achieved vis-à-vis the expected load relief, identify any shortfall, and clearly bring out the corrective measures required to address such deficiencies.

She further highlighted the important issue of under-frequency tripping of Pumped Storage Plant (PSP) units while operating in generating mode. The matter had also been deliberated in the PCSC Meeting, wherein it was observed that tripping of generating units during low-frequency conditions could further aggravate the system disturbance. In this regard, she emphasized the need for a detailed review of the protection settings and their coordination with the system frequency response and other grid protection schemes.

Regarding SPS mock tests recently carried out for KK-1 & KK-2 and RP-1 & RP-2, she emphasized the need for effective follow-up of cases where the required SPS signals were not received or where the expected load/generation relief was not achieved. She stated that the complete

chain of SPS operation, starting from detection of the specified contingency, initiation and transmission of the SPS signal, receipt of the signal at the concerned end, operation of the designated breakers and achievement of the intended load/generation relief, should be verified to assess the actual effectiveness of the SPS.

She also requested an update on the status of the Emergency Restoration System (ERS) and emphasized that the ERS status should be reviewed and updated on a monthly basis. The updated status would subsequently be furnished by SRPC to CEA.

Another important issue highlighted was the non-tripping of PSP units while operating in pumping mode under low-frequency conditions. In this context, she referred to the instances during July 2026 involving tripping of Greenko PSP units while operating in generating mode during multiple low-frequency events, and emphasized the need for appropriate review of the protection performance and settings in both generating and pumping modes.

She stated that several important operational issues relating to generation and transmission outages, system security and protection performance were scheduled for detailed deliberation during the meeting. She also informed that a dedicated slot had been provided to WRLDC at 12:00 hours for discussion on HVDC bipole harmonic measurements.

1.3 **Shri Asit Singh, Member Secretary, SRPC**, welcomed all the participants to the 241st OCC Meeting of SRPC.

***He acquainted the forum regarding the following meetings held:***

a) The 16th PSS Tuning Meeting of Southern Region Generators was held on 13.07.2026 through VC, wherein the PSS performance of generating units was reviewed and issues related to PSS tuning, performance assessment and compliance with the specified requirements were deliberated.

b) Meetings on MVAR performance of State and ISTS-connected generators were held on 04.07.2026 and 05.07.2026 respectively through VC. The discussions focused on reactive power generation/absorption capability of generators, compliance with MVAR requirements, performance during varying grid conditions and the need for corrective measures wherever deficiencies were observed.

c) The Operation Sub-Group Meeting of the National Power Committee (NPC) was held on 13.07.2026 through VC to deliberate on the draft modules for LGBR, Power Supply Position, Transmission System Availability, and Generator/Transmission Outage Planning proposed under Phase-II of the Unified Accounting Software (UAS). The modules, prepared by the RPCs based on the existing practices and requirements, were discussed in detail. The draft modules have been circulated among the RPCs for review and submission of comments for further finalisation.

d) A meeting was held on 20.07.2026 through VC by NPC Division, CEA to finalise the Standard Operating Procedure (SOP) for certification of transmission system availability of deemed ISTS/natural ISTS lines of States commissioned prior to October 2020. The draft SOP is under finalisation and is proposed to be placed before the NPC Meeting scheduled for 18.09.2026.

e) The Operation Sub-Group Meeting of the National Power Committee (NPC) was held on 23.07.2026 through VC to finalise the Standard Operating Procedure (SOP) for diversion of RPC-approved spare transformers and reactors to constituents/State Transmission Utilities (STUs). It was observed that the SOP is already being followed in the Southern Region. The SOP for utilisation of spare transformers and reactors by entities across all regions is under discussion and is proposed to be finalised in the forthcoming NPC Meeting.

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f) PSPA-I Division, CEA held a meeting on 14.07.2026 through VC to deliberate on the transmission system requirements of Puducherry for availing additional GNA, in view of the increase in demand and the request of Puducherry for enhancement of GNA. The transmission adequacy, reactive power support and System Protection Scheme (SPS) requirements were discussed. The Minutes of Meeting (MoM) have been issued.

g) The 55th TCC Meeting and 58th SRPC Meeting were held through VC on 24.07.2026 and 28.07.2026, respectively. Several important matters related to grid operation, transmission planning, protection, commercial issues and other matters concerning the Southern Region were deliberated upon. The Minutes of the Meetings (MoM) are under preparation.

h) Meeting to discuss the scheduling issues related to commissioning power for KKNPP Units 3 & 4 was held on 28.07.2026. The Record Notes of the meeting was issued on 29.07.2026. The following was concluded:

- *SRPC, SRLDC, and CEA concurred that the methodology finalized during the Special Meeting shall continue to be followed and that the directions contained in the CEA letter dated 14.08.2025 shall be complied with. It was further advised that, if NPCIL seeks any modification to the existing methodology or the allocation mechanism, the matter may be taken up with the CEA for appropriate directions*.

i) The FGMO Performance Review Meeting for Southern Region generators was held through VC on 31.07.2026 to review generator-wise FGMO performance and compliance with the requirements of the IEGC. It was observed that the States/GENCOs were not adequately prepared with the required analysis and supporting details for effective deliberation. NTPC Kudgi and NTPC Simhadri, whose FGMO implementation and performance were found to be satisfactory, were requested to share the FGMO logic implemented at their generating stations as a good practice for adoption by other generators. Subsequently, a workshop was organized by SRLDC on 19.08.2026 to create awareness on the methodology, computation and various aspects of FGMO performance evaluation. A continuation meeting has been scheduled on 01.09.2026, wherein all SLDCs and GENCOs have been requested to present generator-wise FGMO performance, deviations and corrective actions. The exercise is aimed at improving FGMO compliance, enhancing frequency response of generating units and strengthening overall grid security, as mandated under the IEGC.

j) A meeting was held on 05.08.2026 to finalize the outage schedule of NTPC Talcher Stage-I Unit-2 in coordination with the proposed shutdown of the Talcher HVDC Bipole associated with the NHAI project. The shutdown window was broadly agreed from 01.11.2026 to 18.12.2026, with the objective of ensuring restoration of the HVDC Bipole by 18.12.2026 and minimizing the impact on grid operation. The final outage programme is subject to confirmation by ERPC/ERLDC in coordination with PGCIL and the concerned utilities, considering system availability and operational requirements.

k) A workshop on the maintenance, testing and calibration of Automatic Weather Stations (AWS) installed at Renewable Energy (RE) plants was organized by NLDC on 05.08.2026. The workshop focused on ensuring the accuracy, reliability and availability of weather data required for RE forecasting, scheduling and effective grid management.

l) The 48$^{th}$ CMETS Meeting of the Southern Region was held through video conferencing on 29.07.2026 to review communication system performance, connectivity and associated issues affecting reliable real-time data exchange and grid operation.

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m) The PSAG Meeting was held on 30.07.2026 and 31.07.2026 to analyse protection and communication-related issues at 400 kV NTPC Simhadri SS, 400 kV Gajuwaka SS and 400 kV Kalpaka SS. The Minutes of Meeting (MoM) have been issued. The issues were primarily attributed to maintenance-related deficiencies, challenging terrain conditions and the adverse effects of coastal and polluted environments. Suitable corrective and preventive measures were discussed to improve the reliability and performance of protection and communication systems.

***He apprised the forum regarding the following meetings scheduled:***

a) The 18th NPC Meeting is scheduled to be held in September 2026. Agenda items, if any, may be submitted to SRPC for onward furnishing to NPC Division, CEA.

b) BIMSTEC Energy Centre (BEC), Bengaluru, organized an online Capacity Building Programme on "Cyber Security in Energy Infrastructure" on 11.08.2026, focusing on cyber threats, vulnerabilities and measures for strengthening cybersecurity of critical energy infrastructure.

c) A meeting of the Standing Committee on Substation Equipment Failure is scheduled to be held on 17.08.2026 at 10:30 hrs in hybrid mode at CEA to review the failure of transformers and reactors of 220 kV and above voltage level during January 2026 to June 2026. Concerned entities may furnish the necessary details/correspondence to PSE&TD Division, CEA and participate in the meeting with relevant technical inputs.

d) A meeting of the Standing Committee of Experts to investigate the failure of 220 kV and above voltage-level transmission line towers during January 2026 to June 2026 is scheduled to be held in physical mode on 24.08.2026 at CEA. Concerned entities may furnish the necessary details/correspondence to PSE&TD Division, CEA and participate in the meeting with relevant technical inputs.

e) The 49th CMETS Meeting of the Southern Region is scheduled to be held through video conferencing on 24.08.2026.

f) An online follow-up review meeting was proposed on 31.07.2026, with reference to the meeting held on 27.07.2026, to review the FOTE and communication-related issues at Koppal PS and discuss the necessary corrective measures.

g) The 11th ISTS Communication Planning Meeting (CPM) for the Southern Region is scheduled to be held on 12.08.2026 to review communication planning requirements and associated issues. Concerned entities may furnish necessary feedback and inputs for consideration during the meeting.

***He apprised the forum regarding the following MoM issued:***

a) Minutes of the 42$^{nd}$ NCT Meeting were issued on 20.07.2026.

b) Minutes of the 47$^{th}$ CMETS Meeting in the Southern Region, held on 26.05.2026, 27.05.2026, and 24.06.2026, were issued on 20.07.2026.

***He explained the forum on the July 2026 month Grid Operation highlights:***

**Grid Frequency Performance:**

The grid frequency remained within the IEGC specified range for 72.47% of the time. The frequency was below the IEGC range for 8.83% of the time and above the IEGC range for 18.70% of the time. The frequency remained above 50 Hz for 53.13% of the time. The maximum and minimum frequencies recorded were 50.35 Hz and 49.42 Hz, respectively.

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**Regional demand:**

The Southern Region has shown an increase in Maximum Demand year-on-year (YoY) and increase month-on-month (MoM).

- Year-on-Year (July-25 → July-26): The demand increased from 64153 MW to 72471 MW, an increase of 8318 MW (12.97%).
- Month-on-Month (June-26 → July-26): The total increased from 64266 MW to 72471 MW, an increase of 8205 MW (12.77%).

**State wise demand trends:**

1. Andhra Pradesh: YoY increased from 12956 to 14420 MW (1464 MW, 11.30%), while MoM increased from 13935 to 14420 MW (485 MW, 3.48%).
2. Telangana: YoY increased from 15443 to 16649 MW (1206 MW, 7.81%), MoM increased from 12685 to 16649 MW (3964 MW, 31.25%).
3. Karnataka: YoY increased from 15014 to 18478 MW (3464 MW, 23.07%), and MoM increased from 16357 to 18478 MW (2121 MW, 12.97%).
4. Kerala: increase YoY (4144 → 4820 MW, 676 MW, 16.32%) and MoM decreased from 5472 to 4820 MW (652 MW, 11.92%).
5. Tamil Nadu: increase in YoY from 19878 to 21402 MW (1524 MW, 7.67%) and increase in MoM from 20664 to 21402 MW (738 MW, 3.57%).
6. Puducherry: slight increase YoY from 559 to 570 MW (11 MW, 2.03%) and slight decrease in MoM from 579 to 570 MW (9 MW, 1.62%).

**Regional energy consumption:**

- Southern Region: Consumption increased by 4973 MU (13.45%) over the previous year and increased by 3608 MU (9.41%) over the previous month.

**State-wise energy consumption trends:**

1. Andhra Pradesh: Consumption increased by 1108 MU (15.98%) year-on-year and increased by 397 MU (5.20%) month-on-month
2. Telangana: Consumption increased by 709 MU (9.31%) year-on-year and increased by 1292 MU (18.37%) from the previous month
3. Karnataka: Consumption increased by 1539 MU (20.60%) year-on-year and increased by 755 MU (9.16%) month-on-month
4. Kerala: Consumption increased by 296 MU (12.51%) year-on-year and slightly decreased by 2 MU (0.06%) month-on-month
5. Tamil Nadu: Consumption increased by1308 MU (10.68%) year-on-year and increased by 1158 MU (9.34%) month-on-month
6. Puducherry: Consumption increased by 16 MU (4.69%) year-on-year and slightly increased by 7 MU (2.11%) month-on-month

**Reservoir Storage:**

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As on 08.08.2026, the reservoir storage stood at 7,370 MU, which is 4,238 MU lower than the corresponding storage of 11,608 MU during the previous year. The current storage is at 47.21% of the total reservoir capacity of 15,608 MU, indicating a significantly lower storage position compared to the previous year.

***He apprised the forum of the recent updates and developments from MoP, CEA, NLDC, and Other Stakeholders***

**Ministry of Power (MoP)**

1. Public Procurement (Preference to Make in India) to provide for Purchase Preference (linked with local content) in respect of the Power Sector – revised guidelines issued on 13.07.2026.

**Key changes introduced by the 13.07.2026 revision:**

| **Aspect** | **Earlier position** | **Revised position** |
|---|---|---|
| **Product covered** | Energy Meters, including Smart Meters | Same |
| **Relevant Annexure** | Annexure-I, **Sl. No. 43** | Sl. No. 43 specifically revised |
| **Effective date** | Earlier 70% MLC trajectory had been kept in abeyance | **New requirements effective from 01.06.2028** |
| **Mechanical relay** | No such specific requirement | **Mechanical relays shall be 100% made in India** |
| **Chipset** | No specific India-design requirement | Chipsets shall be designed in India |
| **Overall approach** | Earlier broad **70% MLC** requirement | Targeted localisation of critical components |
| **Other provisions** | Existing provisions of the MLC order | Continue unchanged**,** except for the specific revision |

**Central Electricity Authority (CEA)**

1) CEA issued the Compendium of Definitions contained in the Electricity Act, 2003, Rules notified by the Ministry of Power, CEA Regulations and CERC Regulations on 30.07.2026. The compendium provides a consolidated reference for important statutory and regulatory definitions and is useful for ensuring consistency in the interpretation and application of various provisions.

2) CEA issued an Advisory on 30.07.2026 encouraging the adoption of improved tower configurations and advanced conductor technologies for installation of transmission lines in forest areas, with the objective of reducing forest land requirements for Right of Way (RoW). The measures are aimed at minimising the environmental footprint of transmission projects while ensuring efficient utilisation of available corridors. Transmission utilities/entities may examine and adopt the recommended technologies, wherever technically feasible.

**3)** CEA circulated the Draft Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2026 on 04.08.2026. The draft proposes a comprehensive revision of the existing connectivity standards in line with the evolving power system, increasing integration of

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Renewable Energy (RE), energy storage and emerging grid technologies. All stakeholders and the general public have been requested to furnish their comments to CEA by 02.09.2026 for consideration before finalisation of the Regulations.

**Key Highlights of the Draft Regulations, 2026**

- **Expanded Applicability**
  - Covers synchronous and asynchronous generating stations, renewable energy plants, hybrid projects, Battery Energy Storage Systems (BESS), Pumped Storage Plants (PSPs), HVDC systems, FACTS devices, and bulk consumers connected at 33 kV and above.
- **Technology-Neutral Framework**
  - Introduces specific technical requirements for inverter-based resource (IBR) plants and grid-forming converters to support reliable grid operation under high renewable penetration.
- **Enhanced Grid Stability Requirements**
  - Mandatory Low Voltage Ride Through (LVRT) and High Voltage Ride Through (HVRT) capabilities.
  - Reactive power support and dynamic voltage control requirements.
  - Provision of Primary Frequency Response (PFR) by generating units.
- **Frequency Operating Range**
  - Generating stations are required to remain connected and operate within a frequency range of 47.5 Hz to 52 Hz.
- **Remote Dispatch and Control**
  - Generating stations of 100 MW and above must be capable of receiving remote instructions from Load Dispatch Centres for active and reactive power control.
- **Hydro Generating Stations**
  - Hydro units of 50 MW and above are required to support synchronous condenser mode operation for voltage regulation.
- **Battery Energy Storage Systems (BESS)**
  - BESS projects of 50 MW and above are required to provide black-start support and other grid support functions.
- **HVDC and FACTS**
  - Dedicated technical standards have been introduced for HVDC systems and FACTS devices to ensure coordinated operation with the grid.
- **Communication, Telemetry and Cyber Security**
  - Mandatory real-time telemetry, communication infrastructure, and compliance with applicable cyber security requirements.

**Central Electricity Regulatory Commission (CERC)**

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CERC circulated the Draft Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) (Fifth Amendment) Regulations, 2026 on 31.07.2026. The proposed amendments relate to the framework for sharing of inter-State transmission charges and losses among the designated entities and are aimed at aligning the mechanism with the evolving transmission and power market landscape. Stakeholders may examine the proposed provisions and furnish their comments and suggestions to CERC by 31.08.2026 for consideration before finalization.

**Central Transmission Utility of India Limited (CTUIL).**

CTUIL has stipulated the last dates for submission of confirmation regarding installation of commensurate Renewable Energy (RE) capacity as 20.08.2026 for Northern Region (NR), 22.08.2026 for Western Region (WR), and 26.08.2026 for Southern Region (SR). Concerned entities in the Southern Region may ensure timely submission of the required confirmation to CTUIL within the stipulated timeline.

**National Load Despatch Centre (NLDC)**

NLDC, vide letter dated 03.08.2026, circulated the draft NLDC Operating Procedure for stakeholder consultation. The draft provides a consolidated framework for operational procedures and coordination among various stakeholders for secure and reliable grid operation. Stakeholders may examine the provisions and furnish their comments and suggestions to NLDC by 16.08.2026 for consideration before finalization.

1.4 **Shri T. Srinivas, Executive Director, SRLDC,** welcomed all the members to the 241st OCC Meeting. He emphasized that the primary objective of the OCC forum is to deliberate comprehensively on operational issues affecting the power system and to arrive at practical and effective solutions.

He further stressed the importance of active participation and adequate preparedness by all constituents. He requested that participants to thoroughly examine the agenda items in advance, ensure the availability of the concerned officials, and come prepared with their observations, responses, and proposed solutions. He noted that meaningful deliberations are possible only when the relevant stakeholders are adequately represented and equipped to address the issues under discussion.

He further highlighted the need for greater focus on emerging operational challenges and evolving grid requirements as stated by MS SRPC in his opening remarks including topics such as BESS, GFM and the integration of increasing levels of renewable energy.

He apprised the forum of the following aspects related to system performance during July 2026:

- Peak demand in July 2026 was 72,471 MW on 16.07.2026, representing an increase of around 12% over June 2026. Maximum energy consumption was 1,496 MU on 15.07.2026, around 10% higher than the previous month.
- Tamil Nadu recorded its all-time maximum demand of 21,724 MW on 14.07.2026 and all-time maximum energy consumption of 469 MU on 16.07.2026.
- Maximum solar generation during July 2026 was 24,198 MW at 12:24 hrs on 13.07.2026, an increase of nearly 6% over June 2026. Maximum wind generation reached an all-time high of 18,442 MW at 15:18 hrs on 30.07.2026, nearly 13% higher than the previous month.
- Maximum instantaneous RE penetration during July 2026 was 60%, recorded on 07.07.2026, highlighting the increasing dependence of the Southern Region grid on renewable energy sources.

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- The maximum and minimum frequencies recorded were 50.35 Hz on 01.07.2026 and 49.42 Hz on 25.07.2026, respectively. The grid frequency remained within the IEGC band for 70.75% of the time, while it was above 50.05 Hz for 18.09% and below 49.9 Hz for 8.55% of the time.
- During July 2026, 10 GD-1 events were recorded, comprising 4 in Tamil Nadu, 2 in Karnataka and 4 in Andhra Pradesh, along with 2 GI-1 and 6 GI-2 events.
- A total of 305 MW of new solar capacity was commissioned during July 2026, further contributing to the increasing RE integration in the Southern Region.
- He observed that hydro reservoir levels in the Southern Region continued to remain low. In view of the rising demand, increasing RE penetration and limited hydro availability, he highlighted the need for enhanced operational preparedness and careful planning of transmission element outages to maintain adequate system margins and ensure secure and reliable grid operation.
- Referring to delays encountered in transmission projects, particularly those involving coordination with external agencies such as NHAI (400 kV Jeypore – Gazuwaka D/C transmission line), he stressed the importance of advance planning, timely coordination, and proactive engagement among all stakeholders. He emphasized that transmission utilities should coordinate with SRLDC, SRPC, and other concerned agencies well in advance and provide sufficient lead time for obtaining necessary approvals and clearances.
- 765 kV Koppal II S/S, Koppal – Raichur lines, ICTs have been charged recently.
- LILO of Mysore – Nelamangala at Huliyerdurga is commissioned.

On the regulatory front,

- CERC circulated the Draft Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) (Fifth Amendment) Regulations, 2026 on 31.07.2026.
- CEA notified Cyber Security in power sector Regulations which are effective from 01.04.2027. He emphasized that cyber security compliance is of critical importance and requested all constituents to initiate the necessary preparatory activities well in advance of the implementation timelines. He cautioned that achieving compliance within the stipulated timelines would be challenging unless adequate planning and preparatory measures are undertaken at an early stage.
- Meetings scheduled:
    - FOLD meeting is scheduled on 12.08.2026.
    - SRLDC has been conducting regular monthly training programmes on important operational topics, including renewable energy integration and associated challenges, and requested stakeholders to nominate suitable personnel for such capacity-building initiatives.
- In conclusion, he informed the forum that the SRLDC Operating Procedure has been issued and requested all constituents to familiarize themselves with the document and ensure its strict adherence during grid operations.

## 2. Confirmation of the Minutes of 240th Meeting of OCC

(i) The 240th Meeting of OCC was held on 10.07.2026 through Video Conference.
(ii) The Minutes of the Meeting were issued on 21.07.2026.

***The Minutes of the 240th Meeting of OCC may please be confirmed.***

SE(O), SRPC informed the forum that no comments had been received from any constituent on the Minutes of Meeting (MoM). Accordingly, the Minutes of the Meeting were confirmed and approved by the 241st OCC Forum

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## 3. Finalization of Energy Requirement and Peak Demand for 2027-28

a) CEA is in the process of finalizing the Electricity Generation Programme for the year 2027-28. In this regard, State/UT-wise and Month-wise Energy Requirement and Peak Demand data for the financial year 2027-28 are required to facilitate preparation of the All-India Energy Requirement and Peak Demand estimates.

b) Accordingly, CEA has requested to furnish the consolidated data in the prescribed format ***(Annexure-3a)*** for timely compilation of the All-India estimates.

c) In view of the above, **all Southern Region States/UTs are requested to furnish their State-wise and Month-wise Energy Requirement and Peak Demand projections for FY 2027-28, in the prescribed format to SRPC Secretariat**, **latest by 10.08.2026**, enabling onward submission to CEA by the stipulated timeline.

**Deliberations/Conclusion:**

- SRPC informed that the requisite data had been furnished by all the SLDCs. After consolidation and analysis of the data, SRPC would submit the consolidated SR data to the GM Division, CEA.

## 4. Unit wise Planned Maintenance Schedule of Generating Units for FY 2027-28

a) CEA vide letter dtd 03.07.2026 ***(Annexure-4a)*** regarding finalization of the Unit-wise Planned Maintenance Schedule of Generating Units for FY 2027-28.

b) In this regard, all RPCs are requested to furnish the Region-wise and Station Unit-wise Planned Maintenance Schedule of Generating Units for FY 2027-28, based on the inputs received from the States/UTs under their jurisdiction, in the format enclosed with the letter.

**c) All the Generators (Central/State/Pvt) are requested to furnish the unit-wise Planned Maintenance schedule of Generating Units for the year 2027-28 to SRPC Secretariat, latest by 10.09.2026**, so as to enable SRPC to furnish the SR region consolidated outage plan to GM division, CEA by 18th Sept 2026, to facilitate CEA for timely finalization of the Electricity Generation Programme (EGP) for FY 2027-28.

➢ ***All Generators (Central/State/Pvt)/SLDCs may please note***

**Deliberations/Conclusion:**

SE(O), SRPC stated the following:

❖ All Central/State/Private Generators are requested to furnish the unit-wise planned maintenance schedule of generating units for the year 2027-28 to the SRPC Secretariat by 10.09.2026.

❖ NTPC/NLCIL/NPCIL stations may optimise their Overhaul (OH) schedules by considering the requirements of all stations under their respective Headquarters, duly taking into account the load-generation balance, availability of materials/spares and other operational requirements, and furnish the optimised OH schedule to SRPC.

❖ Transmission utilities are also requested to furnish their optimised annual maintenance plans, duly considering the demand pattern, seasonal variations and overall system requirements.

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## 5. SPS Mock test of KK-1 & KK-2 and RP-1 & RP-2 (SRLDC Agenda)

In accordance with Regulation 16(2) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023, SPS mock test for KK-1 & 2 was conducted on 15-07-2026 at 14:30 Hrs. and RP-1 and RP-2 was conducted on 22-07-2026 at 14:30 Hrs. In this regard, the key observations from the mock test are summarized below.

**Observations for KK-1 signal mock test:**

1. The KK-1 SPS Signal was received at all nodes

**Observations for KK-2 signal mock test:**

1. The KK-2 SPS signal was received at all nodes except Budidampadu and the downstream loads of TGTRANSCO. PGCIL SR-II informed that the signal had been sent from the Kolar end.

**Observations for RP-1 Signal mock test:**

1. The RP-1 signal was not sent from Kolar_PG end to 220kV Hoody due to a cable issue. PGCIL SR-2 reported that the issue was rectified after the completion of the mock test.
2. The signal was sent to Kumbakonam_TN_230 and Thiruvarur_TN_230 from N_T_Kudy_TN_230. TANTRANSCO reported that upon verification after the mock test, the signal transmission was found to be functioning correctly.
3. The signal was not received at Guruburapalli_GC_TN_33 from Shoolagiri_TN_230.
4. The signal was not received at Tadipatri_AP_220 due to a cable failure. APTRANSCO reported that the faulty cable was replaced after the mock test, and the signal was subsequently tested and found to be healthy.

**Observations for RP-2 Signal mock test:**

1. The signal was not received at Veltoor_TS_400 and was not transmitted to downstream stations Bhoothpur_TS_220 and Wanaparthy_TS_220
2. The signal was not sent to Pudukottai_TN_230 from NT Kudy_TN_230

Tamil Nadu and Telangana are requested to furnish the findings and remedial actions

***May be discussed***

**Deliberations:**

- SE(O), SRPC stated that the SPS tests had been completed and discrepancies were observed at some of the nodes. She emphasized that confirmation needs to be obtained from the concerned entities regarding rectification of the identified discrepancies and completion of end-to-end testing thereafter, so as to ensure the healthiness and reliability of the communication channels and associated equipment during actual SPS operation.
- ED, SRLDC observed that communication failures had been observed at multiple locations during the last two SPS tests. Although the reported deficiencies have subsequently been rectified, the recurrence of such failures during testing raises concerns regarding the reliability of communication channels during actual SPS operation. He emphasized that the healthiness of the communication channels and associated equipment should be ensured on a regular basis by the concerned entities and not only during the scheduled SPS testing. All constituents were requested to monitor communication alarms and the healthiness of the communication systems regularly and take corrective action proactively.

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**KK-1 SPS mock test:**

- SRLDC observed that signals sent from Kudankulam were received at all the designated nodes.

**KK-2 SPS mock test:**

- SRLDC observed that signal sent from the Kolar end was not received at the downstream locations during the mock test. The KK-2 SPS signal was received at all nodes except Budidampadu and the downstream loads of TGTRANSCO.
- TGTRANSCO informed that the issue had subsequently been rectified. During the subsequent test conducted on 22.07.2026, the signal was successfully transmitted, confirming restoration of the communication path.
- SRLDC replied that KK-2 and RP-2 have same downstream loads. During the mock test on 22.07.26, the signal was successfully transmitted, confirming restoration of the communication path.

**RP-1 SPS mock test:**

SRLDC observed the following:

- RP-1 signal was not sent from Kolar_PG end to 220kV Hoody due to a cable issue. Subsequently, PGCIL SR-2 reported that the issue was rectified after the completion of the mock test.
- The signal was not sent to 230 kV Kumbakonam (TN) SS/S and 230 kV Thiruvarur (TN) S/S from 230 kV N T Kudy (TN) S/S. Subsequently, TANTRANSCO reported that upon verification after the mock test, the signal transmission was found to be functioning correctly. Alarms, if observed, need to be to be rectified before carrying out the mock test.
- SE(O), SRPC observed that the healthiness of communication equipment should be periodically checked by the concerned utilities to ensure reliable communication and maintain the effective functionality of the SPS.
- SRLDC stated that signal was not received at Guruburapalli(TN) end from 230 kV Shoolagiri(TN) S/S.
- TNSLDC informed that the healthiness of the concerned relay and carrier communication channel would be checked at 230 kV Thiruvarur (TN) S/S and 230 kV N T Kudy (TN) S/S by the second week of August 2026 by their P&C wing.
- SRLDC observed that SPS signal was not received at 220 kV Tadipatri (AP) S/S due to a cable failure. Subsequently, APTRANSCO reported that the faulty cable was replaced after the mock test, and the signal was subsequently tested and found to be healthy.
- SE(O), SRPC emphasized that the periodic SPS testing prescribed under the applicable regulations is intended to verify the healthiness and functionality of the SPS. However, the testing should be supplemented by regular monitoring of the communication channels and associated equipment to ensure continued reliability of the SPS.
- MS, SRPC clarified that although the IEGC Regulations prescribe periodic/mock testing of SPS, the same should not be construed to mean that the healthiness of the SPS communication system needs to be checked only once a year. The concerned entities, including POWERGRID, transmission licensees and respective State utilities, shall ensure periodic monitoring of communication channels, associated equipment and alarms, and take timely corrective action wherever required.

**RP-2 SPS mock test:**

SRLDC stated the following:

- The signal was not received at 400 kV Veltoor (TG) S/S and was not transmitted to downstream stations 220 kV Bhoothpur (TG) S/S and 220 kV Wanaparthy (TG) S/S.

- The signal was not sent to 230 kV Pudukottai (TN) S/S from 230 kV N T Kudy (TN) S/S.

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- TGTRANSCO replied that there was a port issue (VCL Mux). So, SPS protection coupler is connected to ABB make Mux. SPS Testing is planned shortly.

- SRLDC replied that TGTRANSCO make communicate to SRLDC after SPS testing, to which TGTRANSCO agreed.

- MS, SRPC and ED, SRLDC observed that considering the deficiencies observed during the recent testing, the concerned entities may undertake **quarterly healthiness checks/testing of SPS communication channels**, under intimation to SRLDC, without causing any unintended tripping of loads.
- SR-II POWERGRID stated that healthiness of SPS can be checked quarterly in a year based on forums direction. SR-II POWERGRID also informed that major alarms, if any, would be monitored on a monthly basis and brought to the notice of the concerned entities for necessary corrective action.

**Conclusion**

The mock tests confirmed that most SPS signals were successfully transmitted, while certain communication-related deficiencies were observed at some nodes. The concerned entities have initiated corrective actions. Regular monitoring and periodic healthiness checks of SPS communication channels are essential to ensure reliable operation during actual grid contingencies.

**Action**

- Concerned entities to rectify the identified deficiencies and complete end-to-end testing, wherever required, and confirm the same to SRLDC.
- POWERGRID to monitor major alarms in SPS communication equipment on a monthly basis and communicate the same to the concerned entities/SLDCs for timely corrective action.
- Concerned utilities to undertake quarterly healthiness checks of SPS communication channels and associated equipment, without causing unintended tripping, and keep SRLDC informed.

**Additional Agenda item D (by APTRANSCO): Revision of Kudankulam (KK-1) SPS Tripping Logic for Isolation of 132 kV Nandikotkur Substation from Atmakuru and AP Carbides Ends – Approval – Reg**.

APTRANSCO/SLDC has submitted a proposal for revision of the existing Kudankulam (KK-1) SPS logic to ensure isolation of the 132 kV Nandikotkur Substation from both Atmakuru and AP Carbides ends.
During the operation of KK-1 SPS on 04.07.2026 at 16:43 hrs, a total load relief of 137 MW was achieved against the expected 140 MW. However, the intended load relief at Nandikotkur was not achieved, as the load continued to receive supply through the alternate source from Atmakuru Substation, despite tripping of the 132 kV AP Carbides–Nandikotkur line.
In view of the above, APTRANSCO/SLDC has proposed modification of the KK-1 SPS logic to trip/isolate the Nandikotkur load from both Atmakuru and AP Carbides ends, thereby ensuring the intended load relief during operation of the SPS.
The revised SPS logic is placed before the forum for deliberation and approval prior to implementation.

- **May be discussed**

**Deliberations:**

(i) MS, SRPC observed that the 132 kV Nandikotkur Substation is connected in grid mode from both Atmakuru Substation and AP Carbides ends. Hence, isolation from both ends needs to be ensured by APTRANSCO/SLDC to achieve the intended load relief during operation of the KK-1 SPS. APTRANSCO/SLDC was advised to carry out the necessary modifications. It was further clarified

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that the same principle shall be followed for other SPS/UFR/(df/dt) schemes wherever the concerned feeder/load is fed from multiple sources.

(ii) SRLDC reiterated that APTRANSCO/SLDC may ensure isolation of the 132 kV Nandikotkur Substation from both Atmakuru and AP Carbides ends to achieve the desired load relief during SPS operation.

(iii) SE(O), SRPC stated that identical settings may be implemented at both Atmakuru and AP Carbides ends to ensure the required isolation of Nandikotkur Substation during SPS operation. She further clarified that no separate approval from SRPC/SRLDC is required for APTRANSCO to implement the proposed modification.

**Conclusion:**

- ❖ All States/SLDCs and concerned utilities shall ensure that, wherever the feeder/load covered under SPS/UFR/(df/dt) schemes is fed from multiple sources, the scheme logic provides for isolation from all relevant sources to achieve the intended load relief.
- ❖ APTRANSCO/SLDC shall implement the necessary modifications in the KK-1 SPS logic for isolation of 132 kV Nandikotkur Substation from both Atmakuru and AP Carbides ends and confirm completion/testing to SRPC/SRLDC.

## 6. NLCIL/NNTPP request for LC for Upgradation of SAS (Substation Automation system) along with implementation of IEC104 communication protocol (2 main & 2 standby channels)

NLCIL/NNTPP, vide email dated 23.07.2026, requested Line Clearance (LC) for the upgradation of the Substation Automation System (SAS) along with the implementation of the IEC 104 communication protocol. As part of the SCADA upgradation works, it is mandatory to verify the operation and protection interlocks of each bay, as detailed below.

| Sl. No | Name of Transmission Elements | From | To | Reason | Mode | Remarks |
|---|---|---|---|---|---|---|
| 1 | 400KV-SALEM-NNTPP-1 | 14-08-2026 08:00hrs | 14-08-2026 16:00hrs | For Protection interlock checking as a part of SAS Upgradation | Continuous | |
| 2 | 400KV-NNTPP-PUDUCHERRY-1 | 16-08-2026 08:00hrs | 16-08-2026 16:00hrs | | | |
| 3 | BAY 407 BUSCOUPLER | 17-08-2026 08:00hrs | 17-08-2026 16:00hrs | | | |
| 4 | 400KV BUS-1 | 17-08-2026 08:00hrs | 17-08-2026 14:00hrs | | | All the loads shall be shifted to Bus-2 |
| 5 | 400KV BUS-2 | 17-08-2026 14:00hrs | 17-08-2026 20:00hrs | | | All the loads shall be shifted to Bus-1 |
| 6 | BAY 208 BUSCOUPLER | 18-08-2026 08:00hrs | 18-08-2026 16:00hrs | | | |
| 7 | 220KV BUS-1 | 18-08-2026 08:00hrs | 18-08-2026 14:00hrs | | | All the loads shall be shifted to Bus-2 |
| 8 | 220KV BUS-2 | 18-08-2026 14:00hrs | 18-08-2026 20:00hrs | | | All the loads shall be shifted to Bus-1 |

***NLCIL/SRLDC may respond***

**Deliberations:**

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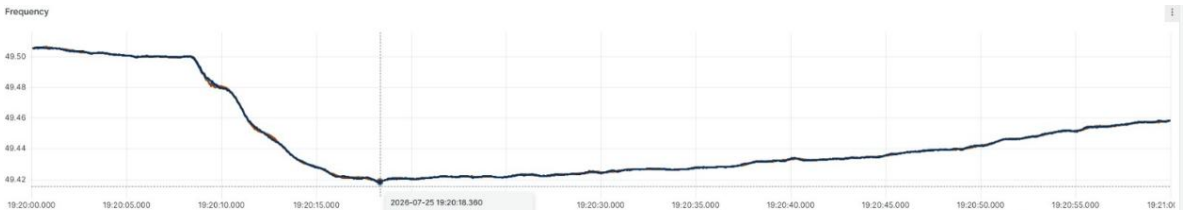
- ✓ NLCIL informed that, as part of the SAS upgradation works, shutdowns of 400 kV Salem–NNTPP-1, 400 kV NNTPP–Puducherry-1, 400 kV Bus-1 & Bus-2, 220 kV Bus-1 & Bus-2 and the associated bus couplers were required for verification of protection logics, interlocks and signals. It was informed that the verification of the major elements had already been completed and the shutdowns were sought for the remaining elements.
- ✓ SRLDC informed that the proposed shutdowns may result in low voltage conditions at Puducherry during the shutdown period and advised that appropriate operational measures be ensured.
- ✓ Puducherry expressed preference for availing the shutdowns during weekends, with the shutdowns of the two buses being taken up sequentially to minimise operational impact.

**Conclusion:**

- ➢ The proposed shutdowns were approved, subject to NLCIL, Puducherry and Tamil Nadu adhering to the operational measures advised by SRLDC and ensuring proper coordination during the shutdown period.

## 7. Low frequency operation on 25.07.2026

It is observed that the Grid Frequency has touched 49.42 Hz at 19:20 Hrs of 25-07-2026 . Operation of UFR is reported to SRLDC control room. SRLDC had requested all SLDCs to send details of any operation of UFR or df/dt at that instance with quantum of relief and list of feeders tripped.



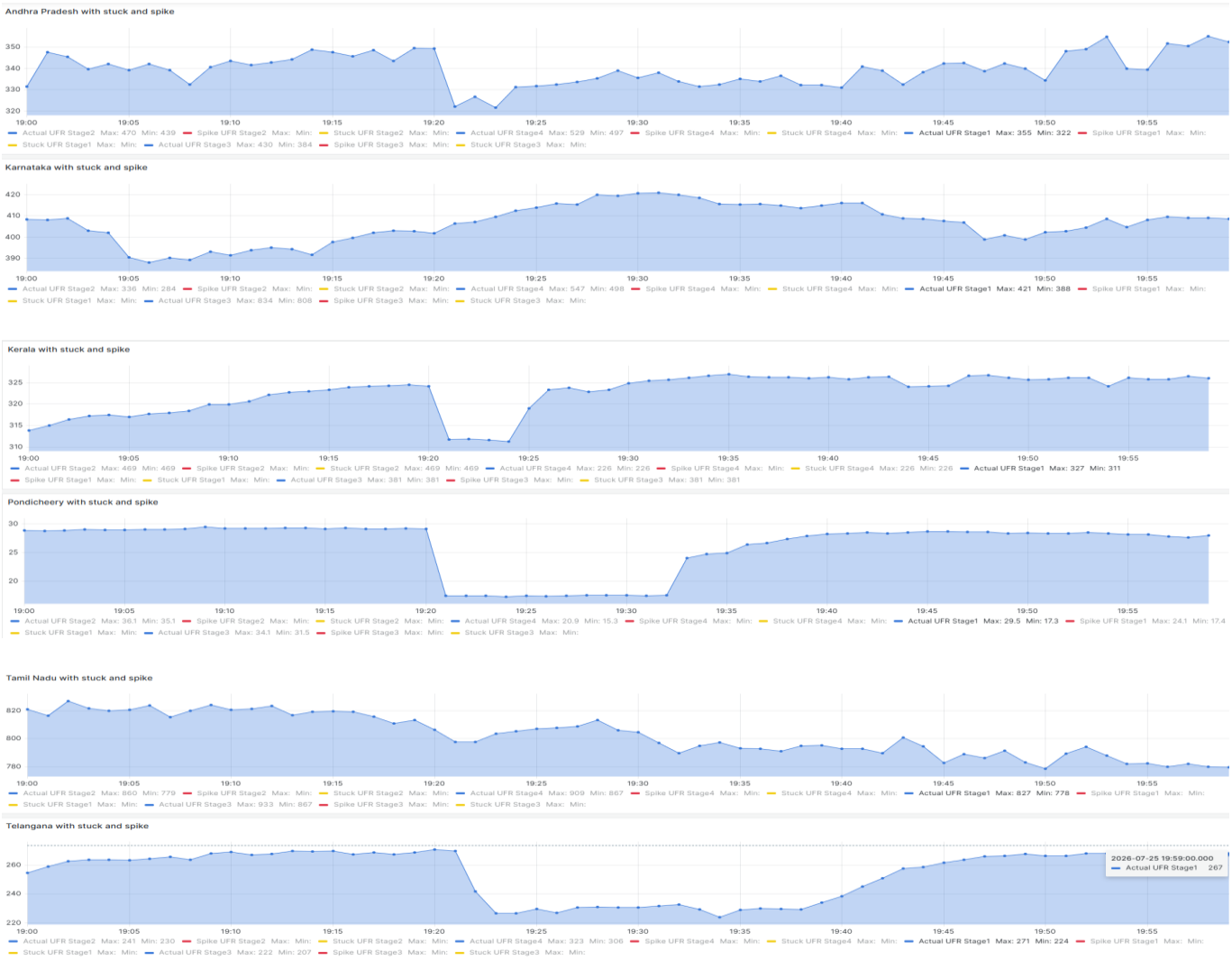

- ➢ ***May be discussed.***
- ➢ ***All SLDCs/SRLDC may update the details***

**Deliberations**

**SRLDC** appraised the forum that, prior to the event on 25.07.2026, the system frequency was around 49.50 Hz. Following the tripping of five units of Greenko PSP operating in generation mode at 49.50 Hz, as discussed under Agenda No. 8B, the frequency dropped to 49.42 Hz at 19:20 hrs. AUFLS operations were subsequently reported by the concerned SLDCs to the SRLDC control room.

As per the SRLDC SCADA, the load reduction observed during the event are as follows:

| STATE | RELIEF (scada) |
|---|---|
| AP | 22 MW |
| KL | 12 MW |
| TN | 9 MW |
| TG | 43 MW |
| PONDY | 11.7 MW |




It was observed that, ideally, the AUFLS relays should not have operated for 49.42 Hz. However, as recommended in the 239th OCC meeting, relays which had exhibited delay or sluggishness in operation may, based on their performance, be configured at 49.41 Hz. Further, it was recommended that 50% of the load relief may be configured at 49.41 Hz with a time delay of 2–3 cycles. Accordingly, it was observed that relays configured at the higher set point of 49.41 Hz may have operated during the event. SRLDC clarified that the frequency data presented was from the PMU installed at Somanahalli.

**APTRANSCO** informed that the report from the field was awaited and stated that the operated relays were most likely configured at 49.41 Hz. The detailed report would be submitted to SRPC and SRLDC.

**KSEBL** informed that a load relief of 33.7 MW was observed, comprising 12.2 MW at 110 kV Parippally and 21.5 MW at 110 kV Kizhissery. Both relays were configured at 49.40 Hz, whereas the lowest frequency recorded by the Kalamaserry PMU was 49.44 Hz. It was clarified that the Kalamaserry PMU is located in the central part of Kerala, whereas the trippings occurred in the northern and southern parts of the State. The relay team was instructed to re-check the relays, and testing was planned within a week.

**TANTRANSCO** informed that no AUFLS tripping was observed in its control area. SRLDC observed that the reduction of around 9 MW could be a normal variation in load during the period.

**TGTRANSCO** informed that AUFLS operation was observed at four stations, resulting in a load relief of around 40–41 MW. It was stated that these relays had not operated during the earlier event and, pursuant

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to the recommendation of the 239th OCC meeting, their set point had subsequently been revised to 49.41 Hz. The relays operated during the present event at the revised higher set point. The field personnel were instructed to check the healthiness and performance of the relays.

**Puducherry ED** informed that two feeders at 110 kV Bahour Substation tripped, resulting in a load relief of 12 MW. The relays were configured at 49.41 Hz, whereas the recorded frequency by PED was 49.43 Hz. The relay testing team was requested to check the relays and verify their operation.

**KPTCL** informed that a total load relief of 105.3 MW was observed from eight substations. Six feeders operated under df/dt Stage-I and three feeders operated under UFR Stage-I. SRLDC and KPTCL concurred that the df/dt Stage-I operating criterion appeared not to have been met, and the relay testing wing was requested to re-check the concerned relays and the df/dt logic.

SRPC and SRLDC observed that certain issues persisted with the logic for measurement of the df/dt criterion, along with issues relating to relay set points. The matter was proposed to be examined further in the subsequent meeting. However, it was emphasized that the AUFLS relay should positively operate by 49.400 Hz, while early operation at higher frequencies such as 49.45 Hz is not desirable.

SRLDC further informed that immediately after detection of the AUFLS operation, details of the relay operations were sought from the concerned SLDCs. However, the required information was not being received promptly.

MS, SRPC emphasized that details of AUFLS operation are required to be furnished within 24 hours, as stipulated under the IEGC. It was further directed that the event report shall be furnished in the format prescribed by NPC as follows:

**Table 8: AUFLS – Feeder-wise Tripping Report at ….. hrs on ……..**

| AUTOMATIC UNDER FREQUENCY LOAD SHEDDING STAGE-1 (49.4) | | | | | | |
|---|---|---|---|---|---|---|
| Sl No | Sub Station | Feeder Description | Average load per year (In MW) | Tripped (Y/N) | Reason if not tripped | Actual flow in MW |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| TOTAL MW RELIEF | | | | | | |

**Conclusion/Action Points**

- All entities will test the relays and check the logic where relays tripped before 49.41 Hz.
- Details of AUFLS operation need to be furnished to SRPC and SRLDC within 24 hours of the event, in the format prescribed by NPC, for timely analysis and monitoring.

## 8. Review of Under-Frequency and Over-Frequency Protection Settings of Pumped Storage Plants in accordance with IEGC, CEA Connectivity Standards and AUFLS Scheme

### A TGGENCO

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a) TGGENCO, vide its letter dtd 17.07.2026 ***(Annexure-8a)*** addressed to the ED, SRLDC, referred to the deliberations held during the recent Protection Coordination Sub-Committee (PCSC) meeting and the observations made during recent grid disturbances. The letter highlighted that, as per the CEA (Technical Standards for Connectivity to the Grid) Regulations, generating units are required to remain connected to the grid within the frequency range of 47.5 Hz to 52.0 Hz. Accordingly, TGGENCO reviewed the existing Under-Frequency (UF) and Over-Frequency (OF) protection settings of its Pumped Storage Plants in consultation with the OEM and proposed separate protection settings for Generator Mode and Pump Mode of operation

b) TGGENCO has decided to adopted UF setting of <47.5 Hz with 2s time delay and OF setting of >52.0 Hz with 2s time delay for Generator Mode, and UF setting of <49.5 Hz with 75 ms time delay and OF setting of >52.0 Hz with 2 s time delay for Pump Mode. Further, TGGENCO has sought clarification on the adoption of time grading for UF/OF protection among generating units to avoid complete tripping of units during recoverable frequency excursions, and on the appropriate UF protection settings for Condenser Mode of operation.

c) In response, SRLDC vide letter dtd 28.07.2026 ***(Annexure-8b)*** had informed that the 143rd PCSC had deliberated the requirements of Regulation 29(12) of the CERC (Indian Electricity Grid Code) Regulations, 2023, the CEA (Technical Standards for Connectivity to the Grid) Regulations, and the recommendations of the Task Force on Implementation of AUFLS and df/dt Scheme, emphasizing compliance with the prescribed UF/OF protection settings, including automatic disconnection of pumped storage units operating in Pump Mode at 49.5 Hz prior to the first stage of UFR operation. SRLDC further informed that the proposals regarding split time grading and under-frequency protection settings for Condenser Mode may be deliberated in the appropriate forum. Until such deliberation, the existing protection settings may be maintained in accordance with the applicable provisions of the IEGC, CEA Connectivity Standards, and the recommendations of the Task Force on Implementation of AUFLS and df/dt Scheme, as deliberated in the 143rd PCSC.

***All SLDCs & Utilities may note the same***

**Deliberations/Conclusion**

SRPC informed the forum that the agenda item had been raised by TGGENCO, seeking clarification regarding the protection settings for Pumped Storage units under different operating modes, as the requirements for under-frequency and over-frequency protection differ between pumping and generation modes. It was informed that the matter had already been deliberated in the Protection Co-ordination Sub-Committee (PCSC) meeting and was being appraised to OCC.

SRLDC informed that TGGENCO had sought clarification on whether suitable grading of under-frequency and over-frequency protection settings could be adopted separately for pumping mode and generation mode. As discussed in the PCSC meeting, the following were concluded:

- **For generation mode under-frequency** protection, grading may preferably not be provided, as tripping of the generating unit during a low-frequency event would further aggravate the frequency decline. The under-frequency setting for generation mode should be below 47.5 Hz. As far as permissible by the OEM, the setting may preferably be kept at an even lower value, such as 46 Hz or even 45 Hz, so that the unit remains connected for as long as its equipment is capable to withstanding the low-frequency condition.

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- **For generation mode over-frequency** protection, some grading may be considered. For example, 50% of the units may be set at one protection level and the remaining units at another level with an appropriate time delay, such as 2 seconds, as already deliberated in the PCSC meeting.
- **For pumping mode under-frequency protection**, a setting of 49.5 Hz may be considered, in line with the recommendation of the AUFLS Task Force Committee, with time delay of 40–60 milliseconds may be considered.
- **For pumping mode over-frequency protection**, grading may preferably not be provided, since tripping of the pump during an over-frequency event would result in further increase in system frequency. The protection setting should, as far as practicable, be above 52 Hz, in line with the applicable connectivity standards and subject to the OEM's permissible operating characteristics. The setting may be kept as high as the OEM capability permits.
- **For condenser mode**, an operating frequency range of 47.5 Hz to 52 Hz may preferably be considered, subject to OEM capability.

TGGENCO concurred with the recommendations and stated that the same would be implemented.

**B GREENKO : Incorrect tripping of Greenko units on under frequency in generation mode**

a) It is observed that on 25.07.2026 at 19:20 hrs, all five generating units of Greenko PSP which are running in generating mode tripped on under-frequency (at 49.5 Hz as informed by Greenko).
As per the Indian Electricity Grid Code (IEGC) and the operational instructions issued by SRLDC, under-frequency tripping is required only when the units are operating in pump mode. However, during the above incident, all five units tripped while operating in generation mode, which resulted in a further decline in grid frequency to a critically low level of 49.4 Hz, thereby adversely impacting grid security.

b) SRLDC vide E-mail dated 25.07.2026 had requested Greenko to furnish the reasons for the under-frequency tripping of the units while in generation mode and to immediately review and revise the protection settings to ensure that under-frequency tripping is enabled only during pump mode operation, in accordance with the applicable IEGC provisions**.** Also vide communication dated 25,07,2026(***Annexure-8c***) had requested Greenko to submit the following updates at the earliest:
   - Review and modify the under-frequency protection settings applicable during generation mode to ensure compliance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, with the under-frequency protection setting being lower than 47.5 Hz, in consultation with OEM.
   - Submit a compliance report, along with the revised protection settings.

**Geenko vide E-mail dated 26.07 2026 had submitted the following:**

- Greenko apprised that on 25.07.2025, the generating units at Pinnapuram PSP tripped on Under Frequency (U/F) protection when the grid frequency dropped to 49.4 Hz. At the time of the incident, the U/F protection settings were as per the SRPC-approved settings adopted during commissioning, as detailed below:

  **Stage 1:** 49.5 Hz / 5S
  **Stage 2:** 48 Hz / 1S

  Subsequently, after technical discussions, it was proposed to revise the U/F protection settings for operation in generator mode as follows:

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**Stage 1:** 48 Hz / 15S
**Stage 2:** 47.5 Hz / 1S

The proposed settings were referred to the OEM, **M/s Andritz**, for technical validation. The OEM has since confirmed that the revised settings are in line with the machine capability and further clarified that the machine is designed to operate within a frequency range of **47.5 Hz to 51.5 Hz** in generation mode. Accordingly, the revised U/F protection settings have been implemented in all generating units at Pinnapuram PSP.

- **May be deliberated**

**Deliberations**

SRPC stated that the agenda was deliberated in the PCSC meeting. SRLDC appraised that the matter was reviewed following the event of 25.07.2026, during which the frequency reached around 49.50 Hz and the five units operating at Greenko-Pinnapuram PSP in generation mode tripped, resulting in a loss of nearly 1200 MW generation. Subsequently, the frequency declined to around 49.42 Hz, leading to the AUFLS operation discussed under the agenda item 8A.

SRLDC informed that its team had visited M/s Greenko-Pinnapuram PSP to verify the under-frequency and over-frequency protection settings of the units in both generation and pumping modes. The settings of the Main-1 and Main-2 protection relays of the units were checked and found to be matching across the units. The relay logic for selection of generation mode and pumping mode settings was also examined. It was informed that the mode selection is based on the phase-reversal switch, which changes the applicable relay settings when the unit changes its operating mode.

The present setting are as follows:

| | | Main 1 (SIEMENS 7UM85) | | Main 2 (ABB REG 670) | |
|---|---|---|---|---|---|
| **Protection** | **Stage** | **Generation Mode** | **Pump Mode** | **Generation Mode** | **Pump Mode** |
| **Over Frequency** | Stage-1 | 51.5 Hz, 50 s | 51 Hz, 50 s | 51.5 Hz, 50 s | 51 Hz, 50 s |
| | Stage-2 | 52 Hz, 0 s | 51.1 Hz, 0 s | 52 Hz, 0 s | 51.1 Hz, 0 s |
| **Under Frequency** | Stage-1 | 47.4 Hz, 5 s | 49.5 Hz, 60 ms | 47.4 Hz, 5 s | 49.5 Hz, 60 ms |
| | Stage-2 | 47 Hz, 0 s | 49.4 Hz, 0 s | 47 Hz, 0 s | 49.4 Hz, 0 s |

SRPC emphasized that the issue should be treated as a serious operational matter, since tripping of generating units during a frequency decline would result in further loss of generation and aggravate the frequency disturbance. Greenko was advised to ensure implementation the settings as recommended by SRLDC.

SRLDC further emphasized that any future change in settings, including changes carried out by OEM in the protection settings shall be promptly intimated to SRPC and SRLDC.

Greenko informed that the recommended changes had been implemented. It was stated that the under-frequency time delay for pumping mode had been reduced from 100 ms to 60 ms, which is within the recommended 40–60 ms range.

**Issue: Compliance of Over-Frequency Protection Settings with CEA Connectivity Regulations**

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Greenko further stated that the remaining settings had been implemented as recommended, except for certain over-frequency settings constrained by the design limitations of the units. It was explained that the units were designed for operation up to 51.5 Hz in generation mode and 51 Hz in pumping mode. SRPC advised Greenko to furnish the OEM-certified limitations in this regard. It was further clarified that any deviation from the CEA Connectivity Regulations on account of OEM/design limitations could not accorded blanket approval. As per CEA Connectivity Regulations, the units are required to remain connected for the frequency range of 47.5 to 52.0 Hz. SRLDC reiterated that, disconnection of the units in pump mode at 51.0 Hz could further aggravate the high-frequency condition. Therefore, the units in pump mode should remain in service for as high a frequency as possible and, at least up to 52 Hz, as stipulated in the Connectivity Regulations. It was observed that the existing over-frequency settings in pump mode and generation mode are not in line with the CEA Connectivity Regulations. Greenko was requested to furnish the relevant OEM recommendations/certification regarding the frequency operating limitations.

**Action Points**

- Greenko to furnish the OEM-certified operating frequency limitations/design ranges both in pumping and generating mode.
- Greenko shall ensure that any future modification of frequency protection settings is with approval of SRPC and SRLDC.

## 9. Status of Captive Data for FY 2025-26 of Southern Region

**Background**

c) The Ministry of Power (MoP) and Central Electricity Authority (CEA) have mandated monthly submission of generation data pertaining to **Captive Power Plants (CPPs), Open Access and Rooftop Solar** in the prescribed format for compilation of national electricity statistics. Accordingly, SRPC has been coordinating collection of the requisite data from the Southern Region States/UTs for onward submission to CEA/MoP.

d) The status of Captive Power Plant (CPP) generation and consumption data for FY 2025-26, submission of monthly CPP data for FY 2026-27, reconciliation of installed capacity records with CEA, and accounting of Captive Open Access/Wheeling consumption were reviewed during the 240$^{th}$ OCC meeting

**Status of FY 2025-26 data**

A meeting was held under the chairmanship of 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.

With respect to the Southern Region, a year-on-year comparison of Captive Consumption for FY 2025-26 with FY 2024-25 was carried out. The analysis is summarised as below:

| Sl. | States | FY25 [12M] | FY26 [12M] | % growth |
|---|---|---|---|---|
| 1 | Tamil Nadu | 7963 | 2673 | -66.40% |
| 2 | Telangana | 4104 | 2529 | -38.40% |
| 3 | Karnataka | 12471 | 14450 | 15.87% |
| 4 | Andhra Pradesh | 9282 | 10013 | 7.88% |
| 5 | Kerala | 1143 | 1256 | 9.89% |
| 6 | Puducherry | 76 | 74 | -2.20% |

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

1. **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:

| 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%? | TG may update. |

2. **Tamil Nadu:** With respect to the data furnished, the following issues are requested to be resolved:
   i. 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
   ii. 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.
3. **Telangana:**
   - ✓ TNGECL/TN SLDC to reconcile the captive consumption data for FY 2024-25 and FY 2025-26.
   - ✓ TG CEIG and TGSLDC shall reconcile the FY 2024-25 and FY 2025-26 generation and captive consumption data with the DISCOMs, verify the criteria adopted for data compilation, and furnish quantified reasons with supporting justification for the observed variations.

4. **The data pertaining to Karnataka, Andhra Pradesh, Kerala and Puducherry was observed to be in order**.

**In view of the upcoming review meeting under the chairmanship of Secretary (Power), MoP, all SLDCs/CEIGs are requested to furnish the observations and the requisite information at the earliest to facilitate preparation for the meeting.**

**Status of CPP data submission for FY 2026-27 (As on 27.07.2026)**

| | 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 |

- **The data of June-26 needs to be furnished by Tamil Nadu & data of July-2026 is requested to be submitted by 10.08.2026, for onward submission of CEA/MoP**

**Reconciliation of CPPs Installed Capacity records**

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- It was informed that the exercise has been under continuous follow-up since this exercise began in November/December 2025. The installed capacity details, as available with CEA, had been circulated. Significant discrepancies were observed between the installed capacity data available with CEA and States.
- All the CEIGs/nodal agencies were requested to reconcile the installed capacity data in cor-ordination with CEA and RPSO. It was further requested that any additions to or deletions from the list of captives generating plants may be made accordingly.

**Accounting of Captive Open Access/Wheeling Consumption**

TGSLDC sought clarification on whether the consumption under Captive Open Access/Wheeling is to be accounted for under Captive Consumption or reported separately under Open Access. After detailed deliberations, SRPC stated that it would examine the issue and clarify the consideration of Captive Open Access/Wheeling consumption.

- ***May be discussed***

**Deliberations**

**TN SLDC** vide email dated 07.08.2026, had reconciled the data of 2025-26 and 2024-25. It was stated that:

i. 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 reason is due to Banked Units adjusted during these months.

ii. The total Captive Consumption is 24055.7690 MU for FY 2025 26 (Non-RE - 2672.8769 MU + RE - 21382.89 MU) and the captive consumption for FY 2024-25 is 19021.6382 MU. An increase of 26.46% which is within the acceptable limits.

**TG SLDC** vide email dated 11.08.2026 stated that:

Reasons for high difference in Gross Generation and Net Generation (i.e 14.4%) of Captive Power Plants for FY 2025-26

Captive Power Plant Generation data for FY 2025-26 is prepared as per the information received from CGPs. It is observed that for certain CGPs, Net Generation is more than Gross Generation. Once again the data from discrepancy generators is received and again calculated Gross & Net Generation and found that there is a difference of 14.9% in Gross Generation & Net Generation. CGPs also informed that their submitted data is correct.

The Reasons for the 38.4% reduction in captive consumption of FY2025-26 compared to FY 2024-25 are as follows:

- The data for FY 2024-25 includes approximately 50 MU of Captive Consumption from Diesel generator (DG) sets.
- The data for FY 2024-25 contains duplicate entries amounting to approximately 798 MU of captive consumption.
- Shut down of the RFCL plant for approximately 3 to 4 months.
- Reduced production of M/s. ITC Ltd., and M/s. NAVA Ltd.,
- Partial operation of Cement plants.
- Shut down of coal CPPs due to higher coal costs.
- The data in FY 24-25 comprised of 49 MU of Captive consumption pertaining to distant Captive Users under Open Access pertaining to TGSPDCL.
- The data in FY 24-25 contains 271 MU of captive consumption pertaining to captive plants which are yet to apply for grid connectivity in TGSPDCL.

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**Conclusion**

SRPC observed that the issue appears to have been resolved. In case of any further queries from MoP or CEA, the agenda would be taken up further, as required.

**Status of CPP data submission for FY 2026-27 (As on 27.07.2026)**

| | 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 |

- **The data of June-26 needs to be furnished by Tamil Nadu & data of July-2026 is requested to be submitted by 10.08.2026, for onward submission of CEA/MoP**

**Update during the meeting**

SRPC presented the latest status of CPP data submission for FY 2026-27 as follows: (as on 14.08.2026)

| | 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 | Received | Received |
| **Jul-26** | Received | Received | | | | Received |

Karnataka, Kerala and Tamil Nadu were requested to expedite and furnish the data pertaining to July 2026. It was reiterated that the due date was 10.08.2026

**Reconciliation of CPPs Installed Capacity records**

- It was informed that the exercise has been under continuous follow-up since this exercise began in November/December 2025. The installed capacity details, as available with CEA, had been circulated. Significant discrepancies were observed between the installed capacity data available with CEA and States.
- All the CEIGs/nodal agencies were requested to reconcile the installed capacity data in coordination with CEA and RPSO. It was further requested that any additions to or deletions from the list of captives generating plants may be made accordingly.

**Deliberations**

SRPC informed that Telangana had completed the reconciliation of its total installed capacity and furnished the reconciled details, along with the reasons for the changes and the present status of the captive generating plants. The details were shared with RPSO (S) for necessary action.

SRPC requested the other States to undertake similar reconciliation of their CPP installed capacity records. It was informed, if required, Telangana's model format, may be used for reconciliation. SRPC appreciated the efforts of Telangana in completing the reconciliation exercise.

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**Accounting of Captive Open Access/Wheeling Consumption**

TGSLDC sought clarification on whether the consumption under Captive Open Access/Wheeling is to be accounted for under Captive Consumption or reported separately under Open Access. After detailed deliberations, SRPC stated that it would examine the issue and clarify the consideration of Captive Open Access/Wheeling consumption.

**Deliberations**

SRPC informed that a clarification will be sought from Chief Engineer (PDM&LF),CEA regarding the accounting of captive Open Access/wheeling consumption. It was stated that the matter would be examined based on the clarification received from CEA, and the outcome would be communicated to the forum accordingly.

## 10. Agenda of RPSO (South), Bengaluru

a) All SLDCs/State Utilities, particularly APSLDC and TGSLDC, are requested to furnish consumer details (contract demand >500 kVA) and undertake necessary information dissemination activities to facilitate onboarding of captive consumers on the CEA Captive Power Portal and improve data coverage.

b) DISCOMs are requested to disseminate information regarding the Captive Power Portal among eligible consumers through SMS, email, and display of posters at offices, billing centers, and consumer grievance centers. Further, it was requested to furnish the preliminary consumer database to RPSO (S) at the earliest to facilitate onboarding of captive consumers onto the Captive Power Portal.

c) All States were requested to expedite registration of captive consumers on the Captive Power Portal and nominate a nodal officer to monitor and coordinate the registration process, **with a target of completing the registrations by August 2026**.

d) CEIGs/DISCOMs were requested to furnish consumer information, including address and other identifying particulars, to facilitate reconciliation of consumer records between the RPSO/CEA and the data furnished to SRPC.

e) EIGs and DISCOMs were requested to disseminate awareness regarding the Captive Power Portal by displaying/circulating the publicity material shared by CEA to encourage registration by captive consumers.

f) RPSO (S) shall examine the feasibility of providing viewing/access credentials for the Captive Power Portal to CEIGs/SLDCs in consultation with Chief Engineer, PDM&LF, and communicate the outcome to the stakeholders

- ***RPSO (South) may take up the agenda***

**Deliberations**

RPSO (South) informed that login credentials for the Captive Power Portal had been created for State entities, including SLDCs, Electrical Inspectorates and DISCOMs, enabling them to view the registration status of consumers, identify consumers yet to register, and monitor the status of monthly data submission. It was informed that the login credentials would be shared with all State utilities by the day.

RPSO (South) further informed that visits had been undertaken with Kerala SLDC, AP SLDC and TN SLDC, and that similar engagement with Telangana SLDC would also be undertaken. During the visit to Kerala, Kerala SLDC was requested to pursue registration of BPCL Kochi Refinery on the Captive Power

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Portal on priority. Kerala SLDC stated that, upon receipt of the login credentials, the registration status of BPCL Kochi Refinery would be verified and necessary follow-up would be undertaken.

RPSO (South) requested all State utilities to accord priority to registration of CPPs above 100 MW on the portal, followed by CPPs of 50-100 MW. It was informed that the registration of consumers had improved following engagement with State utilities and requested that the efforts be continued to enhance participation on the portal. RPSO (South) also informed that any assistance required in this regard may be taken up with RPSO (South). The progress would be reviewed in the subsequent meeting after sharing of the login credentials.

**TGSLDC** sought clarification regarding the consumer details requested from APSLDC and TGSLDC., RPSO (South) clarified that the details of consumers having DG sets were required, primarily to enable RPSO (South) to approach such consumers and facilitate their registration on the Captive Power Portal in case the criteria is met.

RPSO (South) further clarified that details of commercial consumers having Contract Demand above 500 kVA were also required. It was stated that, upon contacting such consumers, it could be ascertained whether they have DG sets. It was further highlighted that during the discussions with the DISCOMs, instances had been observed where consumers with Contract Demand as low as 500 kVA were having substantial solar/DG capacity, including capacities of 1 MW to 2 MW. Accordingly, such consumer details were also required to ensure that the relevant DG/solar capacity is captured for the purpose of the exercise.

**Action Points**

- RPSO (South) to share login credentials for the Captive Power Portal with all State utilities.
- State utilities to monitor the registration status through the portal and ensure priority registration of CPPs above 100 MW.
- Kerala SLDC to verify and pursue registration of BPCL Kochi Refinery on the Captive Power Portal.
- APSLDC and TGSLDC to furnish consumer details of commercial consumers with Contract Demand of 500 kVA and above, to facilitate identification and registration of consumers having DG/solar generation capacity.
- State utilities to continue efforts for enhancing consumer participation and registration on the Captive Power Portal.
- RPSO (South) to review the progress of portal registration and data submission in the subsequent meeting.

## 11. Frequent Grid Disturbances in the Kalapaka–Simhadri Corridor & Operational Issues in Charging 400 kV Kalpakka–Gazuwaka D/C Line Under Single Line Availability

a) APTRANSCO, vide letter dated 24.06.2026, submitted a detailed report on the grid disturbances that occurred during 16$^{th}$ –17$^{th}$ June 2026 involving the 400 kV Kalpakka–Simhadri (STPP)-3, 220 kV Kalpakka–Simhachalam-2 and 400 kV Kalpakka–Gazuwaka (PGCIL)-1 & 2 transmission lines. It was reported that multiple disturbances occurred due to jumper failure, flashover, carrier channel failure, OPGW disconnection and adverse weather conditions. APTRANSCO also observed that the high fault currents in the Kalpakka area, owing to the proximity of major generating stations, warrant a detailed review of fault levels and protection coordination

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b) During restoration of the disturbances on 17.06.2026, APTRANSCO accorded concurrence for charging both 400 kV Kalpakka–Gazuwaka D/C lines. However, due to line isolator alignment issues at Gazuwaka Substation, Line-2 could not be charged. APSLDC informed that charging only the healthy circuit would result in a loading of about 500–600 MW and requested cancellation of the charging code. SRLDC observed that the existing 400 kV Twin Moose conductor is capable of carrying substantially higher loading and opined that the operational constraints require detailed technical examination. Similar operational limitations have also been experienced during periods of higher power export through the HVDC Gazuwaka system.

c) The above issues were deliberated in detail during the 240th OCC. The forum noted that the disturbances were caused by a combination of jumper failures, carrier channel failures, OPGW damage, flashovers, severe coastal pollution/salinity, ageing equipment and high fault levels in the Kalpakka area. SRLDC observed that the existing 400 kV Twin Moose conductor is capable of carrying substantially higher loading and that the constraints in restoring a healthy circuit independently require detailed technical examination.

d) It was also decided that the issues would be examined in detail by the PSAG Committee during its site visit scheduled on 30th –31st July 2026

e) The forum further concluded that, during real-time operation, the operational instructions issued by SRLDC shall be complied with by all constituents. Any field-level operational constraints shall be promptly communicated to SRLDC to facilitate coordinated operational decision-making.

- ***APTRANSCO, SRLDC, NTPC Simhadri and PGCIL may update the forum on the outcome of the PSAG meeting***
- ***The findings on the operational constraints & corrective measures identified***

**Deliberations:**

a) It was observed that the PSAG meeting was held on 30–31.07.2026 and the minutes of the meeting were circulated on 03.08.2026.

b) MS, SRPC observed that the issues identified were predominantly related to operation, system, protection and maintenance, particularly considering the prevailing external conditions such as salinity, humidity and pollution in the area. He further observed that the protection and communication-related issues identified during the PSAG deliberations were minor in nature. All concerned entities were advised to take necessary corrective actions as identified in the PSAG minutes.

c) ED, SRLDC reiterated that the identified operational issues need to be addressed appropriately. He suggested that APSLDC/APTRANSCO, in coordination with NTPC and PGCIL, may formulate a suitable SOP covering the operational aspects and remedial measures for the corridor.

d) APTRANSCO informed that the issues and recommendations emerging from the PSAG meeting had been forwarded to the higher management for taking necessary further action.

e) MS, SRPC informed that the loading limitation on the 400 kV Kalpakka–Gazuwaka D/C still persists due to issues related to clamps and jumpers. It was further suggested that the loading limitation issue may continue to be addressed in the OCC forum, while the remaining issues may be taken up separately in the PCSC forum.

f) APTRANSCO/APSLDC was advised to take necessary corrective measures to enhance the loading capability of the transmission line up to its thermal limit.

**Conclusion/Action to be taken:**

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g) APTRANSCO/APSLDC, PGCIL & NTPC Simhadri shall pursue the issues and recommendations emerging from the PSAG meeting with their higher management, take necessary corrective actions, and apprise the OCC forum of the progress/action taken accordingly.

h) The loading limitation on the 400 kV Kalpakka–Gazuwaka D/C shall continue to be monitored and addressed in the next OCC, with APTRANSCO/APSLDC taking necessary corrective measures to enhance the loading capability up to the thermal limit of the line. The remaining issues may be taken up separately in the PCSC forum.

## 12. Reliability of AGC Communication Links (NLDC Letter to PGCIL)- Follow up item

a) Secondary Reserve Ancillary Services (SRAS) for frequency regulation are presently being implemented through Automatic Generation Control (AGC). Reliable availability of communication links is essential for uninterrupted AGC operation and secure grid operation.

b) During the 240th OCC, the communication failure that occurred on 23.06.2026, resulting in the simultaneous unavailability of AGC services from 13 generating stations (about 14.5 GW) in the Southern Region, was discussed. PGCIL informed that the communication outage was caused by the failure of the Bina–Surajpur and Wapi–WRLDC communication links due to adverse weather conditions in the Western Region. It was further informed that these links constituted the primary and backup communication paths for the Southern Region AGC communication and that an alternate communication route is being planned to avoid recurrence of similar incidents.

c) The forum observed that the communication architecture for the Southern Region should not be entirely dependent on the Western Region and advised PGCIL to review the communication redundancy, eliminate single-point failures, and present the detailed Root Cause Analysis (RCA), corrective measures, and implementation status of alternate communication routing in the next COM-SR meeting. SRLDC Communication Wing was requested to coordinate the review and monitor compliance.

***PGCIL and SRLDC may update the forum on the status of implementation of alternate communication routing for AGC communication links; measures taken to eliminate common-mode/single-point failures and improve communication redundancy***

**Deliberations:**

a) WR PGCIL presented the sequence of events leading to the complete outage of AGC communication links for the SR on 23.06.2026. It was informed that at around 20:30 hrs on 23.06.2026, the Surajpur–Bina communication link was lost, resulting in both the primary and alternate communication paths for SR AGC traffic becoming unavailable through the concerned route. Subsequently, at around 22:30 hrs, the Wapi–WRLDC communication link also failed. Since the SR AGC traffic was being routed through these communication paths, the simultaneous failure of the two links resulted in the complete loss of AGC communication for the Southern Region.

b) WR PGCIL further explained that the failure of both communication paths resulted in the unavailability of both the main and protection/alternate paths, leading to complete loss of SR AGC data at NLDC. Consequently, AGC communication from 13 generating stations in the Southern Region, with an aggregate installed capacity of about 14.5 GW, remained unavailable.

c) It was informed that the Surajpur–Bina communication link was subsequently restored, and all AGC communication links were fully restored by around 1030 hrs on 24.06.2026. The key finding was

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that no alternate communication path was available for routing SR AGC traffic following the simultaneous failure of the Surajpur–Bina and Wapi–WRLDC links. It was further observed that the absence of Unified Network Management System (UNMS) at the WR and National levels resulted in delayed detection, diagnosis, and response to the communication failure.

**SR AGC OUTAGE — CHRONOLOGY OF EVENTS**

| S.No. | Date | Time | Event |
|---|---|---|---|
| 1 | 23.06.2026 | 2030 hrs | Sujalpur–Bina telecom link went down — SR and WR AGC paths left unprotected |
| 2 | 23.06.2026 | 2040 hrs | NTPC Telangana AGC fault commenced. |
| 3 | 23.06.2026 | 2138 hrs | NTECL Vallur both AGC signals reported not healthy |
| 4 | 23.06.2026 | 2151 hrs | NLDC CR confirmed both ULDC links of Telangana STPP down |
| 5 | 23.06.2026 | 2230 hrs | WRLDC–Vapi link also down — complete AGC data blackout at NLDC |
| 6 | 23.06.2026 | 2256 hrs | AGC fault reported in all stages at Ramagundam |
| 7 | 23.06.2026 | 2316 hrs | NTPC Simhadri Stage 1 & 2 AGC not updating |
| 8 | 24.06.2026 | 0545 hrs | NLDC CR reported: All SR plant ULDC links are down — ULDC team please check |
| 9 | 24.06.2026 | 0843 hrs | All WR Plants Standby Links down; All SR plants ULDC links down |

d) WR PGCIL presented the latest configuration of the Main and Standby AGC communication paths, including the working and protection paths, with the exception of the WRLDC–Wapi link. PGCIL was advised to ensure regular monitoring and inspection of the protection paths to maintain their availability and reliability.

e) ED, SRLDC, informed that PGCIL and the concerned RLDCs have constituted a network monitoring group for continuous monitoring of the AGC communication links. Any abnormality/failure in the communication links is being monitored and automatically reflected to PGCIL for necessary corrective action.

**Conclusion:**

f) In view of the corrective action taken by PGCIL and existing continuous monitoring mechanism and the corrective measures already put in place, the forum observed that the matter need not be pursued as a separate agenda item in the subsequent OCC meetings, unless any fresh issue or concern arises

## 13. Implementation of SRPC recommended AUFR and df/dt scheme

### 239 OCC: Actions to be taken

(i) All concerned were requested to complete the works pertaining to relief visibility and SCADA mapping expeditiously. RTU upgradation, wherever required may be taken up on priority.

**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.

**KPTCL** to identify additional loads to realize additional relief of about 400 MW to bridge the deficit in released relief.

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**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.

**(ii) New quantum of load relief settings of AUFLS scheme for the year 2026-27 (SRPC letter dated 19.06.2026)**

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. **In 240th OCC**, it was informed that the new quantum as load relief and State Demand Contribution values as tabulated above and circulated vide SRPC letter dated 19.06.2026.

SLDCs were requested to use the new recommended values in the calculations from next month. The relief quantum pertaining to Southern Region are as follows:

| Sl. No. | Stage | Frequency (Hz) | Quantum of Load Shedding (MW) for 2026-27 | *Change in quantum wrt 2025-26 (MW)* | *Quantum of Load Shedding (MW) for 2025-26* |
|---|---|---|---|---|---|
| 1 | Stage 1 | 49.4 Hz | 3175 | *15 increase* | 3160 |
| 2 | Stage 2 | 49.2 Hz | 3810 | *18 increase* | 3792 |
| 3 | Stage 3 | 49.0 Hz | 4445 | *22 increase* | 4423 |
| 4 | Stage 4 | 48.8 Hz | 4445 | *22 increase* | 4423 |
| **Total** | | | **15875** | ***77 increase*** | **15798** |

In accordance with the methodology recommended by the Task Force, State/UT Stagewise 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** | **15875** |

The change in AUFLS quantum for FY 2026-27 compared to FY 2025-26 is as follows (for reference):

| State | Stage-1 | Stage-2 | Stage-3 | Stage-4 | Total |
|---|---|---|---|---|---|
| Andhra Pradesh | 8 | 10 | 12 | 12 | **42** |
| Telangana | 16 | 20 | 23 | 23 | **82** |
| Karnataka | 10 | 12 | 14 | 14 | **50** |
| Kerala | -4 | -5 | -5 | -5 | **-19** |
| Tamil Nadu | -15 | -18 | -21 | -21 | **-75** |
| Puducherry | 0 | -1 | -1 | -1 | **-3** |
| **Total** | **15** | **18** | **22** | **22** | **77** |

The State Demand Contribution value to be utilized for calculation of Monthly Reports being presented in OCC are as follows for FY 2026-27:

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| State | State contribution | Load Relief in MW/ State Demand Contribution |
|---|---|---|
| | (a)=Column (5) of Table 3 | (b)=a*SR Peak Demand |
| Andhra Pradesh | 0.184 | 13590 |
| Telangana | 0.221 | 16301 |
| Karnataka | 0.231 | 17068 |
| Kerala | 0.074 | 5448 |
| Tamil Nadu | 0.282 | 20829 |
| Puducherry | 0.008 | 569 |
| **Total** | **1.000** | **73805** |

**(iii) Follow-up of Action Points of Grid Frequency dip Event on 13.05.2026**

- ✓ Use the task force recommended correction factor methodology for calculating the desired AUFLS load relief in future events.
- ✓ KPTCL shall submit the final verified AUFLS load relief quantum and furnish the status of operation of relays configured at 49.41 Hz and 49.40 Hz.
- ✓ All constituents shall examine the performance of AUFLS relays configured at 49.41 Hz that did not operate and take necessary corrective action.
- ✓ 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.
- ✓ **In 240th OCC**, Karnataka SLDC confirmed that the AUFLS scheme provided a load relief of 440 MW during the event. It was further informed that the majority of the under-frequency relays that operated were configured with a pickup setting of 49.40 Hz. It was stated that only a negligible number of relays in Karnataka were configured at 49.41 Hz

**240th OCC Conclusion:**

- ➢ AP, Karnataka and Telangana to identify additional AUFLS loads to bridge the deficit in relief quantum. SRPC requested to expedite the implementation by next OCC meeting
- ➢ SLDCs were requested to use the new recommended values in the calculations from next month.

***May be discussed***

**Deliberations**

**Follow-up of 239 OCC Action Points**

**AP SLDC** vide email dated 10.08.2026 had informed that additional 261.36 MW across all 4 stages of load relief was identified and communicated to the field for implementation which is under process.

**KAR SLDC** has stated that RT wing was identifying 400 MW of load divided among the 5 Zones. The reply was received from 2 zones and awaited from remaining 3 zoned. An internal meeting was also scheduled in this regard. It was assured that identification and implementation would be completed by the end of the month.

**Telangana SLDC** stated that identification of the load was under discussion with power systems team.

**Monthly Review of AUFR scheme**

SRLDC presented AUFLS-Monthly Reports for August-2026 prepared by states as follows:

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### a) Telangana

| STATE | Status/Settings | Stage-1 (49.4 Hz) | Stage-2 (49.2Hz) | Stage-3 (49.0 Hz) | Stage-4 (48.8 Hz) | Total |
|---|---|---|---|---|---|---|
| TG | Recommended (A) | 701 | 842 | 982 | 982 | 3507 |
| | Implemented (B) | 446 | 435 | 473 | 582 | 1936 |
| | SCADA monitored (C) | 434 | 419 | 359 | 405 | 1617 |
| | Actual flow on SCADA monitored (D) | 362 | 429 | 359 | 405 | 1555 |
| | Balance implemented (E)= (B) – (C) | 12 | 16 | 115 | 178 | 320 |
| | Actual flow on balance implemented (F) | 22 | 29 | 13 | 162 | 226 |
| | Desired relief (G) = (B) X Average state Demand for the month/ (State Demand Contribution) | 476 | 572 | 667 | 667 | 2382 |
| | Actual relief (H) = (D + F) | 384 | 458 | 372 | 567 | 1781 |
| | Deficit (-)/Surplus (+) --> (H – G) | -92 | -114 | -295 | -100 | -601 |

**TG SLDC** informed that LIS feeders in Stage-3 may be responsible for higher deficit in Stage-3. During the identification of additional load relief exercise, it would be ensured to compensate.

### b) Kerala

| STATE | Status/Settings | Stage-1 (49.4 Hz) | Stage-2 (49.2Hz) | Stage-3 (49.0 Hz) | Stage-4 (48.8 Hz) | Total |
|---|---|---|---|---|---|---|
| KL | Recommended (A) | 238 | 286 | 333 | 333 | 1190 |
| | Implemented (B) | 292 | 303 | 382 | 357 | 1334 |
| | SCADA monitored (C) | 259 | 223 | 266 | 237 | 985 |
| | Actual flow on SCADA monitored (D) | 253 | 125 | 179 | 157 | 713 |
| | Balance implemented (E)= (B) – (C) | 33 | 80 | 116 | 120 | 349 |
| | Actual flow on balance implemented (F) | 41 | 145 | 181 | 146 | 513 |
| | Desired relief (G) = (B) X Average state Demand for the month/ (State Demand Contribution) | 200 | 208 | 262 | 245 | 914 |
| | Actual relief (H) = (D + F) | 293 | 270 | 360 | 303 | 1226 |
| | Deficit (-)/Surplus (+) --> (H – G) | 94 | 62 | 98 | 58 | 312 |

### c) Karnataka

| STATE | Status/Settings | Stage-1 (49.4 Hz) | Stage-2 (49.2Hz) | Stage-3 (49.0 Hz) | Stage-4 (48.8 Hz) | Total |
|---|---|---|---|---|---|---|
| KA | Recommended (A) | 734 | 881 | 1028 | 1028 | 3671 |
| | Implemented (B) | 853 | 907 | 1256 | 1055 | 4071 |
| | SCADA monitored (C) | 801 | 892 | 1230 | 1055 | 3977 |
| | Actual flow on SCADA monitored (D) | 498 | 370 | 590 | 503 | 1962 |
| | Balance implemented (E)= (B) – (C) | 52 | 16 | 26 | 0 | 94 |
| | Actual flow on balance implemented (F) | 50 | 12 | 4 | 0 | 66 |
| | Desired relief (G) = (B) X Average state Demand for the month/ (State Demand Contribution) | 518 | 621 | 725 | 725 | 2589 |
| | Actual relief (H) = (D + F) | 548 | 383 | 594 | 503 | 2028 |
| | Deficit (-)/Surplus (+) --> (H – G) | 31 | -239 | -131 | -222 | -561 |

### d) Andhra Pradesh

| STATE | Status/Settings | Stage-1 (49.4 Hz) | Stage-2 (49.2Hz) | Stage-3 (49.0 Hz) | Stage-4 (48.8 Hz) | Total |
|---|---|---|---|---|---|---|
| AP | Recommended (A) | 585 | 702 | 819 | 819 | 2925 |
| | Implemented (B) | 636 | 648 | 760 | 806 | 2849 |
| | SCADA monitored (C) | 619 | 648 | 739 | 795 | 2801 |
| | Actual flow on SCADA monitored (D) | 473 | 507 | 560 | 597 | 2137 |
| | Balance implemented (E)= (B) – (C) | -51 | 0 | 21 | 13 | -17 |
| | Actual flow on balance implemented (F) | 14 | 0 | 16 | 10 | 39 |
| | Desired relief (G) = (B) X Average state Demand for the month/ (State Demand Contribution) | 465 | 558 | 651 | 651 | 2324 |
| | Actual relief (H) = (D + F) | 486 | 507 | 576 | 607 | 2176 |
| | Deficit (-)/Surplus (+) --> (H – G) | 22 | -51 | -75 | -44 | -148 |

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### e) Tamil Nadu

| STATE | Status/Settings | Stage-1 (49.4 Hz) | Stage-2 (49.2Hz) | Stage-3 (49.0 Hz) | Stage-4 (48.8 Hz) | Total |
|---|---|---|---|---|---|---|
| TN | Recommended (A) | 916 | 1099 | 1283 | 1283 | 4581 |
| | Implemented (B) | 929 | 1070 | 1151 | 1153 | 4303 |
| | SCADA monitored (C) | 746 | 903 | 1116 | 1128 | 3893 |
| | Actual flow on SCADA monitored (D) | 944 | 948 | 1132 | 1113 | 4137 |
| | Balance implemented (E)= (B) – (C) | 183 | 167 | 35 | 25 | 410 |
| | Actual flow on balance implemented (F) | 291 | 170 | 52 | 44 | 557 |
| | Desired relief (G) = (B) X Average state Demand for the month/ (State Demand Contribution) | 840 | 968 | 1041 | 1043 | 3892 |
| | Actual relief (H) = (D + F) | 1235 | 1118 | 1184 | 1157 | 4694 |
| | Deficit (-)/Surplus (+) --> (H – G) | 395 | 150 | 143 | 114 | 802 |

### f) Puducherry

| STATE | Status/Settings | Stage-1 (49.4 Hz) | Stage-2 (49.2Hz) | Stage-3 (49.0 Hz) | Stage-4 (48.8 Hz) | Total |
|---|---|---|---|---|---|---|
| PY | Recommended (A) | 25 | 29 | 34 | 34 | 122 |
| | Implemented (B) | 26 | 31 | 36 | 36 | 129 |
| | SCADA monitored (C) | 26 | 31 | 36 | 36 | 129 |
| | Actual flow on SCADA monitored (D) | 31 | 38 | 30 | 40 | 139 |
| | Balance implemented (E)= (B) – (C) | 0 | 0 | 0 | 0 | 0 |
| | Actual flow on balance implemented (F) | 0 | 0 | 0 | 0 | 0 |
| | Desired relief (G) = (B) X Average state Demand for the month/ (State Demand Contribution) | 21 | 25 | 29 | 29 | 104 |
| | Actual relief (H) = (D + F) | 31 | 38 | 30 | 40 | 139 |
| | Deficit (-)/Surplus (+) --> (H – G) | 10 | 13 | 1 | 11 | 35 |

**Conclusion**

SRPC had requested Karnataka SLDC and Telangana SLDC that in view of the upcoming NPC meeting scheduled in September 2026, to expedite implementation of the recommended AUFLS quantum by the end of August 2026. The updated status may be furnished at the earliest.

## 14. Review of Transmission Line Trippings during Thunderstorm/Adverse Weather Conditions and need for enhanced Situational Awareness of Stressed Corridors (Follow-up)

a) The issue pertaining to the increasing instances of transmission line outages, tower collapses and transmission corridor constraints during adverse weather conditions was deliberated in the 239th OCC Meeting. The forum had reviewed several critical outages that resulted in generation evacuation constraints, reduction in transmission corridor redundancy, voltage issues and reduction in Southern Region import/export capability. The concerned transmission licensees were advised to expedite restoration works, periodically update the status of restoration activities and undertake suitable preventive measures to improve the resilience of the transmission system against extreme weather events.

b) The status of major transmission elements, wherein restoration activities were under progress during the 240$^{th}$ OCC meeting, is summarized below:

| Sl. No. | Transmission Element | Transmission Licensee | Major Concern | Latest Status/Target |
|---|---|---|---|---|
| 1 | 400 kV Kaiga–Guttur D/C | KPTCL | Evacuation of nuclear generation and overall system security and emphasized that all efforts should be | **240$^{th}$ OCC:** **KPTCL:** To furnish the correspondence, testing reports and other relevant data sought by SRPC vide letter dated 29.06.2026 regarding the tower |

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| Sl. No. | Transmission Element | Transmission Licensee | Major Concern | Latest Status/Target |
|---|---|---|---|---|
| | | | made to complete the restoration works at the earliest possible date | collapse incident. KPTCL to expedite completing the works at the earliest.<br>**55th TCC update**: KPTCL informed that due to the rainfall, the restoration activities were further delayed. Expected revival time is 16.08.2026. |
| 2 | 400 kV Gadag–Koppal D/C | Gadag Transmission Ltd. | Koppal and Gadag was being evacuated independently through their respective corridors to Kudgi, as the interconnection between Gadag and Koppal through the affected line was unavailable. Consequently, the system had lost an im-portant network redundancy element. | **240th OCC:** Expedite restoration of the 400 kV Gadag–Koppal D/C line and make all efforts to complete the works before 31.08.2026, considering the RE evacuation constraints.<br>• Deploy additional resources, wherever feasible, to expedite the restoration works.<br>• Submit the correspondence, testing reports, RCA & other relevant documents pertaining to the tower collapse to SRPC. |
| 3 | Repeated trippings of 765 kV WKTL and other critical inter-regional corridors | WKTL | Import/Export capability | **240th OCC/55th TCC update**: It was advised that all utilities shall ensure enhanced monitoring, preventive maintenance and timely corrective action for 765 kV and other critical inter-regional transmission corridors to maintain system reliability and minimise recurring trippings. |

➢ ***KPTCL, GTL & WKTL may update the status.***

**Failure of Somanahalli (Bangalore) ICT**

**1) Background**

The 500 MVA, 400/220 kV ICT-I at POWERGRID's Somanahalli Substation failed on **31.05.2026** following a series of downstream faults in the 220 kV KPTCL network. The outage lasted **38 days**, and the spare ICT was successfully commissioned on **08.07.2026**.

Since the outage exceeded one month, the categorization of the outage for transmission availability certification was required in accordance with the provisions of the **CERC (Terms and Conditions of Tariff) Regulations, 2024**.

**2) Regulatory Provisions**

**CERC (Terms and Conditions of Tariff) Regulations, 2024 (Appendix IV, Clause 5)**

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*The Regulations provide that the outage period of transmission elements, as certified by the Member Secretary, RPC, shall be excluded from the outage duration for transmission availability calculations under the following circumstances:*

**(i) Force Majeure**

*Outage of elements due to force majeure events beyond the control of the transmission licensee. However, whether the same outage is due to force majeure (not design failure) will be verified by the Member Secretary, RPC. A reasonable restoration time for the element shall be considered by the Member Secretary, RPC, and any additional time taken by the transmission licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the transmission licensee. Member Secretary, RPC may consult the transmission licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available;*

**(ii) Grid incidents/Disturbance**

*Outage caused by grid incident/disturbance not attributable to the transmission licensee, e.g. faults in a substation or bays owned by another agency causing an outage of the transmission licensee's elements, and tripping of lines, ICTs, HVDC, etc., due to grid disturbance. However, if the element is not restored on receipt of direction from RLDC while normalizing the system following grid incident/disturbance within reasonable time, the element will be considered not available for the period of outage after issuance of RLDC's direction for restoration;*

**(iii) Competent Authority for Approval**

*The outage period eligible for exclusion shall be approved as follows:*

- *Up to **one month** – Member Secretary, RPC*
- ***Beyond one month and up to three months** – Regional Power Committee (RPC)*
- ***Beyond three months** – Central Electricity Regulatory Commission (CERC)*

**The 52nd TCC recommended delegation of the powers of SRPC under Appendix-IV, Clause 5(iii)(b) of the CERC (Terms and Conditions of Tariff) Regulations, 2024 to the Operation Sub-Committee (OCC), which was subsequently approved by the 55th SRPC.**

**240th OCC Deliberations/Conclusion:**

a) The OCC deliberated on the failure of Somanahalli ICT-I based on the submissions of POWERGRID, beneficiary observations, and the technical analysis presented.
b) The OCC agreed to provisionally categorize the outage under the "Others" category, subject to the findings of the CEA Committee on Failure of Power Equipment (PSE&TD Division).
c) The final categorization for availability certification shall be decided based on the recommendations of the CEA Committee.
d) The matter shall be referred to the CEA Committee on Failure of Power Equipment (PSE&TD Division) for consideration while finalizing its report.
e) POWERGRID and other transmission utilities were advised to present similar cases before the Protection Sub-Committee (PSC) to examine protection coordination issues and recommend suitable measures to prevent recurrence.

**Post OCC Update:**

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In this regard, PSETD, CEA vide mail dtd 23.07.2026 had shared the final ICT failure committee report ***(Annexure-14a)*****.** The recommendations are stated as below:

i. The Transformer should be Dynamic short Circuit (DSC) tested as per the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022.

ii. KPTCL should ensure that frequent fault does not occur on 220 kV side of the KPTCL Substation.

iii. KPTCL should ensure that Bus sectionlizer remain close so that all the all the ICTs operate in parallel.

iv. PGCIL shall measure short circuit inductance and SFRA of the transformer after the occurrence of fault, to check the mechanical integrity of the active part

***May be deliberated***

**Deliberations:**

**400 kV Kaiga – Guttur D/C line:**

- KPTCL informed that due to the rainfall, the restoration activities were further delayed. Expected revival time is 25.08.2026.
- KAIGA GS vide communication dated 03.08.2026 requested:
  - ✓ KPTCL to expedite restoration of the 400 kV Kaiga–Guttur D/C lines and furnish the expected completion schedule.
  - ✓ Pending restoration of 400 kV Kaiga – Guttur D/C line, SRLDC is requested to regulate the power flow through the 220 kV Kaiga–Kadra and Kaiga–Kodasalli lines so as to avoid overloading of the 400 kV Kaiga–Narendra D/C lines.
- ED, SRLDC emphasized the importance of expediting the restoration of the 400 kV Kaiga–Guttur D/C line, as the outage of this critical transmission corridor has operational implications on generation evacuation and system security. He recalled that on 10.08.2026, one of the 400 kV Kaiga - Narendra D/C line was taken for shutdown to attend wave trap issue. SRLDC stated that whenever the line is taken out of service for maintenance or due to any contingency, the remaining transmission elements experience increased loading, thereby affecting grid security. Early restoration of the line would therefore help in maintaining system reliability and operational security.
- Forum requested KPTCL to expedite the restoration work and, if feasible, advance the completion schedule by deploying additional resources and maintenance teams.
- KPTCL informed that it would closely follow up the matter and make efforts to complete the restoration work at the earliest.
- SRPC observed that during contingencies involving outages of the Kaiga–Narendra transmission corridor, adequate precautions are required, as the system may remain dependent on a limited number of transmission elements. It was noted that any additional outage during such conditions could adversely affect the evacuation of generation from Kaiga Generating Station.
- NPCIL, Kaiga informed that a disconnected wave-trap string was observed on the Narendra line, necessitating a shutdown of the line for maintenance. The maintenance work was completed within a few hours and the line was restored to service by approximately 1800 hrs on the same day. NPCIL further stated that a vertical string was found disconnected and requested that transmission line loading be minimized as far as possible until completion of detailed investigation and submission of the maintenance report.

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**Conclusion/Action**

- KPTCL shall expedite the restoration of the Kaiga–Guttur D/C line and complete the work at the earliest.
- SRLDC and SLDC shall undertake necessary operational measures to manage power flows and avoid overloading of the transmission system during contingencies.

**400 kV Gadag–Koppal D/C line:**

**Deliberations/Conclusion:**

- SRPC recalled that, as per the earlier update by Renew, restoration of the remaining affected line section was targeted by **31.08.2026** and requested the concerned entity to expedite the restoration process.
- SE(O) SRPC expressed concern on the non-participation of M/s Renew (Gadag Ph-II) in the OCC meeting.

**Repeated Tripping of Critical Inter-Regional Transmission Lines:**

- ✓ SRPC reviewed the issue of repeated tripping of the **765 kV WKTL and other critical inter-regional transmission lines**. It was recalled that the matter had been deliberated during the previous TCC meeting.
- ✓ The forum reiterated that WKTL shall undertake the necessary maintenance activities and corrective measures to minimize trippings of critical inter-regional transmission lines, as such outages adversely affect system reliability and the available transfer capability (ATC/TTC) of the grid.

**Somanahalli ICT-I:**

**Deliberations/Conclusion:**

- SRPC reviewed the status of the ICT failure incident, which had been discussed in earlier OCC meetings.
- In this regard, PSETD, CEA vide mail dtd 23.07.2026 had shared the draft ICT failure committee report ***(Annexure-14a)*****.** The recommendations are stated as below:

i. The Transformer should be Dynamic short Circuit (DSC) tested as per the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022.
ii. KPTCL should ensure that frequent fault does not occur on 220 kV side of the KPTCL Substation.
iii. KPTCL should ensure that Bus sectionlizer remain close so that all the all the ICTs operate in parallel.
iv. PGCIL shall measure short circuit inductance and SFRA of the transformer after the occurrence of fault, to check the mechanical integrity of the active part

- It was recalled that the matter was tentatively categorized under "others" category subject to the conclusion of CEA Meeting of the Standing Committee on Substation Equipment Failure scheduled to be held on 17.08.2026.

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**Additional Agenda item E: Restoration of 400 kV Kaiga–Guttur D/C Lines and Regulation of Power Flow through 220 kV Kaiga–Kadra and Kaiga–Kodasalli Lines ( KGS, NPCIL Communication dated 03.08.2026)**

Kaiga Generating Station (KGS) has a generation capacity of 4 × 220 MWe and has power evacuation facilities through both 400 kV and 220 kV switchyards, which are interconnected through two 501 MVA ICTs. The 220 kV switchyard is connected to the Kaiga–Kadra and Kaiga–Kodasalli lines, while the 400 kV switchyard is connected to the Kaiga–Guttur D/C and Kaiga–Narendra D/C lines. During peak hours, approximately 800 MW is being evacuated through the 400 kV switchyard, comprising about 600 MW from Kaiga Units 2, 3 & 4 and 200 MW through the 220 kV network towards Kaiga.

The 400 kV Kaiga–Guttur D/C lines have remained out of service since 14.05.2026 due to tower collapse. Consequently, the entire maximum load of about 800 MW is presently being evacuated through the 400 kV Kaiga–Narendra D/C lines. In the event of tripping of either Kaiga–Narendra circuit, the evacuation capability from the Kaiga 400 kV switchyard would be severely constrained, with the possibility of overloading of the remaining circuit and consequential generation/load curtailment at KGS.
Further, on 30.06.2026, the Kaiga–Narendra Line-2 tripped, resulting in the entire power flow shifting to Kaiga–Narendra Line-1. To limit loading on the remaining circuit, generation at Kaiga was reduced and power flow through the 220 kV Kaiga–Kadra and Kaiga–Kodasalli lines was also reduced. Although the situation was normalized after rectification within about 8 hours, recurrence of a similar contingency would pose operational difficulties.

In view of the above, KPTCL is requested to expedite restoration of the 400 kV Kaiga–Guttur D/C lines and furnish the expected completion schedule. Pending restoration, SRLDC is requested to regulate the power flow through the 220 kV Kaiga–Kadra and Kaiga–Kodasalli lines so as to avoid overloading of the 400 kV Kaiga–Narendra D/C lines.

The matter is submitted for deliberation and appropriate action by the OCC Forum

**Deliberations:**
Covered at Agenda item 14

## 15. Tripping of 765KV-Ariyalur-NCPS line (Follow up item)

a) On 18.05.2026, 765 kV Ariyalur–NCPS-1 tripped at 23:30 hrs due to multiple insulator decappings. During the antecedent condition, 765 kV Ariyalur–NCPS-2 was already under outage. Consequently, the outage of the only available source resulted in complete outage of the 765 kV NCPS Pooling Station and 765 kV NCPS Generating Station, leading to a generation loss of about 520 MW.
b) It was observed that the 765 kV Ariyalur–NCPS corridor has experienced repeated outages due to Y-N faults, low $SF_6$ gas pressure, and insulator decapping at various locations. During the calendar year 2026, 765 kV Ariyalur–NCPS-2 and 765 kV Ariyalur–NCPS-1 remained under outage for about 50 days and 39 days, respectively, resulting in prolonged reduction in evacuation reliability from the NCPS complex.
c) During the 240$^{th}$ OCC, TANTRANSCO/TNSLDC informed that the recurring insulator failures were predominantly associated with Deccan make polymer insulators, which were suspected to have design-related deficiencies. It was further informed that laboratory testing of the failed insulators had been initiated in coordination with the manufacturer.
d) SRLDC observed that the 765 kV Ariyalur–NCPS corridor and the 400 kV Manali–Puliyanthope corridor presently do not have adequate N-1 reliability, and that outages on these corridors result in generation loss from the NCPS complex.
e) The 240$^{th}$ OCC advised TANTRANSCO/TNSLDC to:

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- ✓ Expedite the 400 kV Manali–Puliyanthope LILO at NCPS and furnish the updated implementation timeline.
- ✓ Submit the laboratory test results, root cause analysis, and proposed mitigation measures for the recurring failures of Deccan make polymer insulators.
- ✓ Address the recurring outages on the 765 kV Ariyalur–NCPS corridor on priority to improve corridor reliability and avoid recurrence of generation loss.

f) All transmission utilities were also advised to verify the health and performance of Deccan make polymer insulators installed in their transmission systems and take suitable preventive measures, wherever required.

➢ ***TANTRANSCO/TN SLDC may respond***

**Deliberation/Conclusion:**

- ➢ TNSLDC informed that, based on the results of the laboratory tests, replacement of all the 765 kV insulators along the 765 kV Ariyalur–NCPS corridor has been proposed. The proposal has been submitted to the higher management for approval.
- ➢ Regarding the LILO works of the Manali–Puliyanthope line, TNSLDC informed that the same is presently under the tendering process.

## 16. Persistent Overloading of Critical ISTS Corridors in Tamil Nadu & Karnataka under High RE Injection Scenario (Follow up item)

a) The issue of persistent overloading of critical ISTS corridors/ICTs under high Renewable Energy (RE) injection scenarios in Tamil Nadu and Karnataka was deliberated in the 239th and 240th OCC Meetings. Based on the operational analysis presented by SRLDC, it was observed that increasing RE power injection from the State transmission network into the ISTS has resulted in sustained overloading of critical ISTS corridors/ICTs, N-1 violations, voltage management issues, and reduction in the export capability (TTC/ATC) of the Southern Region.

b) During the 240th OCC, TNSLDC highlighted that transparent SCADA data reporting from RE generators, particularly wind generators, is essential for accurate forecasting and demand management. SRLDC reiterated that large-scale RE injection from the State network into the ISTS, beyond the planning assumptions, continues to cause overloading of critical ISTS corridors/ICTs and voltage management issues. It was further highlighted that the 765 kV Raigarh–Pugalur HVDC is presently unable to operate in the reverse power flow direction and, under high RE injection scenarios, the Southern Region is likely to lose about 3000 MW of export capability. KAR SLDC informed that delays in transmission augmentation due to RoW constraints, inadequate reactive power support from RE generators, and pending implementation of network strengthening works are contributing to the overloading of critical ISTS corridors.

c) Accordingly, TNSLDC was advised to furnish the location-wise details of the 3 GW RE capacity connected to the STU network during FY 2025-26, along with the associated evacuation arrangements, and to convene a coordination meeting involving TANTRANSCO, CTUIL, SRLDC and SRPC to identify suitable medium- and long-term mitigation measures. TANTRANSCO and KPTCL were advised to expedite transmission augmentation works and implementation of reactive power compensation measures, including capacitor banks and STATCOMs, to mitigate overloading of critical ISTS corridors and ICTs under high RE injection scenarios.

d) KAR SLDC was advised to furnish the reconciled location-wise details of RE capacity integrated during FY 2025-26, expedite implementation of the FTC procedure for new RE connectivity, and continue follow-up to ensure compliance with reactive power requirements by RE generators.

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e) SRLDC was also advised to prepare a draft Standard Operating Procedure (SOP) for operation of ICTs during overloading conditions arising due to high RE injection from the State network and place the same before the Forum for consideration. Until finalization of the SOP, the concerned SLDCs shall continue to comply with the real-time operational directions issued by SRLDC to maintain secure and reliable grid operation.

***TNSLDC/TANTRANSCO, KAR SLDC/KPTCL & SRLDC may update the forum.***

**The agenda was deliberated in detail during the 58th SRPC–55th TCC meeting. The Minutes of Meeting (MoM) of the said meeting are awaited.**

## 17. Noncompliance of IEGC-2023 Regulation 40 on Periodic Testing of Generators & HVDC

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*"

- ✓ 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.
- ✓ Further, vide letter dated 03.06.2025, 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.
- ✓ Subsequently, vide letter dated 27.05.2026, 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.
- ✓ Further, vide letter dated 27.05.2026, 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).
- ✓ In view of the above, a special meeting with all conventional generators in the Southern Region was held on 18.06.2026 to discuss compliance with the periodic testing requirements mandated under the IEGC.
- ✓ A special meeting with all conventional generators in the Southern Region was held on 18.06.2026 to discuss compliance with the periodic testing requirements stipulated under the IEGC, and the Minutes of Meeting (MoM) were issued on 02.07.2026. The periodic testing schedule for the Southern Region for the 2024–29 control period is enclosed as (***Annexure-17a***)**.** All GENCOs were requested to review the

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schedule and communicate any changes/updates to seoprnsrpc-ka@nic.in and srpc.operation@gmail.com for necessary action.

- ***May be discussed.***

**Deliberations/Conclusion**

SRPC emphasized that periodic testing should not be treated merely as a regulatory compliance requirement. It was highlighted that the testing and validation of governor response, PSS and other associated models are important for ensuring the actual performance and reliability of generating units and, consequently, grid security. In this regard, all generators were requested to strictly adhere to the prescribed periodic testing schedules and complete the tests within the stipulated timelines.

## 18. SPS at 220kV Pothencode Substation (Follow up item)

a) KSEBL vide letter dated 18.05.2026 informed that power is presently evacuated from the PGCIL Sub-station to 220kV Pothencode Substation through feeders 2TVPC#1, 2TVPC#2, 2TVPC#3 and 2TVPC#4. After implementation of the scheme approved by CEA, feeder 2TVPC#4 will no longer be available for power evacuation.

b) In the absence of feeder 2TVPC#4, the major load of Pothencode Substation will have to be supplied through feeders 2TVPC#1, 2TVPC#2 and 2TVPC#3. These feeders are strung with single moose conductor having a current carrying capacity of 798 A each. In the event of tripping of any one of these feeders due to fault, the remaining two feeders may get overloaded, which may lead to conductor snapping of the live feeders.

c) In order to avoid such a contingency, it is proposed to implement a Special Protection Scheme (SPS). Accordingly, the SPS proposed to provide overload setting logic for feeders 2TVPC#1, 2TVPC#2 and 2TVPC#3 at 220kV Pothencode Substation and proposed to be wired for load relief through 110kV feeders 1PCAT#1 & 2 and 1PCPP#1 & 2.

d) In 240$^{th}$ OCC, Kerala SLDC informed that the SPS implementation work has been completed. However, the SPS tripping test has been scheduled for 15.07.2026. Upon successful completion of the testing, the results/status shall be communicated to SRPC and SRLDC.

- ***KSEBL may update the status of SPS implementation***

**Deliberation**

- ✓ SRLDC informed that the test results pertaining to the implementation of the SPS have not yet been received from KSEBL. In response to SRLDC's query regarding whether end-to-end testing of the SPS was carried out, KSEBL informed that the testing was conducted at the line level and that the SPS load has also been integrated with the existing SPS. KSEBL further informed that the SPS has been in service since 15.07.2026 and assured that the test results/report would be shared with SRPC/SRLDC.

## 19. NTPC Agenda

### Item 1: House Load Operation Test of NTPC Kudgi Unit-1 Prior to Capital Overhauling

NTPC Kudgi has informed that Unit-1 will be taken up for Capital Overhauling during August 2026. Prior to shutdown, a House Load Operation (HLO) test is proposed to validate the unit's house load capability. The test will be conducted by maintaining the unit at 400 MW, followed by de-synchronization from the grid after obtaining code from SRLDC. The unit load will automatically reduce to 30 MW as per the con-

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figured logic and will remain in house load mode for 15–30 minutes. Thereafter, the unit will be re-synchronized with the grid after obtaining code from SRLDC, following which the unit will be shut down for the planned overhaul. The forum may note the proposed House Load Operation test.

**Item 2: Deliberations:**

- Forum approved the same and requested NTPC Kudgi to share the procedure after successful completion of the House Load Operation Test of NTPC Kudgi Unit-1.

**Item 2: Intimation of Pre-Overhaul Performance Testing of NTPC Kudgi Unit-1**

NTPC Kudgi has informed that pre-overhaul efficiency tests of Unit-1 are proposed to be carried out by a third-party agency prior to the Capital Overhauling. For conducting the tests, the unit is required to operate continuously at full load for four hours on each of two days. The exact test dates will be intimated one week in advance. The forum may note the same.

**Deliberations:**

- NTPC Kudgi requested for switch off AS Down, SCUC Down, and SCED Down during the test duration. It was also stated that SRAS/FGMO would be switched off after obtaining clearance from SRLDC/NLDC prior to commencement of the test.
- NTPC Kudgi further informed that sufficient schedule from the beneficiaries was available for the station to carry out the Pre-Overhaul Performance Testing of Unit-1. They requested that the tests be conducted on 13.08.2026 and 14.08.2026, for 4 hours on each day during the evening peak hours.

**Conclusion:**

- Forum approved the Pre-Overhaul Performance Testing of NTPC Kudgi Unit-1 for 4 hours each on 13.08.2026 and 14.08.2026, during evening peak hours.

**.Item 3: Status of 765 kV New Narendra (Kudgi–PGCIL) – Pune Transmission Line and Enhancement of SR–WR Transfer Capacity**

NTPC Kudgi has informed that due to the outage of the 400 kV Kudgi–Kolhapur D/C transmission line, generation from NTPC Kudgi had to be restricted on 22.07.2026 and 23.07.2026 owing to transmission constraints. In this regard, NTPC has requested that the present status of erection and commissioning of the 765 kV New Narendra (Kudgi–PGCIL) – Pune transmission line and the enhancement of the SR–WR corridor transfer capacity be updated in the forum and that the associated works be expedited to facilitate early enhancement of transfer capability.

**Deliberations:**

- As per the update in the 55$^{th}$ TCC/ 58$^{th}$ SRPC meeting, 765 kV New Narendra (Kudgi–PGCIL) – Pune transmission line is expected to be commissioned by October 2026.

**Item 4: Rescheduling of Annual Overhaul of NTPC Ramagundam Unit-5 (500 MW)**

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The Annual Overhaul of NTPC Ramagundam Unit-5 (500 MW) was approved during the 240th OCC meeting from **15.08.2026 to 28.09.2026 (45 days)**. NTPC has now requested approval for rescheduling the outage from **18.08.2026 to 26.09.2026 for a period of 40 days**, in place of the previously approved schedule commencing on 15.08.2026. The forum may consider the request.

**Deliberations:**

Covered at Agenda item no. 25

**Item 5: Preponement of First Annual Overhaul of NTPC Telangana Unit-1 (800 MW)**

The Annual Overhaul of NTPC Telangana Unit-1 (800 MW) was originally approved during the 238th OCC meeting from **01.06.2026** for a period of **40 days**. Subsequently, during the 239th OCC meeting, it was informed that the overhaul had been tentatively rescheduled to commence from **01.11.2026** for **65 days** to facilitate Boiler Superheater/Reheater (SH/RH) modification works by the OEM, **M/s BHEL**.

NTPC Telangana has now informed that, based on the revised Boiler SH/RH modification schedule finalized by M/s BHEL, the required resources can be mobilized by **15.09.2026**. Accordingly, approval is requested to prepone the first Annual Overhaul of Unit-1 to **15.09.2026** for a period of **45 days**, in place of the previously proposed schedule from November 2026. The forum may consider the request.

**Deliberations:**

Covered at Agenda item no. 25

## 20. Follow up on Energization of 230 kV BHAVINI – Kancheepuram Line-I & II for PFBR Commissioning Support

a) The issue regarding operationalization of 230 kV BHAVINI–Kancheepuram Line-I & II for PFBR commissioning support was deliberated in the 239th OCC Meeting, wherein the forum emphasized expeditious operationalization of the lines considering the national importance of the PFBR project. It was also decided that BHAVINI, TNSLDC, MAPS and SRLDC shall jointly study the proposed injection pattern and assess any system modifications required prior to commencement of power injection.

b) During the meeting, BHAVINI informed that all commercial clearances and requisite clarifications had been furnished to TANTRANSCO, while TNSLDC informed that the proposal for operational approval had been submitted to the higher management and that approval for charging the feeders was expected shortly.

c) TNSLDC/TANTRANSCO vide mail dtd 24.06.2026 informed to SR II, PGCIL that all the commercial issues were resolved and necessary consent may be forwarded to SRLDC for FTC approval as PGCIL is the bay owner. SR II, PGCIL had concurred for the same, vide mail dtd 27.06.2026

**In 240th OCC,**

- ✓ TNSLDC informed that the phase sequence verification at 230 kV Kancheepuram SS has been completed and the line is expected to be charged shortly.
- ✓ SR-II, PGCIL informed that the required clearance has already been accorded to TANTRANSCO SRLDC informed that the FTC clearance for 230 kV BHAVINI–Kancheepuram

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Line-I & II was issued on 08.07.2026 and that the operational code would be issued upon confirmation of readiness from TANTRANSCO and PGCIL (SR-II).

- ✓ SRLDC further informed that no transmission constraints were observed for the proposed injection pattern, though the 230 kV Kancheepuram–Thiruvalam S/C, 230 kV Kanchi Data CTR–Kancheepuram, and 230 kV Sriperumbudur–Kanchi Data CTR lines would require close monitoring.
- ✓ TNSLDC agreed to carry out a detailed study and furnish its observations

➢ ***TNSLDC, BHAVINI, and SRLDC may update the present status of operational approval, charging of the 230 kV BHAVINI–Kancheepuram Line-I & II feeders, and the study on the proposed injection pattern.***

**Deliberations:**

d) BHAVINI informed that the 230 kV BHAVINI–Kancheepuram Line-I & II feeders were charged from the Kancheepuram end during the previous month. However, subsequent to charging for few hours, the feeders were opened from the Kancheepuram end, as the power flow pattern in the Kancheepuram–Siruseri–BHAVINI corridor changed, resulting in operational concerns in the surrounding network.

e) BHAVINI informed that, as per the PFBR commissioning/start-up protocol, all six evacuation lines from BHAVINI are required to remain connected during the start-up/commissioning phase. It was explained that the availability of all six lines is considered necessary from the reliability perspective including severe under-voltage conditions during contingencies or tripping of any of the incoming/outgoing lines needs to be avoided.

f) TNSLDC presented the load flow study ***(Annexure-20a)*** covering the following three scenarios:

1. 230 kV Kancheepuram–BHAVINI Line-I & II open, without BHAVINI generation
2. 230 kV Kancheepuram–BHAVINI Line-I & II closed, without BHAVINI generation and
3. 230 kV Kancheepuram–BHAVINI Line-I & II closed, with BHAVINI generation.

**Without BHAVINI Generation**: TNSLDC informed that, with the Kancheepuram–BHAVINI feeders open, Sholinganallur and Kaluvinthapattu are the major sources feeding the Siruseri–BHAVINI–Arani corridor. The loading of the Kaluvinthapattu–Siruseri line was observed in the range of about 200–230 MW, while the Sholinganallur–Siruseri line was loaded at around 200 MW.

TNSLDC further explained that, with the Kancheepuram–BHAVINI feeders closed, the power flow pattern in the Kaluvinthapattu–Siruseri–BHAVINI–Kancheepuram corridor changes. Under such conditions, in the event of a contingency such as tripping of the Kaluvinthapattu–Siruseri line, the Sholinganallur–Siruseri line may not satisfy the N-1 criterion and may exceed its thermal limit. Accordingly, the Kancheepuram–BHAVINI feeders were being kept open during such operating conditions to avoid constraints in the network.

**With BHAVINI Generation:** TNSLDC informed that, upon commencement of BHAVINI generation, the power generated at BHAVINI would support the loads at Kancheepuram, Arani and Siruseri, thereby reducing the loading of the Sholinganallur and Kaluvinthapattu sources by approximately 50%. It was further informed that, by the time of commencement of BHAVINI generation,

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additional 400 kV transmission lines planned by TANTRANSCO are also expected to be commissioned, which would further strengthen the network and improve the reliability of evacuation from BHAVINI.

g) BHAVINI informed that the reactor coolant pumps are presently being fed through the available transmission lines and that any disturbance resulting in low voltage could lead to tripping of the pumps, which may affect the stability of the electrical systems associated with the reactor. In view of the reliability requirements, BHAVINI stated that its management is insisting on the availability of all six lines connected to BHAVINI. It was also brought out that, while the voltage at the Kancheepuram end was observed to be around 220 kV and above, the voltage at the BHAVINI end was in the range of 207–210 kV.

h) TNSLDC informed that, with all six lines connected to BHAVINI, the loading was around 50% of SIL. The principal operational concern was observed during peak hours, when Siruseri acts as an importing bus and Arani as an exporting bus towards BHAVINI. Under such conditions, as per the instructions of the Sub-LDC, the Kancheepuram–BHAVINI line is being kept open to avoid system constraints. During day/solar hours, no such constraint was observed and the line could be kept closed. TNSLDC further clarified that merely closing the Kancheepuram–BHAVINI line would not by itself resolve the low-voltage issue at BHAVINI. However, TNSLDC assured that all possible operational measures would be examined, in coordination with the Sub-LDC and BHAVINI, to address the voltage concerns and assess the feasibility of keeping the line in service.

i) SRLDC concurred with the observations of the TNSLDC load flow study. It was informed that, on the day under consideration, the loading of the Kancheepuram–BHAVINI line was only around 1–2 MW, and no significant increase in the loading of the Kaluvinthapattu–Siruseri line attributable to charging of the Kancheepuram–BHAVINI line was observed. SRLDC further observed that the impact of closing the Kancheepuram–BHAVINI line on the Kaluvinthapattu–Siruseri line flow was negligible under the prevailing conditions.

j) SRLDC further observed that, as BHAVINI is presently not drawing significant power, the requirement for keeping all six lines in service needs to be assessed with reference to the actual power requirement during the start-up and commissioning stages. It was suggested that BHAVINI clarify the specific reliability/protocol requirement for availability of all six lines, including the stage of commissioning/start-up at which such requirement becomes mandatory.

k) SRLDC also suggested that BHAVINI explore the feasibility of closing the bus coupler and furnish the proposed injection methodology at the earliest, considering the tentative commissioning schedule of December 2026. BHAVINI informed that the FTC application for the bus coupler had already been submitted; however, the same was delayed due to a zone-related issue with TANTRANSCO, which is expected to be resolved shortly. BHAVINI further informed that the proposed injection methodology would be submitted to the forum after obtaining approval from its higher management, tentatively by the next OCC meeting.

l) SRPC sought clarification from BHAVINI as to whether the requirement for six lines was primarily associated with low-voltage concerns during reactor coolant pump operation or with the applicable commissioning/operational protocol, and whether the requirement applied during pre-commissioning activities as well as during actual generation.

m) BHAVINI clarified that the requirement applies to both stages and stated that, as per the AERB-related requirements cited by BHAVINI, all six lines are required to be in service from reactor start-up, during pre-commissioning quality tests, and during generation. However, BHAVINI informed

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that a special consent/approval from its Corporate Office had been obtained to proceed with the ongoing pre-commissioning tests with four lines in service.

n) It was observed that, in the case of other nuclear generating stations such as Kudankulam and Kaiga, availability of four evacuation lines had been considered sufficient from the grid connectivity/reliability perspective. Accordingly, BHAVINI was advised to obtain clarification from its higher management regarding the specific requirement for availability of all six lines, particularly whether such availability is mandatory from the pre-commissioning/reactor cooling stage itself or from the commencement of generation, and furnish the clarification to the forum.

**Conclusion/Action to be taken:**

o) BHAVINI shall obtain clarification from its higher management regarding the requirement for availability of all six evacuation lines during pre-commissioning and generation stages and furnish the same to the forum.

p) TNSLDC, in coordination with SRLDC, Sub-LDC and BHAVINI, shall examine the feasibility of keeping the 230 kV BHAVINI–Kancheepuram Line-I & II in service under different system conditions and evolve suitable operational measures.

q) BHAVINI shall expedite the bus coupler FTC and submit the proposed injection methodology, duly approved by its higher management, in the next OCC meeting.

## 21. Grid operational Issues – SRLDC Concerns

### A) Follow up on Staggering of loads in Southern Region

a) The issue regarding sharp evening demand reduction in the Southern Region around 17:45–18:00 hrs leading to over-frequency and over-voltage conditions was deliberated in the 238$^{th}$ & 239$^{th}$ OCC meeting. The forum noted that, pursuant to the deliberations in the 238$^{th}$ OCC Meeting, NLDC, vide letter dated 27.05.2026, had advised APSLDC and KAR SLDC to implement suitable measures for staggering agricultural load switching schedules to smoothen the demand profile and avoid abrupt demand variations affecting secure grid operation.

b) During the 239$^{th}$ & 240$^{th}$ OCC Meeting, APSLDC and KAR SLDC informed that corrective measures had been initiated and some improvement in the demand profile had been observed. However, SRLDC observed that significant demand fluctuations continued to occur during the evening period and emphasized the need for further refinement of the staggering mechanism.

c) In 240$^{th}$ OCC, it was observed that significant action is still required from APSPDCL. APSLDC informed that a response from APSPDCL is expected within the next two days, based on which further mitigation measures would be implemented within a week

d) Further, APSLDC & KAR SLDC shall share the mitigation measures implemented for refining the staggered agricultural load switching, through official communication to SRPC/SRLDC

- ***APSLDC & KAR SLDC may update on the action taken, the effectiveness of the measures implemented, and the present status of evening demand variations***

**Deliberations**

(i) APSLDC informed that, following the request made to APSPDCL, staggering of the irrigation pump (IP) loads has been implemented to some extent. Consequently, the evening peak associated with the IP load, which was earlier observed around 17:45–18:15 Hrs, has reduced by approximately 400–500 MW, with an overall reduction of around 400 MW in the evening peak load.

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(ii) KARSLDC informed that an instantaneous drop of around 800–900 MW was generally being observed at about 18:00 Hrs. Following the implementation of step-wise staggering of IP loads, the instantaneous load drop has reduced, with the effect now being observed over multiple time blocks.

## 22. Status of spares of Talcher-Kolar HVDC system

**It is noted that there are 4 Spares for Talcher-Kolar HVDC system**

**240th OCC Update:**

| Spares at Tacher end | Spares at Kolar end |
|---|---|
| Repaired Convertor Transformer reached Talcher in the last week of June 2026. It was dispatched from Kalva, Mumbai. It is planned is to be taken in to service in place of another in-service faulty transformer | One healthy transformer is available at Kolar end |
| Another faulty Convertor Transformer was transported from Talcher site and reached TARIL, Ahmedabad for repairs. | |
| Third Faulty Convertor Transformer is under tendering stage. The open tender would be awarded to the successful bidder based on the outcome. | |

➢ ***SR II, PGCIL may respond***

## 23. Pending Items from Previous OCCs

| S. No | Items to be discussed | Status/Remarks |
|---|---|---|
| 1 | **Frequent switching of Bus Reactors at Munirabad and Raichur sub-station on voltage regulations.**<br>**For Discussion:**<br>**JSWEL may update the following:**<br>a) The budgetary approval for the proposed works has been obtained. The procurement process is under progress, and the Power Order (PO) is being finalized. The compensators are expected to be delivered by December 2026/January 2027.<br>b) The shutdown of SBU-II Unit-1 is already under shutdown to facilitate the inspection of the UAT tap settings.<br>c) Technical issues in integrating the ABB Master PPC with the existing PPC of the renewable generating stations were observed. While the Wind PPC is already in service, the integration of the Master PPC with the existing PPCs is under progress. The OEM (ABB) team is expected to visit the site to complete the integration activities. JSW Energy informed that the commissioning of the Master PPC is expected to be completed by the third week of August 2026.<br>**SR I PGCIL/CTUIL may update the augmentation of ICT & new STATCOM at Munirabad** | ***SR I PGCIL/ JSWEL*** |

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| 2 | **Low Voltages in Karnataka during Morning Peak Period**<br><br>**The status/action may be taken for the following:**<br>***a)*** Capacitor bank installation & STATCOM implementation (Action plan along with capacity)<br>b) The mock reactive energy billing for the month of February 2026 had been generated and actual billing for March 2026 would be issued shortly in line with the applicable notification. In this regard, the effectiveness of RE reactive power compliance mechanism and feedback on billing implementation may be shared.<br>c) KPCL clarified that it is not feasible for YCCPP to operate in synchronous condenser mode, as the required augmentation/modification of the generating unit assembly is not technically feasible. KPCL was advised to furnish the OEM's technical verification and detailed study report in support of the above.<br>d) Steps taken to ensure reactive compensation planning at connectivity/design stage based on system studies. | ***SRLDC/KARSLDC/KPCL.*** |
| 3 | **Pending Issues w.r.t Tamil Nadu system Control Area**<br>**A. Outage of Kadamparai Units**<br>• At present, three units are under outage due to stator earth faults, and one unit is under outage due to a rotor earth fault. As per the latest status received from the Kadamparai field authorities, the expected restoration schedule is as follows:<br>✓ Unit 1: March 2027<br>✓ Unit 2: December 2026<br>✓ Unit 3: January 2027<br>✓ Unit 4: December 2026<br>• TN shall expedite the restoration of the Kadamparai units and keep the Forum apprised of the progress. | ***TNSLDC/ Kadamparai*** |
| | **B. Low Voltage profile in 220/400 kV switchyard at NNTPS**<br>**For Discussion:**<br>• TN SLDC informed that the Nagai Power Plant is presently providing about 30–40 MVAr of reactive power support at a generation level of around 90 MW.<br>• With regard to the proposed 528 MVAr capacitor banks, TNSLDC informed that the revised cost estimate is under approval, following which the re-tendering process will be initiated under the new Government of Tamil Nadu. | ***TNSLDC/SRLDC*** |
| | **C. High loading of 400kV Kanarpatty- S/C**<br>**For Discussion:**<br>a) **Temporary Solution**:<br>• TNSLDC informed that a detailed study would be carried out before taking up the proposal as operating may lead to additional RE injection into the ISTS through the Madurai ICTs.<br>b) **SPS Implementation**<br>• TN SLDC vide mail dtd 22.06.2026 informed that SPS was implemented on 12.06.2026. All the relevant logic was shared. | ***TANTRANSCO/TNSLDC*** |

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| | c) **Permanent Solution**<br>• In 240h OCC, SR II, PGCIL informed that works are progressing as per approved schedule. The targeted completion is December 2026. Further, it was concluded that TN SLDC and SR II PGCIL may discuss together in completing the Bay construction at the earliest.<br>**Additionally, TN SLDC may update on:**<br>• RE Monitoring & Compliance - Provide action plan for upgrading from AMR-based to real-time RE SCADA data acquisition. Plan installation of PMUs and integration, including the required hard-ware arrangements, at all major RE pooling stations.<br>• Obtain compliance reports from RE generators on LVRT/HVRT/MVar support as per CEA connectivity Reg.<br>• Furnish a detailed incident report for the trippings on 23rd Aug 2024 and 24th Sep 2025 to SRPC<br>In 240th OCC, TN SLDC informed that the RE developers have chal-lenged the compliance requirements before the court. However, it was assured that they issue the necessary compliance for installation of PMUs at the identified RE pooling stations and update the status in the next OCC. | ***/PGCIL/SRLDC*** |
| D | **Implementation of 3rd ICT (315MVA) at 400/230kV Neyveli TS 2:**<br>• Pre-foundation works for the ICT are targeted for completion by 31.07.2026. Erection and commissioning of the ICT are planned to be completed by November 2026, after completion of the civil works, including the foundation curing period.<br>• With regard to the permanent works, NLCIL informed that the ten-der had progressed up to the Pre-Qualification Requirement (PQR) evaluation stage. However, the bidder was disqualified during the evaluation process. Accordingly, the tendering process is required to be re-initiated. | ***TPS II/TAN-TRANSCO*** |
| E | **Sparing of one number of 315 MVA, 400/ 230 KV ICT at Kayathar 400KV**<br>**For Discussion:**<br>a) The tendering process for sparing of the 315 MVA, 400/230 kV ICT is still under progress & transportation of the ICT is envisaged within one month.<br>b) Further, it was informed that the tender is presently under evaluation stage. TANTRANSCO may update on procurement of new ICT<br>c) PGCIL informed that only the Memorandum of Understanding (MoU) remains to be executed from their end. | ***TNSLDC/PGCIL*** |

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| 4 | **Power Shortage scenario of Puducherry**<br>**PED to update the following:**<br>• The administrative approval for the proposed 35 MW BESS is awaited prior to award of the work. Subsequently, a separate proposal will be submitted to the Government for approval of the balance 15 MW BESS.<br>• Additional connectivity to Yanam has been sought from Gollapalem Substation & the revised estimation is awaited from CGM(Commercial), APTRANSCO. In 240th OCC, PED informed that the revised estimate is expected shortly.<br>• With regards to temporary diversion of 132 kV Prathap Nagar-Yanam interstate feeder, APTRANSCO informed that, as discussed in the CEA meeting, the construction of one multi-circuit tower is yet to be completed. Upon completion of the tower, the 132 kV Prathap Nagar–Yanam feeder will be shifted to the 132 kV Kakinada–Yanam feeder. APTRANSCO was advised to expedite the pending works and complete the restoration at the earliest | ***APSLDC/ PED*** |
| 5 | **Reliable Power Supply to Puducherry & associated system Strengthening**<br>**For Discussion:**<br>• PED, Puducherry informed that the transformer augmentation at Thondamanatham is under progress and is tentatively targeted for completion by February 2027.<br>• With regard to the proposed works at Bahour and Villianur, it was informed that the tendering process will be initiated after obtaining approval from the Government of Puducherry, with a tentative target of March 2027. In respect of Karaikal, approval for the required Government land is still awaited.<br>• SR II PGCIL informed that the proposal has been forwarded to the Corporate Centre Engineering (CCE) for approval. | ***SR II PGCIL/ PED*** |
| 6 | **Submission of Static IPv4 Address - SRLDC Outage Portal Access**<br>• **SRLDC Outage Portal** (https://dailyreport.srldc.in/REPORTINGUI-UAT/) is being secured through implementation of IP whitelisting. Post implementation, access will be permitted only from whitelisted Static IPv4 addresses to enhance cybersecurity.<br>• All users/entities are requested to submit their Static IPv4 address details at the earliest to **srldcoutage@grid-india.in**, along with an authorization letter for the respective IP address.<br>• Early submission is requested to ensure uninterrupted portal access and compliance with cybersecurity requirements & for checking the current IPv4 address, users may visit: www.whatismyipaddress.com<br>**For Discussion:**<br>SRLDC responded that the matter would be discussed internally, and an appropriate deadline for submission of the Static IPv4 address details and migration to the portal would be communicated to all constituents | ***SRLDC/Entities who has not furnished the IP addresses*** |

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| 7 | **Operational Constraints at Bhadrawati Back-to-Back HVDC Link**<br><br>**Background**: Operational issues, including power fluctuations and harmonic concerns, were observed at the Bhadrawati B2B HVDC link. In earlier OCCs, Southern Regional Load Despatch Centre reported harmonic levels exceeding limits at Bhadrawati end, and PGCIL informed that the matter has been referred to Corporate Office.<br><br>• In 240th OCC, SR I, PGCIL informed that PGCIL (WR) is scheduled to avail a Line Clearance (LC) from 22.07.2026 to 24.07.2026 to carry out the required works on all eight breakers associated with the Bhadrawati Back-to-Back HVDC link. | ***SR I, PGCIL & SRLDC may respond*** |

**Agenda No 23.1 – 23.6:**

- The updates pertaining to Agenda Nos. 23.1 to 23.6 were deliberated during the 58th SRPC–55th TCC meeting. The Minutes of Meeting (MoM) of the said meeting are awaited.

**23.6 Submission of Static IPv4 Address - SRLDC Outage Portal Access**

- It was concluded that SRLDC will come up with an appropriate deadline for submission of IPv4 address details and migration to the portal would be communicated to all constituents by next OCC meeting.

**23.7 Operational Constraints at Bhadrawati Back-to-Back HVDC Link**

**Deliberations:**

WR PGCIL informed that harmonic measurements were carried out over a period of one month, and the required bay shutdown was availed during August 2026 for measurement of the characteristic harmonics of the HVDC link. The measurement results have been submitted to the PGCIL Corporate Office for review and approval. WR PGCIL informed that, upon receipt of approval, the detailed report would be submitted to the forum, tentatively by the end of August 2026.

**Conclusion/Action to be taken:**

**Upon approval from the Corporate Office, WR PGCIL shall prepare the detailed harmonic measurement report and present an abstract of the same in the next OCC meeting.**

## 24. Outage Planning of Transmission Lines and Elements

***24.1 Monthly outages of Transmission Lines and Elements proposed in the Outage Coordination Meeting:***

(i) The outages proposed for the month of ***September 2026*** in respect of Transmission Lines and Elements, State Transmission Utilities, PGCIL, other transmission licensees, and by other regions would be processed and discussed in the Outage Coordination meeting scheduled on ***10.08.2026 through VC***.

**Outage statistics for July 2026:** SRLDC furnished the details via e-mail dated 01.08.2026, which are in ***(Annexure-24.1a)*** The analysis will be carried out during the Outage Coordination Meeting on 10.08.2026.

(ii) The list of outages of Transmission Lines and Elements, proposed for **September 2026**, will be

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mailed to OCC Google Group after closing the outage submission window on **03.08.2026 (24:00 hr)** in the outage Portal.

- ***All the entities including generators are requested to ensure participation of their representatives in the Outage Coordination Meeting scheduled on 10.08.2026.***

- ✓ The outages proposed for the month of September 2026 in respect of Transmission Lines and Elements, State Transmission Utilities, PGCIL, other transmission licensees, and by other regions was processed and discussed in the Outage Coordination meeting was held on 10.08.2026 through VC.
- ✓ SRLDC had furnished outage statistics via e-mail dated 01.08.2026 & subsequently discussed in the Outage coordination meeting.
- ✓ Total SR S/D Proposals: Received 584 (Approved:488, Rejected: 91 & 5 S/Ds was apprised to OCC Forum for discussion)
- ✓ Other Inter Regional S/Ds: ER: Received :4 (Approved: 1), WR Received: 15 (Approved: 10)

**The following agenda items came for discussion from the Outage co-ordination meeting:**

1. As part of the refurbishment of the 400 kV Bhadrawati HVDC Bipole, WR PGCIL requested the shutdown of the 400 kV Bhadrawati–Ramagundam-1 circuit for replacement of the CLR at Loc. Nos. 465 and 466 and Ckt-2 at Loc. Nos. 320 and 425, as the thermo-scanning reports indicated these locations under alert condition. In this regard, WR PGCIL was requested to provide the technical details and justification for the proposed activity.

**Deliberations:**

- ✓ The representative from Bhadrawati Station informed that harmonic measurements had been carried out under running conditions. It was further explained that, for establishing the background harmonic measurements under no-load conditions, both poles of the HVDC bipole are required to be in block condition while the transmission line remains charged/in service. Under this condition, measurements would be carried out for 2 hours on each circuit, with samples recorded at 10-second intervals. The measurements would be used as a reference for comparison with the measurements to be taken after completion of the refurbishment. It was also informed that the measuring kit/meter would be connected to the secondary side of the CVT.
- ✓ SRLDC raised a concern regarding the adequacy of the proposed measurement duration, particularly if the measurements are intended to form the basis for appropriate harmonic filter design. It was observed that the harmonic profile may vary significantly with the generation and load pattern during solar and non-solar hours, and therefore measurements limited to a few hours during a particular operating condition may not adequately represent the complete range of system operating conditions.

**Conclusion:**

- ***In view of the above, it was concluded that WR PGCIL shall obtain further technical clarification from the OEM regarding the measurement methodology, duration, operating conditions considered, and adequacy of the proposed measurements for assessment/design of harmonic filters.***
- ***WR PGCIL shall present the detailed clarification and proposed methodology in the next OCC meeting for further deliberation.***

## *2. S/D of 400KV-JANAGAON-JULURUPADU (NHAI Diversion works)*

Telangana had requested for Erection of newly proposed tower no. 223(DD+03), 224(DB+0), Circuit-1&2 Stringing between Loc.No.222-225 (1.098KM) and commissioning by NHAI as below

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a) Ckt 1 from 01st Sept to 07th Sept
b) Double ckt from 08th Sept to 19th Sept
c) Ckt 2 from 20th Sept to 21st Sept

**In the Outage co-ordination meeting,**

- ✓ It was highlighted that TG SLDC shall furnish all relevant details, such as the RoW diagram, approvals/clearances, etc., along with an assurance that no further shutdown will be required on the same transmission line for the same/related work. Such proactive coordination with the concerned Project Developer/NHAI shall be undertaken well in advance, prior to approaching the forum for facilitating the shutdown.
- ✓ Further, wherever a long-duration shutdown is availed for such project-related works, it was suggested that any pending AOH/routine maintenance works on the same line may also be suitably clubbed during the shutdown period, wherever technically feasible, so as to avoid repeated shutdowns and optimize the overall outage duration.
- ✓ In the Outage co-ordination meeting held on 09.08.2026, TG SLDC informed that NHAI is not ready to avail in the September month and requested to postpone to the month of November.

**In the OCC Meeting,**

- ✓ TG SLDC assured that, in coordination with NHAI, the RoW diagram, requisite approvals/clearances and other relevant details of the proposed work would be furnished to the forum.
- ✓ TG SLDC further assured that the work would be planned and coordinated with NHAI in such a manner that no further shutdown of the concerned transmission line would be required for the same work.

### *3. S/D of 400KV-SOMANAHALLI-MYLASANDRA-1*

a. KPTCL had requested S/D of Somanahalli-Mylasandra-1 to take up 400kV MC monopole line balance foundation, erection, stringing and destringing work, as this work is mandatory to take up for commission of 400 kV Dommasandra Sub-station from 10.09.2026 for 40 days.

**In the Outage Co-ordination meeting,**

b. It was observed that, the S/D of Kolar-Mylasandra was approved in the month of May 2026 for 40 days. However, KPTCL availed the S/D from 1st Week of August 2026. After revival of Kolar-Mylasandra, it was concluded to facilitate the S/D for Somanahalli-Mylasandra-1.

c. In view of the above, KPTCL was requested to present the status of Kolar-Mylasandra S/D works and the action plan for Somanahalli-Mylasandra S/D related works along with all the approvals & RoW diagram.

d. Subsequently, KAR SLDC shared the Forest clearance/approvals, details of work status of Kolar-Mylasandra , with a plan to revive by 04th Sept 2026.

**In OCC Meeting,**

e. KPTCL informed that, following restoration of the 400 kV Kolar–Mylasandra line, the shutdown of the 400 kV Somanahalli–Mylasandra-1 line is proposed to be availed from 05.09.2026 for taking up the associated works. The action plan for the proposed works was furnished to the forum and is enclosed as **(Annexure-24.1b)**

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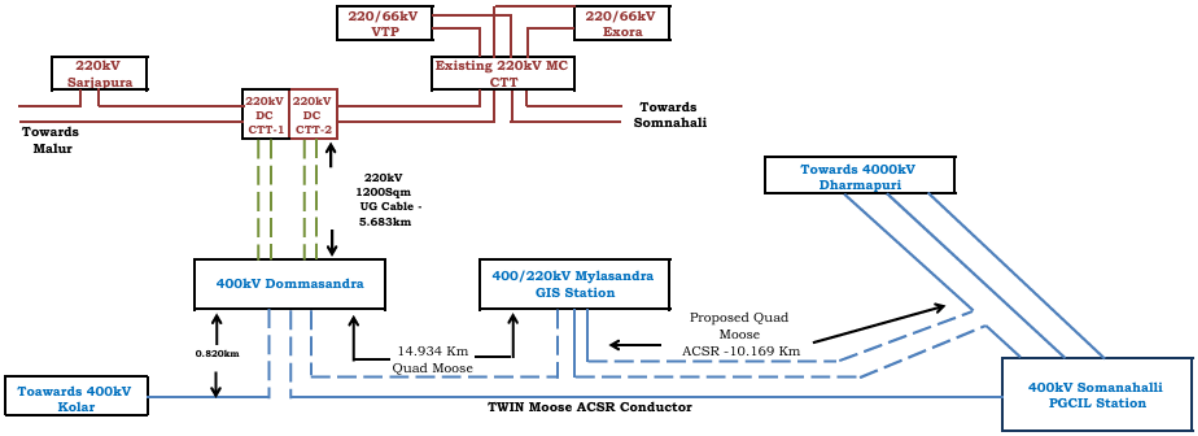


f. Further, KAR SLDC confirmed that all the double-circuit works would be completed by 04.09.2026. Thereafter, the shutdown of the 400 kV Somanahalli–Mylasandra-1 line would be availed for completion of the multi-circuit tower erection and stringing works.

g. Upon completion of the multi-circuit tower erection and stringing works, the Dharmapuri LILO works would be taken up by availing the requisite shut down for a period of 10 days. KAR SLDC informed that the detailed action plan and schedule for availing the shutdown for Dharmapuri LILO works would be finalized and communicated to the forum in due course.

**Conclusion/Action to be taken:**

h. KAR SLDC may avail the shutdown of 400 kV Somanahalli–Mylasandra-1 after restoration of the 400 kV Kolar–Mylasandra line.

i. Further, KAR SLDC was also advised to explore the feasibility of accommodating short-duration shutdowns of the ICTs at Yelahanka and Somanahalli and other transmission elements for maintenance activities, as requested by SR I PGCIL during the Outage Coordination Meeting, to the extent feasible.

j. Further, KAR SLDC shall furnish the weekly progress status of the works and closely monitor the progress in coordination with the concerned field officials, so as to ensure completion of the works within the stipulated schedule.

## *4. Furnishing of Maintenance Proposals Received on Monthly Basis by TANTRANSCO*

**In Outage co-ordination meeting,**

a. It was observed that TNSLDC has been furnishing a relatively large number of outage proposals on a monthly basis for maintenance of EHV transmission elements. The matter had earlier been deliberated in the 57$^{th}$ TCC–54$^{th}$ SRPC Meeting held in March 2026, wherein TNSLDC was advised to formulate a Standard Operating Procedure (SoP) at the higher management level of MD, TANTRANSCO, for systematic planning and execution of annual maintenance of transmission elements.

b. During the TCC deliberations, it was concluded that TANTRANSCO would formulate a comprehensive Standard Operating Procedure (SoP) for planning and execution of maintenance of transmission elements owned by TNEB/TANTRANSCO, with due approval at the appropriate higher management level.

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c. All SR utilities should streamline their maintenance practices by avoiding frequent/monthly shutdowns of EHV elements, optimizing outage duration and adhering to annual/planned maintenance schedules.

**In OCC Meeting,**

d. TNSLDC informed that, pursuant to the directions of the 57th TCC–54th SRPC Meeting, instructions were reiterated to all TNEB officials during the 37th GCC meeting for minimizing outages through Main/Mid/PNOCC/Emergency categories and ensuring strict adherence to the prescribed outage procedure. TNSLDC stated that a copy of the minutes of the 37th GCC meeting would be shared with SRPC/SRLDC.

e. TNSLDC further clarified that, as per the existing TANTRANSCO Code of Instructions, field officers are required to update the relevant registers on a monthly basis regarding the monitoring and maintenance activities, including activities carried out through availing of LCs, for the transmission elements under their jurisdiction.

f. TNSLDC also informed that a separate committee is proposed to be constituted for formulation of a revised SoP for systematic planning and coordination of maintenance activities. Approval from the higher management of TANTRANSCO for constitution of the committee is awaited.

g. KAR SLDC, AP SLDC and KSEBL informed that maintenance activities of transmission elements are generally planned on a quarterly basis, while TG SLDC follows a half-yearly maintenance schedule. SR-I PGCIL and SR-II PGCIL informed that maintenance activities requiring shutdown are generally planned once a year, whereas activities not requiring shutdown are undertaken on a quarterly, half-yearly or monthly basis, as applicable.

h. TNSLDC stated that certain critical transmission elements, particularly those located in areas having higher salinity or pollution levels, require more frequent maintenance. It was also informed that, in some instances, shutdowns could not be availed due to system constraints and were therefore proposed in the subsequent month. It was further stated that critical elements would be identified in line with the directions of the forum and an appropriate SoP would be formulated, subject to approval from the higher management.

i. SE (O, P & C) highlighted the need for early formulation of the SoP, considering its impact on the overall grid operation in Tamil Nadu. TNSLDC was advised to study and adopt suitable practices followed by other States and transmission licensees and formulate a procedure for optimizing shutdown requirements without compromising the required monitoring and maintenance of transmission elements. It was further suggested that, wherever a shutdown is availed, the activities of other concerned wings such as MRT, Communication, Maintenance and Protection may be coordinated and clubbed, wherever feasible, to derive maximum benefit from the shutdown.

j. ED, SRLDC observed that despite TNSLDC availing shutdowns for maintenance activities on a monthly basis, recurring breakdowns have been reported, particularly in and around Chennai. The need for reviewing the effectiveness of the existing maintenance practices and identifying the underlying causes of such recurring failures was emphasized.

k. MS, SRPC informed that the best practices followed by various power entities would be compiled and shared with TNSLDC for consideration while formulating the SoP. It was further suggested that the SoP may incorporate specific provisions for maintenance of critical transmission elements in high pollution/salinity areas, including Chennai, based on site conditions and element criticality. It was also clarified that routine maintenance shutdowns shall not be proposed under PNOCC/Emergency categories, in accordance with the provisions of the outage procedure.

**Conclusion/Action to be taken:**

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l. All SLDCs and transmission licensees (PGCIL, AP, KA, TG & KL) shall share their existing SoP/practices for maintenance of transmission elements with SRPC. SRPC shall compile and share the same with SR constituents for reference.

m. TNSLDC/TANTRANSCO shall expedite formulation of a comprehensive SoP for systematic maintenance planning, duly considering critical elements, site-specific requirements and advance scheduling of shutdowns. Suitable practices of other entities, including coordination of activities of concerned wings during shutdowns, may be incorporated to optimize shutdown requirements.

### *24.2 Consolidated outage calendar for proposed diversion works by project developers*

a) The Ministry of Power (MoP)/Central Electricity Authority (CEA) has issued a Standard Operating Procedure (SoP) ***(Annexure-24.2a)*** for execution of infrastructure diversion works involving transmission lines, emphasizing advance planning, coordination among stakeholders, and timely completion of diversion works with minimum impact on grid operation.

b) It has been observed that, despite transmission outages being facilitated by SRPC/SRLDC through extensive coordination, infrastructure diversion works are frequently deferred or rescheduled. In addition, repeated shutdowns are often sought on the same transmission element by different project developers/concessionaires due to inadequate planning and coordination. Such practices lead to inefficient utilization of approved shutdowns, affect the execution of other parallel outage activities, necessitate frequent revisions to the outage programme, result in ATC/TTC curtailment on critical inter-regional transmission corridors, generation backdown on account of transmission constraints, and adversely impact secure and reliable grid operation.

c) To facilitate advance and coordinated outage planning and effective implementation of the MoP/CEA SoP, all STUs and Transmission Licensees are requested to furnish a consolidated outage calendar for FY 2026-27 covering all planned infrastructure diversion works requiring transmission outages, indicating the transmission element, project developer/concessionaire, purpose of outage, proposed shutdown period, expected completion schedule, and present status of the works. The calendar shall be updated periodically to facilitate coordinated outage planning and execution.

- ***STUs/SLDCs/Transmission Licensee may respond***

**Deliberations:**

d) SR-I, PGCIL informed that, in diversion works involving multiple concessionaires, the major constraint is the difference in their respective work completion schedules, resulting in shutdowns being sought separately. PGCIL informed that the concessionaires have been advised to explore the possibility of clubbing the shutdown requirements, wherever feasible.

e) MS SRPC emphasized that, instead of receiving shutdown requirements from individual concessionaires on a case-to-case basis, a comprehensive line-wise outage plan for the entire FY 2026-27 is required, indicating all proposed diversion works, concessionaires involved, locations and tentative schedules. This would provide visibility of multiple shutdown requirements on the same transmission element and facilitate coordinated outage planning. Further, it was highlighted that advance availability of such information is essential for assessing the requirement of Emergency Restoration System (ERS) or other contingency arrangements for critical transmission lines, wherever required.

f) SRLDC concurred with the requirement for a comprehensive outage plan and informed that such consolidated information would facilitate effective outage planning and assessment of system constraints.

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g) SR-II, PGCIL informed that the diversion requirements for the lines under SR-II had been shared earlier and assured that the updated plan covering the period up to March 2027 would be furnished to SRPC within the next few days.

*h)* SR-I, PGCIL informed that a consolidated presentation covering the diversion works had already been prepared and assured that the same would be suitably updated with details of the concessionaires, locations and tentative schedules and submitted to SRPC by the end of the week.

i) APSLDC informed that the annual calendar covering substation/line maintenance and proposed infrastructure diversion works is being prepared and would be submitted to SRPC.

j) MS SRPC emphasized that the calendar shall comprehensively capture the shutdown requirements received from Irrigation/Water Resources Departments, NHAI, Railways and other infrastructure agencies, including the transmission element involved, proposed shutdown period and other available details. The objective is to identify multiple shutdown requests on the same transmission element, assess their clubbing wherever feasible, and facilitate coordinated outage planning considering other planned outages in the system.

k) MS SRPC emphasized that, for critical transmission elements, the requirement for deployment of ERS shall be considered, as suggested by the Forum/System Operator (SLDC/SRLDC), wherever warranted. The concerned Transmission Licensee shall, at the planning stage itself, examine the technical feasibility and suitability of ERS deployment for the proposed diversion works. Where ERS deployment is found feasible and required, appropriate provisions for its utilisation shall be incorporated in the MoU/agreement with the concerned concessionaire before commencement of the diversion works. Transmission Licensees shall accordingly identify such critical transmission elements and intimate the proposed diversion works to SRPC/SRLDC sufficiently in advance to facilitate assessment of the requirement and feasibility of ERS and finalisation of the appropriate shutdown period.

l) PGCIL, SR-I informed that, in some cases, a provision regarding ERS has been included in the agreements with the concessionaires. PGCIL assured that, henceforth, the critical transmission elements proposed for diversion works would be identified and brought to the notice of forum sufficiently in advance for assessment of ERS requirements.

m) ED SRLDC concurred with the above and observed that advance identification of such requirements would facilitate proper outage planning and timely system assessment.

### *24.3 400kV Jeypore-Gajuwaka D/C Shutdown:*

a) 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.

b) Subsequently, CMD, NHAI, vide letter dated 16.03.2026, 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, 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.

c) Thereafter, the shutdown was reconsidered in the 237$^{th}$ 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

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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.

d) 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.

e) 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.

f) **In 240th OCC**, it was observed that the prolonged outage has affected the planning of several important shutdowns in the inter-regional corridor and the Visakhapatnam area and further concluded that **ER, PGCIL** shall expedite completion of the balance works in coordination with NHAI and ensure early restoration of the 400 kV Jeypore–Gajuwaka D/C line without further slippage in timelines.

g) **ER PGCIL** further requested extension of the shutdown up to 27.07.2026 (vide mail dtd 18.07.2026), up to 31.07.2026 (vide mail dtd 28.07.2026) & up to 04.08.2026 (vide mail dtd 31.07.2026).

- ***May be discussed***

**Deliberations:**

h) SRPC noted that the shutdown, originally sought for 22 days, had been extended on multiple occasions and the line was ultimately restored on 06.08.2026 at 11:30 hrs. The prolonged outage had affected the planning and coordination of other important shutdowns in the inter-regional corridor and resulted in significant ATC curtailment of around 700–750 MW.

i) ER PGCIL explained that the diversion work involved multiple sections, including stringing/de-stringing work over approximately four km and modification of seven towers. The work was affected by adverse weather conditions, including the collapse of a tower on 23.06.2026, and constraints associated with an 11 kV crossing and site accessibility. It was also informed that the works were being executed under the supervision of PGCIL, while the execution was being carried out by the concerned NHAI/concessionaire agencies.

j) MS SRPC observed that the constraints associated with the diversion work, including the requirement of inline towers, site accessibility and the consequent downstream shutdown requirements, ought to have been identified and addressed at the planning stage itself. It was further emphasized that, as per the MoP/CEA SoP, the Transmission Licensee is required to examine the proposed work methodology, route alignment and all associated technical aspects before according approval, including exploring feasible alternatives to avoid inline tower work wherever practicable. The matter had also been highlighted by CMD, Grid-India to Chairman, NHAI, with copies to Chairman, PGCIL and Secretary (Power).

k) ED SRLDC also observed that the significant extension of the shutdown from the originally proposed 22 days to more than three times the initial period indicates the need for improved planning and assessment of the proposed works before seeking/approving the shutdown.

l) MS SRPC further observed that the prolonged outage of the critical transmission corridor has significant implications for secure grid operation. It was emphasized that, in future diversion

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works, comprehensive planning shall be undertaken with realistic assessment of the work methodology and duration, identification of all associated shutdown requirements and advance assessment of suitable contingency arrangements, so as to minimize the duration and operational impact of outages.

**Conclusion:**

m) The Forum emphasized that diversion works involving critical transmission elements shall be comprehensively planned and technically assessed at the planning stage itself, with realistic estimation of work duration, identification of all associated shutdown/contingency requirements and evaluation of feasible alternatives to minimize outages.

n) Transmission Licensees shall ensure that such assessments are completed before seeking/approving shutdowns and shall incorporate appropriate contingency provisions, including ERS wherever warranted, in the agreements/MoUs with the concerned agencies.

### *24.4 Replacement of heavily rusted towers in 400kV D/C Nellore PS – SEIL P1 line.*

**Background:**

- ❖ The 400 kV D/C Nellore PS – SEIL-P1 line, owned by PGCIL, has experienced severe rusting of towers and hardware due to coastal and pollution conditions, raising concerns on system reliability and safety.

- ❖ A joint site visit was conducted on 05th September 2025, and the findings were documented in a detailed report. The report outlines two alternative options to facilitate uninterrupted evacuation of SEIL-P1 generation during the proposed replacement of the rusted towers.

**Option–1:**

Connectivity of one circuit of the 400 kV NPS–SEIL-P1 D/C transmission line to 400 kV SEIL-P2, evacuating through APTRANSCO (Manubolu SS, Line–3), and the other circuit of the 400 kV NPS–SEIL-P1 D/C transmission line to 400 kV SEIL-P2, evacuating through APGENCO (Krishnapatnam Switchyard, Line–4).

**Option–2:**

Connectivity of one circuit of the 400 kV NPS–SEIL-P1 D/C transmission line through ERS from Tower No. 9 to the span between Tower No. 8 and 9 of the 400 kV NPS–SEIL-P2 line, and connectivity of the other circuit of the 400 kV NPS–SEIL-P1 D/C transmission line through APTRANSCO (Manubolu SS, Line–3).

- ✓ In earlier OCCs, stakeholders were advised to finalize technically feasible options for ensuring uninterrupted evacuation of SEIL generation and examine feasibility of tower strengthening vs replacement.
- ✓ SR-I, PGCIL informed that 3–4 towers are critically affected, with damage being categorized into multiple levels. A technical committee (including IIT Tirupati) has been constituted, and the assessment report is expected shortly. FRP coating/strengthening is being explored as a remedial measure, with trial implementation on 1-2 selected towers on an experimental basis.

**Present Status:**

- ❖ In 240th OCC, it was concluded that SR I, PGCIL shall obtain the decision from the Corporate Office at the earliest and take up the approved course of action without further delay. If tower replacement is approved, the work shall be completed before 31.01.2027 (or it will be shifted to FY 2027-28) to avoid further slippage in timelines

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➢ ***PGCIL may update the detailed tower condition assessment report, including feasibility of FRP coating/strengthening measures.***

➢ **SR-I, PGCIL informed that the report from its Corporate Office is awaited. SRPC observed that the proposed shutdown may be considered for facilitation during the next financial year. Accordingly, the agenda may be kept in abeyance and taken up again upon submission of a revised proposal by SR-I, PGCIL.**

### *24.5 S/D of 400kV S/C N'sagar- Kadapa-1 and 2 lines for diversion works of Transmission line by NHAI*

❖ **SR I, PGCIL communication dated 05.11.2025**: Shutdown of 400kV S/C N'Sagar -Kadapa-1 & 2 lines for diversion works of transmission line by NHAI for facilitating the development of 6 lane access-controlled Greenfield Highway from Bengaluru-Vijayawada economic corridor under Bharatmala Pariyojana project.

❖ Initially it was scheduled for December and forum approved. However, NHAI kept deferring since last few OCCs & it was concluded that SR I PGCIL shall coordinate with NHAI and submit a firm and realistic shutdown schedule to SRLDC/SRPC, only after confirming preparedness in terms of RoW issues, site readiness and material availability. NHAI had availed S/D for Ckt 1 along with PGCIL construction works where as Ckt 2 was not availed.

❖ Subsequently, NHAI vide letter dtd 20.06.2026 had requested from 01st August for 15 days and the same S/D for Ckt 2 was approved, as requested. It was concluded that any S/D for the remaining locations, by the different concessionaires, may be planned together and the same may be communicated to NHAI.

***SR I, PGCIL may update the status.***

➢ **SR I, PGCIL informed that the S/D was availed on 05.08.2026 and adhering with the approved schedule.**

➢ **In real time, the line was revived on 18.08.2026 at 19:33 Hrs**

### *24.6 Diversion of 400 kV Thiruvalam - Nellore D/C, 400KV Kolar-Thiruvalam S/C, 400KV Kolar-Sriperumbduur S/C line of Multi circuit tower for NHAI Works*

The Bangalore–Chennai Expressway crosses the 400 kV multi-circuit tower at location 461–462, which currently carries the following transmission lines:

a) 400 kV Thiruvalam–Nellore D/C

b) 400 kV Kolar–Thiruvalam S/C

c) 400 kV Kolar–Sriperumbudur S/C

❖ NHAI have requested the shutdown of above multi circuit tower for 26 days. However, it has been communicated to NHAI to examine the feasibility of bypassing the 400 kV Kolar–Thiruvalam S/C and 400 kV Kolar–Sriperumbudur S/C lines at the multi-circuit towers. This would enable the establishment of a direct 400 kV Kolar–Sriperumbudur line at the multi circuit tower.

❖ SR II, PGCIL had shared bypass arrangement drawings and proposed shutdown plan & in 236th OCC, it was concluded that shutdown can be considered only after the SR peak demand period, and the same was to be communicated to NHAI. However, NHAI had not furnished the revised proposal.

❖ This item was discussed in 239th outage coordination meeting held on 09.06.2026, and concluded to avail the S/D from 20.06.2026 for 25 days. However, it was observed that the S/D was not availed due

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to the permissions at 110kVThiruvalam–Melvenkatapuram line is still pending from TANTRANSCO. NHAI is following up with TANTRANSCO to obtain the necessary approval.

- In 240th OCC, **TN SLDC** informed that the concerned DISCOM is willing to facilitate the 110 kV line shutdown on 18.07.2026. In this regard, PGCIL (SR-II) stated that the same would be communicated to NHAI, following which the shutdown may be availed for execution of the works. Further, **SRLDC i**nformed that the shutdown could be facilitated on 18.07.2026, subject to deferment of the other over-lapping shutdowns to ensure secure grid operation.
- Further, it was concluded that S/D of 400kV Vijayawada-Nellore D/C line and 400kV Nellore-Thiruvalam D/C line can't be facilitated concurrently. Hence it was suggested PGCIL (SR-I) and PGCIL (SR-II) to jointly coordinate and finalize a shutdown schedule ensuring that the outages are planned without overlap, while maintaining system security and facilitating timely completion of the NHAI diversion works.
- Subsequently, SR I vide mail dtd 21.07.2026 informed that SR-II has informed that NHAI was unable to avail the shutdown of the 400 kV Nellore–Thiruvalam line and had consented to avail the shutdown of 400 kV Vijayawada–Nellore Ckt-I & II the S/D was availed on 22.07.2026. In real time, the S/D was availed on 22.07.2026.

- ***TN SLDC/TANTRANSCO may respond.***
- ***SR II PGCIL may update status of coordination with NHAI.***

**Deliberations:**

- SR-II, PGCIL informed that NHAI has been attempting to avail the required 110 kV shutdown for the past two months. As per the information received from NHAI, discussions are underway between the higher management of TANTRANSCO and NHAI authorities regarding the modalities for availing the shutdown. It was informed that the shutdown is proposed to be facilitated through deployment of ERS, for which the manpower requirement is being worked out with the support of NHAI. SR-II, PGCIL further informed that the shutdown would be availed upon finalization of the above arrangements.
- Further, SR-II, PGCIL informed that, as per the latest request received from NHAI, the shutdown is proposed to be availed w.e.f. 01.09.2026. However, it was observed that the 400 kV Vijayawada–Nellore Ckt. 3 & 4 are expected to be revived by 02.09.2026. Accordingly, it was opined that the Nellore–Thiruvallam shutdown may be facilitated after the revival of Vijayawada–Nellore Ckt. 3 & 4, subject to system conditions.

**Conclusion:** TN SLDC and SR II PGCIL may co-ordinate and facilitate the S/D of 110kV line at the earliest. Subsequently, SR II PGCIL may approach the forum for availing the S/D post revival of 400kV Nellore-Vijayawada Ckt 3 & 4.

### *24.7 Shutdown of 400kV D/C Nellore - Vijayawada Ckt-1&2 for diversion works of transmission line by NHAI.*

NHAI vide letter dtd: 05.06.26 has requested the shutdown of 400kV D/C Nellore – Vijayawada Ckt-1 & 2 for the development of the six-lane access-controlled Greenfield Highway from Polavaram (Ch. 260+000) to Marripudi (Ch. 285+500) of NH-544G, Bengaluru–Vijayawada Economic Corridor, under Bharatmala Pariyojana Phase-I in the State of Andhra Pradesh (Package-12).

The shutdown of lines proposed with following schedule for line diversion works:

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| Sl. No. | Name of the line | Diversion Loc. Nos. | Works involved | Period of S/D proposed |
|---|---|---|---|---|
| 1 | 400kV D/C Nellore - Vijayawada line 1&2 | 510 - 514 | Erection: 5 nos. towers; Dismantling: 3 no. tower; Stringing and destringing works. | 01.07.26 – 22.07.26 |

- ✓ This item was discussed in the 239th outage coordination meeting held on 09.06.2026 and concluded that the S/D may avail after revival of Nellore-Thiruvallam NHAI S/D from 17th July for 22 days i.e., 7th August.
- ✓ In 240th OCC, it was concluded that S/D of 400kV Vijayawada-Nellore D/C line and 400kV Nellore-Thiruvalam D/C line can't be facilitated concurrently. Hence it was suggested PGCIL (SR-I) and PGCIL (SR-II) to jointly coordinate and finalize a shutdown schedule ensuring that the outages are planned without overlap, while maintaining system security and facilitating timely completion of the NHAI diversion works.
- ✓ SR I PGCIL vide mail dated 17.07.2026, forwarded the request received from NHAI for postponement of the shutdown of the 400 kV Vijayawada–Nellore D/C line to 22.07.2026 due to RoW-related issues & in real time.
- ✓ Subsequently, SR I vide mail dtd 21.07.2026 informed that SR-II has informed that NHAI was unable to avail the shutdown of the 400 kV Nellore–Thiruvalam line and had consented to avail the shutdown of 400 kV Vijayawada–Nellore Ckt-I & II the S/D was availed on 22.07.2026. In real time, the S/D was availed on 22.07.2026

***SR I PGCIL may update status***

- ➢ **In real time, it was observed the ckt 1 was revived on 12.08.2026 at 22:02 Hrs & ckt 2 on 21:54 Hrs.**

### *24.8 Shutdown of 400kV D/C NP Kunta - Hindupur Ckt-1&2 for diversion works of transmission line by NHAI*

NHAI vide letter dtd: 08.06.26 has requested the shutdown of 400kV D/C NP Kunta – Hindupur Line for the development of the six-lane access-controlled Greenfield Highway from Kodur (Ch. 0+000) to Vanavolu (Ch. 24+300) Bengaluru–Vijayawada Economic Corridor, under Bharatmala Pariyojana Phase-I in the State of Andhra Pradesh (Package-1).

The shutdown of lines proposed with following schedule for line diversion works:

| Sl. No. | Name of the line | Diversion Loc. Nos. | Works involved | Period of S/D proposed |
|---|---|---|---|---|
| 01 | 400kV D/C NPKunta - Hindupur line | 99 - 102 | Erection: 4 nos. towers; Dismantling:2no. tower; Stringing and destringing works. | 01.07.2026 – 15.07.2026 |

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- ✓ This item was discussed in the 239th outage coordination meeting held on 09.06.2026 and concluded that the S/D may avail from 01st July for 15 days i.e., 15th July. Any other overlapping S/Ds may be deferred.
- ✓ SR I, PGCIL informed that the works are progressing as per the approved schedule and are being executed within the stipulated timelines & the same was availed from 03.07.2026 in real time and revived back on 18.07.2026

➢ ***SR I, PGCIL/SRLDC may update the status***

➢ **In real time, Ckt 1 was revived on 18.07.2026 at 10:26 Hrs & Ckt 2 at 10:50Hrs**

### *24.9 Shutdown of 400kV D/C Kadapa - Madugiri Ckt-1s2 for diversion works of transmission line by NHAI.*

- NHAI vide letter dtd: 18.06.26 has requested the shutdown of 400kV D/C Kadapa - Madugiri Ckt-1C2 Line for Development of Six-Lane Access Controlled Greenfield Highway from Kodur (Ch.0+000) to Vanavolu (Ch.24+300) Bengaluru Vijayawada Economic Corridor on HAM Mode under Bharatmala Pariyojana Phase-I in the state of Andhra Pradesh-(Package '1).
- The shutdown of lines proposed with following schedule for line diversion works:

| Sl. No. | Name of the line | Diversion Loc. Nos. | Works involved | Period of S/D proposed |
|---|---|---|---|---|
| 01 | 400kV D/C Kadapa - Madugiri Ckt-1C2 line | 397 - 401 | Erection: 6 nos. towers; Dismantling: 5no. tower; Stringing and destringing works. | 16.08.2026 to 31.08.2026 |

- This S/D was discussed in 240th Outage co-ordination meeting on 09.07.2026 & approved from Last week of August 2026 after observing the line loadings from the DLR installed on 400kV Gooty-Pavagada, tentatively 26.08.2026 for 20 days.

➢ ***SRLDC/SR I PGCIL may update the status***

➢ **SRLDC informed that based on the real time conditions, the S/D will be facilitated.**

### *24.10 Shutdown of 400kV Vijayawada - Nellore Ckt-3 & 4 for diversion works of transmission line by NHAI.*

- NHAI vide letter dtd: 30.06.26 has requested the shutdown of 400kV Vijayawada - Nellore Ckt-3C4 Line for Development of Six-Lane Access Controlled Greenfield Highway from Polavaram (Km 260+000) to Marripudi (Km.285+500) Bengaluru Vijayawada Economic Corridor on HAM Mode under Bharatmala Pariyojana Phase-I in the state of Andhra Pradesh-(Package 12).

- The shutdown of lines proposed with following schedule for line diversion works:

| Sl. No. | Name of the line | Diversion Loc. Nos. | Works involved | Period of S/D proposed |
|---|---|---|---|---|
| 01 | 400KV VIJAYAWADA-NELLORE_AP-3 | 471 - 472 | Erection: 2 nos. towers; Dismantling:1no. tower; Stringing and destringing works. | 10.08.2026 To 23.08.2026 |
| 02 | 400KVNELLORE_AP-VTPS_IV-1 | | | |

- In 240th OCC, the S/D was approved from 12th August for 14 days, without overlapping of other Nellore S/Ds.

➢ ***SR I PGCIL/SRLDC may respond***

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- **In real time, the S/D for ckt 3 was availed on 14-08-2026, 08:20Hrs & Nellore_AP-VTPS_IV-1 at 08:14Hrs.**

***AA-AI Shutdown of 100MVA, 400/20kV Coupling Transformer (±100 MVAR NP Kunta STAT-COM) for upgradation of SMPS version from 1.0 to 3.0 in power modules at NP Kunta SS.***

During one of the meetings w.r.t issues in STATCOM, OEM M/s Hyosung has advised for upgradation of Sub-Module SMPS version from 1.0 to 3.0 for reliable and efficient STATCOM operation. Considering the requirement, shutdown of **100MVA, 400/20kV Coupling Transformer (±100 MVAR NP Kunta STATCOM) is proposed** for carrying out SMPS version upgradation to 3.0 in power modules at NP Kunta SS.

The shutdown of Coupling Transformer is proposed with the following schedule for SMPS upgradation works:

| Sl. No. | Name of the line | Sub Station | Works involved | Period of S/D proposed |
|---|---|---|---|---|
| 01 | 100 MVA, 400/20kV Coupling Transformer (±100 MVAR NP Kunta STATCOM) DOCO: 04.06.2017 | 400/220kV NP Kunta SS | 1.SMPS upgradation works in power modules.<br>2.Station Controller Maintenance.<br>3.AMP works of Coupling Transformer. | 14.09.2026 To 16.09.2026 |

OCC forum may kindly deliberate and concur the S/D as proposed above for carrying out the SMPS upgradation works in power modules of NP Kunta STATCOM.

Deemed availability may be considered for the upgradation works to improve the performance of STATCOM

- ***Submitted for kind consideration of the OCC Forum.***

- ✓ PGCIL apprised the forum, due to certain limitation in SMPS 1.0 of one power module, as per the OEM suggestion, PGCIL wants to upgrade with SMPS 3.0 for all the power modules at NP Kunta. For the upgrading to 3.0, it needs 3 days of LC of coupling transformer along with STATCOM.
- ✓ For the SRLDC query on upgradation of SMPS power modules, PGCIL responded that NP Kunta and Hyderabad stations were recommended by OEM. Further, it was stated that the work can't be executed online as the work is involved with physical replacement of power modules.

**Conclusion:** The LC is approved, based on the system conditions in real time. SR I, PGCIL may approach SRLDC in real time on D-3 basis

***AA AII Shutdown of 400kV Transmission Elements at Hyderabad Substation for Migration from Conventional Control System to SAS Based Control & Protection System***

The shutdowns are proposed as per the following schedule:

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| Sl. No. | Dia Details | Element Details | Period of S/D proposed |
|---|---|---|---|
| 01 | DIA-2 | 400kV Hyderabad-Ramagundam #4 Line | 24.08.2026 to 29.08.2026 (5-days) |
| | | 400kV Hyderabad-Nagarjunasagar Line | 01.09.2026 to 05.09.2026 (5-days) |
| | | 400kV Hyderabad-Ramagundam #4 Line & 400kV Hyderabad-Nagarjunasagar Line (For LBB Testing) | 05.09.2026 |
| 02 | DIA-7 | 400kV ICT-3 | 07.09.2026 to 12.09.2026 (5-days) |
| | | 400kV Hyderabad-Maheshwaram Line | 15.09.2026 to 19.09.2026 (5-days) |
| | | 400kV Hyderabad-Maheshwaram Line & ICT-3 (For LBB Testing) | 19.09.2026 |
| 03 | DIA-3 | 400kV Hyderabad-Ramagundam #3 Line | 21.09.2026 to 26.09.2026 (5-days) |
| | | 400kV Hyderabad-Gajwel Line with Reactor | 28.09.2026 to 03.10.2026 (5-days) |
| | | 400kV Hyderabad-Ramagundam #3 Line & Hyderabad-Gajwel Line with Reactor (For LBB Testing) | 03.10.2026 |

Under ADDCAP POWERGRID is executing the work of migration from Conventional Control System to SAS (Substation Automation System) at 400/220kV Hyderabad Substation through M/s Siemens. The scope includes installation and commissioning of SAS equipment, augmentation of bays/elements and integration of existing bays and protection systems into the SAS platform.

For completion of SAS migration activities planned outages of the concerned diameter elements are essentially required for commissioning tests including LBB relay testing.

Continuous outage of single element and both elements in a diameter is necessary for smooth migration from conventional control system to SAS.

Accordingly, OCC forum may kindly deliberate and concur the above shutdowns for successful and timely completion of SAS migration works at Hyderabad Substation.

Encl: 1) SLD of Hyderabad SS

- ***Submitted for kind consideration of the OCC Forum.***

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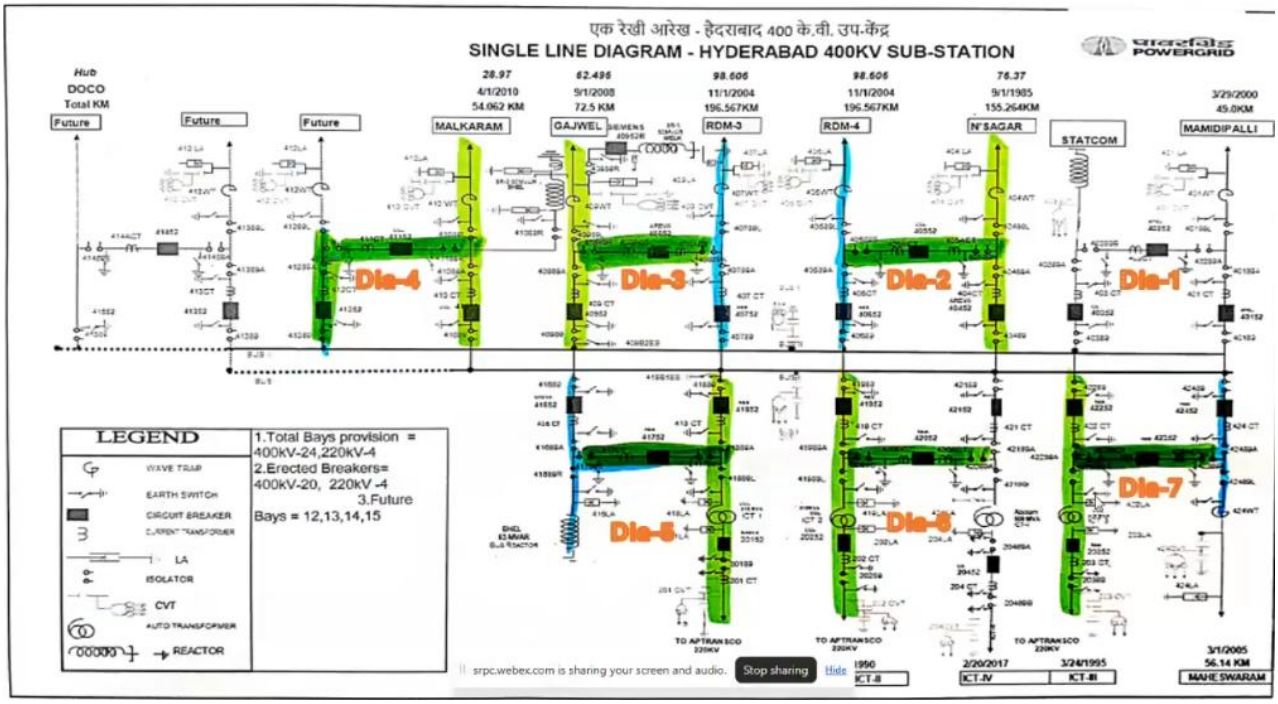


a. SR-I, PGCIL informed the forum that upgradation of the bays (Dia-1 to Dia-7) at Hyderabad 400 kV Substation was proposed as per the approved Single Line Diagram (SLD). Initially, PGCIL had proposed shutdown of Dia-2 (Hyderabad–Ramagundam & Hyderabad–Nagarjuna Sagar) from 24.09.2026 to 29.09.2026 (6 days) for carrying out the upgradation works. Subsequently, after restoration of the line through the main bay, shutdown of Dia-3 (Hyderabad–Nagarjuna Sagar) from 01.09.2026 to 05.09.2026 (5 days) was proposed. The shutdown requirements for the remaining bays were proposed to be planned based on the availability of the Telangana system.

b. It was already deliberated during the Outage Coordination Meeting held on 09.08.2026, wherein TGSLDC had expressed its inability to facilitate the proposed shutdowns in view of the exigencies in the Telangana system demand, particularly due to high irrigation loads.

c. SRLDC clarified that the shutdown for Dia-7 could not be facilitated during the proposed period, as already conveyed by TGSLDC during the Outage Coordination Meeting. Accordingly, SR-I, PGCIL was advised to plan the Dia-7 upgradation works during October 2026. It was further advised that PGCIL may submit a revised and consolidated shutdown proposal through Mid-OCC, duly incorporating the latest requirements and obtaining concurrence from TGSLDC. The shutdowns proposed during August 2026 could not be facilitated due to the exigencies in the Telangana system and other parallel shutdown requirements.

d. SRLDC clarified that the LC for Dia-7 can't be facilitated, as already informed by TG SLDC during Outage Co-ordination meeting. Hence SR I PGCIL can carry out the upgradation works in the month of October. Now, in the revised proposal, PGCIL may come up with the latest LC request through Mid-OCC. The revised list needs to be furnished, along with concurrence from TG SLDC. The LCs, requested in the August month, can't be facilitated due to the other parallel shutdowns.

e. It was further discussed that the LC for the STATCOM at Ghanapur (SMPS) may be availed concurrently with the proposed SAS upgradation works. The forum also emphasized that the various upgradation works at Hyderabad 400 kV Substation should, as far as practicable, be planned and coordinated together so as to minimize the overall shutdown requirement.

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**Conclusion:**

- SR-I, PGCIL shall coordinate with TGSLDC, finalize the revised and consolidated shutdown proposal for the bay and SAS upgradation works, and approach the forum through Mid-OCC for facilitating the required LCs, duly supported by TGSLDC's concurrence.

***AA-B: 500KV Talcher-Kolar HVDC Pole-1 shutdown under Add cap works -reg***

- ✓ The refurbishment of the 500 kV Talcher-Kolar HVDC System under Add-Cap works was approved in the 52nd TCC and 55th SRPC meetings held on 25.07.2025 and 26.07.2025, respectively. Further, during the 54th TCC and 57th SRPC meetings held on 16.03.2026 and 17.03.2026, the SRPC forum requested POWERGRID to proceed with the implementation of the refurbishment scheme.
- ✓ In line with the above, the tendering process for the refurbishment of the ±500 kV Talcher-Kolar HVDC system has already been initiated. As part of the tender requirements, the OEMs have requested access to inspect the valve halls and associated facilities to assess the scope of modifications required prior to submission of bids for the Add-Cap works. To facilitate this inspection, a shutdown of Pole-1 of the ±500 kV Talcher-Kolar HVDC system is proposed, enabling the OEMs to carry out a detailed assessment of the valve hall and related installations.
- ✓ In view of the above, it is requested to kindly accord shutdown approval for 500 kV Talcher-Kolar HVDC Pole-1 on 19.08.2026,10:00hrs to 18:00hrs to enable the OEM technical team to carry out the necessary site inspection. It is also requested that the proposed shutdown may please be considered and booked under the approved Add-Cap refurbishment works of the Talcher-Kolar HVDC system.

***PGCIL SR II requested OCC forum to consider the request and approve 500KV Talcher-Kolar HVDC Pole-1 shutdown on 19.08.2026 under Add cap works.***

- SR-II, PGCIL informed that the OEMs are required to inspect the equipment as part of the tendering process and that the inspection would be carried out for a few hours, preferably during solar hours.
- SRLDC observed that the proposed shutdown would entail an ATC/TTC curtailment of about 1000 MW, while a sufficient quantum margin of approximately 11,000 MW is available in the system. However, SRLDC advised that any requirement for backing down of Talcher generation during the shutdown, particularly considering the ongoing shutdown works of Talcher–Meramundali, may be duly noted and coordinated with ER as well. It was further emphasized that, in case of any system exigency, Pole-1 shall be returned to service by SR-II, PGCIL immediately as per the operator directions.

**Conclusion:**

- All the beneficiaries concurred with the shutdown of 500 kV Talcher–Kolar HVDC Pole-1 on 19.08.2026 from 08:30 Hrs to 16:00Hrs, subject to prevailing real-time grid conditions.

## 25. Review of Maintenance schedule of Units (CGS/IPPs connected to ISTS)

The MoP approved Outage Plan for SR generators for the period from **April 2026 to March 2027** (segregated month-wise, Generator wise) was circulated and outage plan for the period from August 2026 to October 2026 is at (***Annexure-25a***)

- ***All the SLDCs/GENCOS/Generators may strictly adhere to the approved Maintenance schedule & hereby requested to come prepared for update the status.***

**NTPC/NTECL Units:**

**a) Telangana STPP Unit -1:**

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- ✓ NTPC, vide email dated 31.07.2026, informed that, in view of the revised Boiler SH/RH modification schedule finalized by the OEM, M/s BHEL, approval was sought for undertaking the Unit-1 overhaul from 15.09.2026 for 45 days, instead of the previously proposed schedule.
- ✓ SRHQ, NTPC informed that due to the lower radiant temperature, the unit efficiency is very low, resulting in a loss to the beneficiaries.
- ✓ NTPC Telangana highlighted that the present operating condition is causing a loss of approximately ₹3 crore and requested early approval of the outage, stating that it would be beneficial to all stakeholders.
- ✓ TG SLDC did not concur with the shutdown for the requested period and reiterated that the outage could be concurred with only towards the end of October or during November 2026.

**Conclusion:** NTPC Telangana Unit-1 may avail the outage only towards the end of October or during November 2026, keeping in view the interests of the beneficiaries

**b) Ramagundam STPS Unit-5:**

- ✓ NTPC, vide email dated 31.07.2026, requested rescheduling of the Unit-5 AOH from the approved schedule of 15.08.2026 to 28.09.2026 (45 days), as approved in the 240th OCC, to 18.08.2026 to 26.09.2026 (40 days).
- ✓ During the meeting, NTPC proposed a further revised outage schedule from 17.08.2026 to 29.09.2026 (45 days).

**Conclusion:** The Forum approved the revised outage schedule of 17.08.2026 to 29.09.2026 (45 days). NTPC shall strictly adhere to the approved schedule.

**c) Talcher STPS Unit-6:**

- ✓ It was observed that there was a 2-day delay in revival of Unit 6. SRHQ, NTPC informed the same will be communicated vide mail.

**d) Ramagundam STPS Unit-3:**

- ✓ NTPC, vide email dated 17.07.2026, informed that revival of Unit-3 was tentatively expected by 23.07.2026, against the originally scheduled revival date of 14.07.2026. However, as per the SRLDC Daily Report Sheet, the unit was actually revived on 21.07.2026, resulting in a delay of 7 days.
- ✓ SRHQ, NTPC clarified that during the overhaul activities, certain critical technical issues were encountered, necessitating additional time for satisfactory completion of the balance works. It was stated that these activities were required to be completed with due diligence to ensure safe, reliable and sustained operation of the unit after restoration.

**Conclusion:** Forum noted the same.

**e) Talcher STPS Unit-6:**

- ✓ In the 240th OCC meeting, the Forum did not approve NTPC's proposal to avail a 3–4 day gap between the outages of Unit-6 and Unit-3 and decided that a maximum gap of 2 days could be availed.
- ✓ However, it was observed that NTPC Talcher availed a 4-day gap between the outages of Unit-6 and Unit-3.

**Conclusion:** NTPC Talcher was requested to furnish the reasons for availing the 4-day gap, despite the Forum's decision permitting a maximum gap of 2 days.

**f) NTPC Kudgi Unit-1:**

- ✓ NTPC Kudgi informed that the outage would be availed as per the approved schedule i.e., from 22.08.2026 for 60 days.

**Conclusion:** NTPC Kudgi to strictly adhere to the approved schedule and revive by 20.10.2026.

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**g) NTECL Vallur Unit-2:**

- ✓ It was observed that the unit was revived on 27.07.2026, against the approved revival date of 23.07.2026, resulting in a delay of 4 days.
- ✓ NTECL Vallur informed that during the hydro test carried out after the overhaul, boiler tube leakage was detected, which necessitated rectification and resulted in the four-day delay in re-vival.

**Conclusion:** The Forum noted the same.

**h) NTECL Vallur Unit-3:**

- ✓ It was noted that the Boiler License Renewal for Unit-3 was carried out online on 27.07.2026.
- ✓ NTECL Vallur informed that it does not intend to avail the outage for the said purpose.

**Conclusion:** The Forum noted the same.

**i) NTPC Simhadri Unit-4:**

- ✓ It was observed that the outage of Unit-4 was availed as per the approved schedule on 03.08.2026.
- ✓ NTPC Simhadri assured that the unit would be revived as per the scheduled date of 06.09.2026 and that the approved schedule would be adhered to.
- ✓ Further, it was noted with concern that updating the revival date on the SRLDC portal beyond the date approved by the Forum is not desirable.

**Conclusion:** NTPC Simhadri to strictly adhere to the approved schedule and revive by 06.09.2026. NTPC was advised to coordinate with SRLDC and ensure that the relevant sheets are updated with correct information.

**j) Ramagundam STPS Unit-1:**

- ✓ NTPC, vide email dated 30.06.2026, furnished a revised schedule, wherein the outage of Unit-1 was rescheduled to commence from 20.01.2027 for 30 days.

**Conclusion:** The revised schedule will be discussed in the subsequent OCC meeting.

**k) Vallur TPP Unit-1:**

- ✓ NTPC vide mail dtd 30.06.2026 had furnished revised schedule, in which Vallur Unit 1 was deferred.
- ✓ SRHQ, NTPC also clarified that the same & no other outage will be availed during this FY.

**Conclusion:** Forum noted the same

**l) Kudgi STPP Unit-3**

- ✓ NTPC vide mail dtd 30.06.2026 had furnished revised schedule, in which Kudgi Unit 3 was proposed from 15th November for 40 days.

**Conclusion:** The revised schedule will be discussed in the subsequent OCC meeting

**NLCIL/NTPL Units:**

**m) Neyveli TPS-II Unit-3 & 1:**

- ✓ NLCIL, vide letter dated 31.07.2026, requested an extension of 11 days for Unit-3, up to 11.08.2026, against the approved revival date of 30.06.2026, citing the OEM's recommendation to undertake replacement of the generator bearing during the ongoing maintenance works.
- ✓ NLCIL informed that the issue was not yet resolved and that a separate meeting with the OEM would be convened to discuss the matter. Thereafter, the exact date of revival would be confirmed.
- ✓ Further, with regard to Unit-1, NLCIL was advised to update the relevant details through official communication to SRPC.

**Conclusion:** The Forum noted the above and advised NLCIL to communicate the revised revival status of Unit-3 after consultation with the OEM and update the details pertaining to Unit-1 through official communication to SRPC.

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**n) TPS II Exp Unit-1:**

- ✓ NLCIL, vide letter dated 07.08.2026, informed that the repair work was completed in accordance with the applicable maintenance procedures to ensure the structural integrity and operational reliability of the component.
- ✓ TPS II Exp further informed that, due to the unforeseen repair activities associated with the boiler maintenance pressure parts, the scheduled Maintenance Overhaul (MOH) duration was extended to facilitate completion of the additional works. The refractory dry-out activities were scheduled to commence from 09.08.2026 and were expected to be completed by 11.08.2026. Accordingly, the unit was expected to be synchronized with the grid on 11.08.2026.
- ✓ In the meeting, it was informed that, as per the latest update, the unit was expected to be revived in the early hours of 12.08.2026.

**o) NTPL Tuticorin Unit-1:**

- ✓ NTPL confirmed that they are availing the unit-1 from 17.08.2026.

**Conclusion:** NTPL to strictly adhere to the approved schedule and revive by 15.09.2026

**p) NNTPS Unit-2:**

- ✓ The Unit-2 was revived on 12.07.2026, against the approved revival date of 06.07.2026, resulting in a delay of 6 days.
- ✓ NNTPS informed that, as per the preliminary inspection of all eight mills, severe damages were identified that required rectification, resulting in the 6-day delay in revival.

**Conclusion:** The Forum noted the above. The unit-2 was revived on 12.07.2026 against the approved revival 06.07.2026 with a delay of 6 days.

**q) NNTPS Unit-1:**

- ✓ It was informed that, although the Boiler Statutory Works were initially planned, FGD pre-commissioning works were also scheduled to be undertaken simultaneously.
- ✓ The OEM had requested 7 days for carrying out the required works. However, the unit could not be handed over to the OEM as planned due to site conditions, since both activities could not be carried out in parallel. As a result, the scheduled activities were delayed.

**Conclusion:** The Forum noted the above & suggested NNTPS to avoid any such delays in future.

**r) TPS I Exp Unit-2:**

- ✓ NLCIL, vide email dated 31.07.2026, informed that the outage of the unit would be availed from 08.08.2026 due to the extension of the outages of other NLCIL generating units. Subsequently, vide email dated 10.08.2026, requested to reschedule the Unit-2 outage from 12.08.2026, citing the inevitable extension of the outages of other NLCIL generating units.
- ✓ In the meeting, TPS-I Expansion informed that the unit had tripped due to ABG and requested that the outage be converted to planned maintenance with effect from 11.08.2026.

**Conclusion:** The Forum noted the above

**s) TPS I Exp Unit-1**

- ✓ TPS-I Expansion informed that the outage of Unit-1 would be availed from 07.10.2026, as the Boiler License is valid up to 10.10.2026.

**Conclusion:** The Forum noted the above.

**ISTS connected IPP Units**

**t) ITPCL TPP Unit 1 & 2:**

- ✓ ITPCL confirmed that no AOH is required in this FY.

**u) MEL Unit-1, 3 & 4:**

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- ✓ No participation was observed from MEL.

**v) Simhapuri TPS Unit-2:**

- ✓ No participation was observed from SEL

**w) SEIL P-I Unit-2:**

- ✓ It was observed that the outage for the unit-2 was availed as per the approved schedule i.e., 16.07.2026 to 09.08.2026

**x) SEIL P-II Unit-1:**

- ✓ SEIL Phase-II informed that the revised outage proposal is scheduled from 21.11.2026 to 26.12.2026. The revised outage schedule will be discussed in the upcoming OCC meeting.

**y) MPGL Tuticorin (formerly CEPL) Unit- 2:**

- ✓ MPGL requested to postpone the outage from 06.09.2026 (for 22 days) due to manpower issues for which TN SLDC concurred.

**Conclusion:** NTPL to strictly adhere to the approved schedule

**MPGL Tuticorin (formerly CEPL) Unit-1:**

- ✓ MPGL revised the outage proposal from 17.01.2027 to 27.02.2027 due to the proposed LP turbine replacement, for which the required material is expected to be supplied in January 2027.
- ✓ SRPC clarified that, for larger generating units (more than 500 MW), it is desirable to complete the unit overhaul by the end of January 2027, as the States may face difficulty in procuring power from the market thereafter.
- ✓ MPGL stated that the matter would be taken up with its higher management and that it would revert with a revised outage proposal.

Conclusion: The Forum advised MPGL to review the revised outage schedule, ensuring that the unit is revived by December 2026, in consultation with its higher management, keeping in view the peak demand period in the Southern Region, and furnish a revised proposal at the earliest.

**z) HNPCL Unit-1:**

- ✓ In the 240th OCC meeting, the outage of Unit-1 was approved in principle by the Forum, with the final outage schedule to be finalized in coordination with APSLDC.
- ✓ APSLDC concurred with the outage schedule from 01.09.2026 for a period of 25 days.

**Conclusion:** The Forum noted the above and approved the outage schedule from 01.09.2026 to 25.09.2026.

## 26. ERS-Cumulative line length (ckm) data- kV level wise wrt States/POWERGRID/TBCB projects - CEA data requirement

### 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.

**Updated Status as per 240th OCC**

| Entity | ERS Required | ERS Available | Shortfall / Remarks |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Andhra Pradesh | 5 | 2 | **Shortfall of 3.**<br>**240th OCC**: Administrative approval accorded. Tender specifications being prepared for 1 set of ERS. |
| Telangana | 5 | 1 | Shortfall of 4.<br>**240th OCC**: 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.**<br>**240th OCC**: 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.<br>Tendering process initiated for additional ERS set. |
| Kerala | 2 | 0 | **Shortfall of 2**.<br>**240th OCC**: KSEBL informed that Board has given approval for new Make in India conditions. Re-tendering process is going on. |
| Tamil Nadu | 6 | 2 | **Shortfall of 4.**<br>**240th OCC**: 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 shortly. |
| Puducherry | Mutual sharing agreement | 0 | **240th OCC**: PED informed that PGCIL had given consent to share for natural calamities only |
| PGCIL – SR-II | 4 | 2 | **Shortfall of 2**<br>**239th OCC**: POWERGRID stated that order is placed for 5 Nos. for SR.<br>SR-1 – 2 Nos<br>SR-2 – 3 Nos.<br>Order placed on 06.10.2025. Delivery is expected by April 2027 |
| PGCIL – SR-I | 5 | 3 | **Shortfall of 2** |
| Kudgi TL | 1 | 0 | Atleast 1 ERS set is required for Kudgi TL in SR which is compatible upto 765 kV.<br>Sterlite Invit and Kudgi TL have a binding agreement that allows Kudgi TL to deploy ERS in an emergency situation. |

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|---|---|---|---|
| MTL, RSTCL, KNTL, Gadag (IndiGrid) | 1 | 0 | Atleast 1 ERS set is required for Indigrid in SR which is compatible upto 765 kV. **240th OCC**: 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 Solutions Limited) | 1 | 0 | Atleast 1 ERS set is required for AESL in SR which is compatible upto 765 kV. **240th OCC**: 3 ERS are present on PAN India Basis. 1 ERS in NR (400 kV – 14 towers at 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 world be moved to SR in few days from Koradi SS which is in proximity. |
| Gadag TL (Gadag IIA) (Renew) | Mutual sharing agreement | 0 | **240th OCC**: 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. |

**Deliberations:**

- This agenda was deliberated in detail in the recent 55th TCC/ 58th SRPC meeting held on 24th/ 28th July 2026.
- Utilities were requested to furnish any further updates, if any, to SRPC.

## 27. Crisis/Disaster Management Plan (CMP/DMP- December 2025) of Ministry of Power

a) SRPC had noted that the PSLF Division, CEA had circulated the revised CMP and DMP (Dec 2025) to strengthen emergency preparedness and disaster response in the power sector, and had requested all entities to align their respective documents accordingly. The matter, which had been deliberated in the 234th OCC Meeting, where the changes in CMP 2025 and DMP 2025 when compared with that of CMP 2024 and DMP 2024 documents were highlighted and subsequently followed up in the OCC meetings to ensure timely compliance.

b) It had also been noted that the Standard Operating Procedure (SOP) for Transmission System Restoration, issued by CEA in May 2025, held critical importance in complementing the DMP by providing detailed technical and operational guidance for restoration activities post-disaster. Entities had been advised to review and implement the SOP in conjunction with their CMP/DMP to ensure coordinated and effective response during contingencies.

c) It had been reiterated that CMP and DMP were mandatory documents and were to be aligned with MoP/CEA guidelines, institutionally adopted, and regularly updated. Entities had been advised to

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prepare these documents in-house to maintain confidentiality and ensure better control, with version control, date stamping, and update logs maintained as part of IMS practices.

d) All SLDCs, TRANSCOs, GENCOs, and DISCOMs had been requested to confirm completion of alignment to SRPC as per committed timelines. Entities had also been advised to conduct quarterly mock drills, submit reports to CEA (PSLF Division), and nominate/confirm nodal officers on the DRIPS portal for infrastructure inventory updates.

e) SRPC and SRLDC had offered to conduct capacity-building workshops for entities requiring support in the formulation and implementation of CMP, DMP, and SOP. On 14.07.2025, SRPC Secretariat and SRLDC had conducted an awareness session for TGTRANSCO utilities, as requested by them, to facilitate better understanding and implementation of the CMP, DMP, and SOP requirements.

✓ All SLDCs, TRANSCOs, GENCOs, and DISCOMs were advised to confirm completion of alignment activities to SRPC within the committed timelines, conduct quarterly mock drills and submit reports to CEA (PSLF Division), and nominate/update nodal officers on the DRIPS portal for infrastructure inventory management

✓ The latest status of CMP/DMP Alignment – State-wise/Central Sector is as follows (240$^{th}$ OCC)

***The updated Status as per 240$^{th}$ OCC***

| 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. | Dr. NTTPS(VTPS) station document updated as per CMP/DMP 2025 document.<br>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.<br>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.<br>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.<br>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).<br>• NCTPS Stage II documents wrt CMP/DMP 2024 were furnished on 02.03.2026.<br>• MTPS St-I: Have updated document wrt DMP 2024(letter dated 09.02.2026).<br>• MTPS St-II : have updated document wrt DMP 2024(letter dated 31.01.2026).<br>GENCO: Received documents from all Generating Stations | Documents are prepared. After internal deliberations, would put up to competent authority for approval |

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|---|---|---|---|---|
| | | | 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** | Vide mail dated 22.04.2026, TGSLDC communicated that SLDC draft CMP/DMP has been prepared in line with CEA CMP/DMP-2025 and furnished for suggestions | TGTRANSCO is yet to prepare CMP/DMP documents | TGGENCO vide letter dated 17.02.2026 communicated that they have updated their documents as per CMP 2024 and DMP 2024 documents.<br><br>They have to update wrt 2025 guidelines | TGDISCOMs are yet to prepare CMP/DMP documents |
| **Puducherry** | CMP/DMP documents were prepared wrt earlier guidelines. Updation wrt 2024/2025 guidelines needs to be taken up | PED is yet to prepare CMP/DMP documents | | PED is yet to prepare CMP/DMP documents |
| **PGCIL (SR-I/SR-II)** | **240th OCC**: CMP/DMP documents aligned with MoP guidelines. | | | |
| **NTPC** | **240th OCC:**CMP/DMP documents aligned with MoP guidelines. | | | |
| **NPCIL** | **57th SRPC:** CMP/DMP already in place. | | | |
| **NLCIL** | **240th OCC:** CMP/DMP documents aligned with MoP 2024 guidelines. The updation of documents wrt 2025 guidelines is expected to be completed in a week. | | | |
| **NTPL** | **57th SRPC:** Under Preparation, would complete at the earliest. | | | |

➢ ***Entities may update the status***

**Deliberations:**

- This agenda was deliberated in detail in the recent 55th TCC/ 58th SRPC meeting held on 24th/ 28th July 2026.
- TGGENCO informed they have updated their CMP/DMP documents in line with CMP/DMP-2025 issued by CEA, except for Yadadri TPS.
- Utilities were requested to furnish any further updates, if any, to SRPC.

## 28. 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

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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-28a*****.**

d) Status of staffing updated in 240th OCC is given below:

| SLDC | Norm | Sanctioned | Present | Status/ Latest Updates |
|---|---|---|---|---|
| **AP** | 144 | 96 | **68 (Technical executives = 61, Non-executive (Accounts) =7)**<br>**Rest will be recruited at the Assistant Engineer** | APERC approval received.<br>**57th SRPC:**<br>APTRANSCO stated that they would recruit 300 personnel for various posts by April-2026 end and some personnel would be assigned to APSLDC.<br>**240th OCC:**<br>3 nos. of additional engineers have joined on deputation basis. |
| **KAR** | 144 | 99 | **91**<br>**As per the latest guidelines, the 60 Nos staff from field (communication), will be excluded.** | **240th OCC:**<br>KPTCL informed that the proposal was pending with the Government of Karnataka for approval of 144 posts and informed that restructuring was parallelly progressing. |
| **KER** | 103 | | **Technical executives = 48,**<br>**Non executives = 19**<br>**(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.<br>• 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).<br>**240th OCC:**<br>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. |

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|---|---|---|---|---|
| **TN** | 144 | 57 | **57** | **240th OCC:**<br>TANTRANSCO had informed that in principle approval for 49 posts were taken and 18 posts were under administrative approval. |
| **TG** | 144 | 87 | **98 (Technical Executives = 71, Non-Technical Executive =27)** | 33 additional have been approved. Recruitment ongoing.<br>Technical Executives = 71, Non-technical Executive (Supervisors and workmen)=27.<br>Additional Technical Executives plan:<br>June 26 end = 34,<br>Dec 26 = 10,<br>June 27 = 10.<br>Non-Technical Executive strength is planned to be reduced to 20 by June 2027.<br>**240th OCC:**<br>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 Dec 2026. Balance 24 would be for the HR and finance wings, with a plan to be shifted from the existing posts in TGTRANSCO. |
| **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).<br>**240th OCC:**<br>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 |

a) 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.

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b) 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.*

➢ ***States/UT/Entities may update***

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

a) As part of the Ministry of Power's broader initiative to enhance system operations and capacity building at Load Despatch Centres, a short-term knowledge-sharing exchange program covering System Operation, Market Operation, System Logistics, REMC function between RLDCs and SLDCs to foster cohesion and knowledge exchange was introduced.

b) This was deliberated in the 54rd TCC and 57th SRPC and further followed up in OCC Meetings.

c) The latest update is as follows:

| **Visit of SLDC officials to SRLDC (02.06.2025 - 21.10.2025)** | | | | | | |
|---|---|---|---|---|---|---|
| **State** | System Operation (Shift) | System Studies | Market Operation | Market Operation & REMC | System Logistics | Total |
| **TN** | 21 | 8 | 14 | 9 | - | 52 |
| **TG** | - | 3 | 4 | 1 | 1 | 9 |
| **AP** | 1 | - | 1 | - | 2 | 4 |
| **KA** | 2 | - | - | - | - | 2 |
| **KER** | 2 | - | - | - | - | 2 |
| **Total** | 26 | 11 | 19 | 10 | 3 | 69 |
| | | | | | | |
| **Status of deputation from SRLDC to states is a follows:** | | | | | | |
| **Utility** | Market Operation | System Operation | Cyber Security | SCADA | System Logistics | |
| **KPTCL** | 1 | 1 | 1 | | | |

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|---|---|---|---|---|---|---|
| **KSEBL** | | 3 | 3 | 3 | | |
| **PED** | 2 | 2 | 2 | | 2 | |

➢ ***SRLDC/SLDCs may update***

➢ In 57th SRPC-54th TCC meeting, it was noted that, subsequent to the peak demand season, SRLDC would be coordinating for all the exchange programs from SLDC to SLDC, RLDC to SLDC & SLDC to RLDC, to foster cohesion and knowledge exchange among them. Further in 238th OCC, SRLDC stated that tentatively from July 2026 onwards, they would coordinate all exchange programs.

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

CERC in its 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*

***In the Meeting***, SRLDC stated that the requirement for knowledge-exchange modules had been taken up with all SLDCs. The SLDCs may communicate to SRLDC the specific modules for which exchange programmes may be organized. SRLDC shall coordinate and arrange such programmes in consultation with the concerned SLDCs.

**Deliberations:**

- This agenda was deliberated in detail in the recent 55th TCC/ 58th SRPC meeting held on 24th/ 28th July 2026.
- Utilities were requested to furnish any further updates, if any, to SRPC.

## 29. Submission of FRC/FRP Calculation & High-Resolution Data as per IEGC, 2023

a) As per IEGC 2023, clause 30, Frequency response characteristic (FRC) calculation shall be carried out by each control area for any load or generation loss incident involving net change of more than 1000 MW of load or generation or a frequency change involving 0.1 Hz or more for the event notified by the NLDC.

➢ The generator is required to submit the data within two days of the event notification from NLDC. As soon as the event is notified, SRLDC also share this information in the OCC group for awareness. Now that the procedure has been notified, **it is up to the generators to submit the data in a timely manner.**

The following were concluded for compliance:

- ❖ Generators must resolve technical bottlenecks, especially at low loads.
- ❖ Internal root-cause analysis and corrective actions to be taken proactively.
- ❖ Performance will continue to be monitored; **persistent underperformance may impact FRP-linked incentives.**

❖ SRPC had conducted a Special Meeting to deliberate on Free Governor Mode of Operation (FGMO) Performance during FY 2025-26 in Southern Region on 31.07.2026 at 10:00 hrs.

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- Average Monthly/Cumulative FRP and FRC for all Control Areas may be presented by SRLDC

**Deliberations**

- The forum was appraised that NLDC notified three reportable events in the month of July 2026 as tabulated below:

| Sl.No | Events (Date and Time) | Region/Area | Generation (+ve) / Load (-ve) loss (MW) | Frequency Change(Hz) |
|---|---|---|---|---|
| 1 | 16-07-2026 11:52HRS | ANDHRA PRADESH (AP), SR | -1150 | 0.050 |
| 2 | 19-07-2026 12:36HRS | TAMILNADU (TN), SR | 1149 | -0.012 |
| 3 | 25-07-2026 19:20HRS | 400kV GREENKO S/s, SR | 1200 | -0.041 |

- SRLDC presented the station-wise performance of ISGS stations during the events as follows:

| Average Monthly Frequency Response Performance for 'July' , 2026 | | | | | |
|---|---|---|---|---|---|
| | | | Events | | |
| | | | 16-07-2026 11:52:50 | 19-07-2026 12:36:13 | 25-07-2026 19:20:07 |
| S No | Generator Name | Beta 'ß' | FRP | FRP | FRP |
| 1 | Neyveli I Exp- NLCIL | 0.33 | 0.00 | 1.00 | 0.00 |
| 2 | Neyveli II Stage I- NLCIL | 0.33 | 0.00 | 0.00 | 1.00 |
| 3 | Neyveli II Stage II- NLCIL | 0.64 | 1.00 | 0.00 | 0.91 |
| 4 | Neyveli II Exp- NLCIL | 1.00 | 1.00 | 1.00 | N/A |
| 5 | NTECL- JV (NTPC&TNPDCL) | 0.67 | 0.00 | 1.00 | 1.00 |
| 6 | NTPL-JV(NLCIL& TNPDCL) | 0.67 | 1.00 | 1.00 | 0.00 |
| 7 | Kudgi -NTPC | 1.00 | 1.00 | 1.00 | 1.00 |
| 8 | NNTPP-NLCIL | 0.67 | 0.00 | 1.00 | 1.00 |
| 9 | Telangana STPP -NTPP | 0.75 | 1.00 | 1.00 | 0.24 |
| 10 | Ramagundam Stage I&II-NTPC | 1.00 | 1.00 | 1.00 | 1.00 |
| 11 | Ramagundam Stage III-NTPC | 0.75 | 1.00 | 1.00 | 0.24 |
| 12 | Simhadri I-NTPC | 0.67 | 1.00 | 1.00 | 0.00 |
| 13 | Simhadri II-NTPC | 0.67 | 1.00 | 1.00 | 0.00 |
| 14 | Talcher II- NTPC | 1.00 | 1.00 | 1.00 | 1.00 |
| S No | Generator Name IPP | Beta 'ß' | FRP | FRP | FRP |
| 15 | SEILP1 | 0.71 | 1.00 | N/A | 0.43 |
| 16 | ILFS | 1.00 | 1.00 | 1.00 | 1.00 |
| 17 | SEILP2 | 0.77 | N/A | 1.00 | 0.54 |
| 18 | COASTAL | 1.00 | 1.00 | 1.00 | 1.00 |
| 19 | MEPL Stage - 2 | 0.67 | 1.00 | 0.00 | 1.00 |
| 20 | GREENKO PSP | 0.00 | PUMP Mode | PUMP Mode | 0.00 |

- SRLDC observed that NLC TPS-1 Exp, NLC TPS-II Stg-1, NLC TPS-II Stg-2, NTECL VALLUR, NTPL, NNTPP, SIMHADRI Stage-1 and Stage-2, SEIL-P1, and MEPL have given average FRP response < 0.75 for the FRC events of July 2026.

## 30. Partial Outages observed in state generators:

**Agenda Item in OCC**

1) All generators to expedite the actions for mitigating the Partial Outage.
2) The tie ups for the imported coal to be planned in advance.
3) The information w.r.t coal status and plan for imported coal etc to be informed to SRLDC/SRPC timely.
4) SLDCs to ensure that reason for partial outage passed on to SRLDC/SRPC is validated since the same is furnished to CEA/MoP.

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5) The following to be noted for compliance:

| Point | Details |
|---|---|
| **SR Peak Vigilance** | All thermal power plants must be more vigilant to maintain lower partial outages and support the grid during SR peak. |
| **Partial Outage Updates** | Generating plants should clearly update the reasons for higher average partial outages, focusing on technical reasons over poor coal quality, which can be secondary. |
| **Data Coordination** | All entities should ensure proper coordination between generators (State LDCs, TPPs, IPPs, and ISGS) and SRLDC for accurate and consistent data updates. |
| **Clarity in Formats** | SRLDC should discuss with GENCOs to clarify the data formats. |

**The following to be noted:**

- Partial outages during non-solar hours (19:00–24:00 hrs) are a serious concern as grid demand is at its peak and thermal support is essential.
- It was stressed that technical problems such as ID/FD fan loading, ESP constraints, and control valve issues must be rectified without delay.
- Coal quality improvement was identified as a key requirement, and utilities were urged to pursue this with suppliers vigorously.
- SRPC Secretariat/SRLDC had stated that if corrective actions are not visible, the matter may need to be escalated by writing to the respective CMDs/Chairmen for intervention.
- In 239th OCC, it was concluded all generating stations shall continue efforts to minimize partial outages, particularly during the evening peak period (19:00–24:00 hrs), by addressing technical constraints, improving coal quality management, and ensuring timely and accurate reporting of outage reasons through the respective SLDCs.

**Deliberations/Action Points**

- SRLDC presented the status of partial outages in thermal stations, particularly during non-solar hours (19:00 to 24:00 hrs) (***SRLDC PPT- Annexure-37a***).
- In case of **Andhra Pradesh**, it was informed that the average partial outage is 16 %.

**PARTIAL OUTAGE SUMMARY - THERMAL (01-07-2026 TO 31-07-2026)**

| STATION | AVG. RUNNING CAPCAITY GROSS (MW) [A] | AVG. RUNNING CAPCAITY NET (MW) [B] | AVERAGE PARTIAL OUTAGE (MW) [C] | PERCENTAGE (%) [C/B*100] | Significant Reason |
|---|---|---|---|---|---|
| ANDHRA PRADESH_THERMAL | 6568 | 6108 | 996 | 16 | |
| VIJAYAWADA TPS | 2289 | 2129 | 324 | 15 | Poor Coal Quality, aux trouble |
| RAYALASEEMA TPP | 1399 | 1301 | 188 | 14 | IDFs loading, BACKDOWN, Poor Coal Quality, seal air fans problem, Turbine Vibrations, PA fan problem, |
| KRISHNAPATTANAM | 2219 | 2064 | 464 | 22 | Poor Coal Quality, Both PA fans taking high currents, boiler constraint, HRH drain line complaint, Coal feeding probelm, |
| SEIL P2 Unit-2 | 660 | 614 | 20 | 3 | --- |

- In case of **Telangana**, it was informed that the average partial outage is 19 %.

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| PARTIAL OUTAGE SUMMARY - THERMAL (01-07-2026 TO 31-07-2026) | | | | | |
|---|---|---|---|---|---|
| STATION | AVG. RUNNING CAPCAITY GROSS (MW) [A] | AVG. RUNNING CAPCAITY NET (MW) [B] | AVERAGE PARTIAL OUTAGE (MW) [C] | PERCENTAGE (%) [C/B*100] | Significant Reason |
| TELANGANA_THERMAL | 6655 | 6190 | 1172 | 19 | |
| KOTHAGUDEM TPS | 1758 | 1635 | 421 | 26 | Coal quality issues, coal shortage, |
| SINGARENI TPS | 1181 | 1098 | 63 | 6 | Coal quality issues, Generated as per Schedule |
| RAMAGUNDAM-B | 0 | 0 | 0 | Plant Out | --- |
| BHADRADRI TPS | 836 | 778 | 129 | 17 | Coal quality issues, coal shortage |
| KAKATIYA ST1&ST2 | 1100 | 1023 | 105 | 10 | Coal quality issues, coal shortage |
| YADADRI | 1781 | 1656 | 454 | 27 | Coal quality issues, coal shortage |

- In case of **Karnataka**, it was informed that the average partial outage is 15 %.

| PARTIAL OUTAGE SUMMARY - THERMAL (01-07-2026 TO 31-07-2026) | | | | | |
|---|---|---|---|---|---|
| STATION | AVG. RUNNING CAPCAITY GROSS (MW) [A] | AVG. RUNNING CAPCAITY NET (MW) [B] | AVERAGE PARTIAL OUTAGE (MW) [C] | PERCENTAGE (%) [C/B*100] | Significant Reason |
| KARNATAKA_THERMAL | 3923 | 3648 | 546 | 15 | |
| YERAMARAS TPS | 1342 | 1248 | 269 | 22 | Poor Coal Quality, Ash handling plant evacuation issue |
| RAICHUR TPS | 1135 | 1056 | 161 | 15 | Poor Coal Quality, Coal Feeding Problem |
| BELLARY TPS | 1445 | 1344 | 116 | 9 | Low heat value coal and equipment constraints (Mills loaded more than rated capacitayFurther loading may lead to ash handling problems) |

- In case of **Tamil Nadu**, it was informed that the average partial outage is 16 %.

| | | | | | |
|---|---|---|---|---|---|
| TAMILNADU_THERMAL | 4263 | 3964 | 623 | 16 | |
| NORTH CHENNAI TPS STG-II | 1103 | 1026 | 350 | 34 | To maintain the boiler parameters, Coal Issue |
| TUTICORIN | 596 | 554 | 32 | 6 | Back down due to high RE |
| North Chennai TPS | 576 | 536 | 171 | 32 | Backdown due to high RE power, Less demand |
| ST - CMS | 250 | 233 | 1 | 0 | Back down due to high RE |
| METTUR TPS | 1213 | 1128 | 40 | 4 | Back down due to RE Power, Less demand |
| SEPC | 525 | 488 | 29 | 6 | ID fan issue, Back down due to high RE |

- **State IPPs:** It was observed that the average partial outage in IPPs is 12%, with most stations generating as per schedule.

| | | | | | |
|---|---|---|---|---|---|
| STATE IPP_THERMAL | 3188 | 2965 | 366 | 12 | |
| HINDUJA POWER CORPORATION LTD | 906 | 842 | 2 | 0 | -- |
| UPCL | 1123 | 1044 | 255 | 24 | Generated as per schedules, Backdown due to high RE power, due to silt formation, Sea water intake issues, Silt formation |
| JINDAL | 1160 | 1079 | 109 | 10 | Generated as per schedules |

- **Regional IPPs:** It was observed that the average partial outage in IPPs is 3%, with most stations generating as per schedule.

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| PARTIAL OUTAGE SUMMARY - THERMAL (01-07-2026 TO 31-07-2026) | | | | | |
|---|---|---|---|---|---|
| STATION | AVG. RUNNING CAPCAITY GROSS (MW) [A] | AVG. RUNNING CAPCAITY NET (MW) [B] | AVERAGE PARTIAL OUTAGE (MW) [C] | PERCENTAGE (%) [C/B*100] | Significant Reason |
| REGIONAL IPP_THERMAL | 4474 | 4161 | 132 | 3 | |
| SIMHAPURI ENERGY PVT LTD | 518 | 482 | 19 | 4 | Generated as per Schedule |
| IL&FS | 1200 | 1116 | 75 | 7 | Air preheater issue |
| COASTAL ENERGEN | 1181 | 1098 | 1 | 0 | -- |
| SEIL | 958 | 891 | 0 | 0 | -- |
| SEIL-PROJECT2 U1 | 617 | 574 | 36 | 6 | Generated as per Schedule |
| MEENAKSHI ENERGY LTD | 0 | 0 | 0 | Plant Out | -- |

❖ **ISGS:** It was observed that the average partial outage is 8%, with NLCIL stations exhibiting higher partial outages mostly attributed to mill outages and FBHE Fluidization issue in NLCIL TS II Expansion.

| PARTIAL OUTAGE SUMMARY - THERMAL (01-07-2026 TO 31-07-2026) | | | | | |
|---|---|---|---|---|---|
| STATION | AVG. RUNNING CAPCAITY GROSS (MW) [A] | AVG. RUNNING CAPCAITY NET (MW) [B] | AVERAGE PARTIAL OUTAGE (MW) [C] | PERCENTAGE (%) [C/B*100] | Significant Reason |
| ISGS_THERMAL | 13752 | 12789 | 973 | 8 | |
| RAMAGUNDAM - UNIT7 | 371 | 345 | 0 | 0 | -- |
| TALCHER ST2 | 1565 | 1455 | 254 | 17 | Generated as per Schedule, MILL PROBLEM |
| VALLUR TPS | 1032 | 960 | 58 | 6 | Generated as per Schedule, Unit-3 PA fan issue |
| NTPL | 1000 | 930 | 1 | 0 | -- |
| SIMHADRI STAGE II | 1000 | 930 | 0 | 0 | -- |
| NEYVELI TS II - STG1 | 318 | 296 | 96 | 33 | Mill outages and low lignite quality |
| NNTPS | 661 | 615 | 146 | 24 | Mill outages |
| KUDGI | 2400 | 2232 | 40 | 2 | Generated as per Schedule |
| NEYVELI TS II EXPN | 153 | 143 | 56 | 40 | FBHE Fluidization issue |
| NTPC-TELANGANA STPP | 1497 | 1392 | 17 | 1 | -- |
| NEYVELI TS I EXPN | 386 | 359 | 52 | 14 | ID Fan issue, Mill outages, Lignite quality issu |
| Simhadri Stage I | 1000 | 930 | 3 | 0 | -- |
| RAMAGUNDAM - UNIT1to6 | 1684 | 1566 | 62 | 4 | Poor Coal Quality |
| NEYVELI TS II - STG2 | 684 | 636 | 186 | 29 | Mill outages and low lignite quality, |
| SR_THERMAL | 42822 | 39825 | 4807 | 12 | |

**Conclusion:**

All generators may take necessary measures to minimize partial outages in thermal generating units and ensure full availability.

## 31. 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% |

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(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.** | | | | | |

i. 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.)

ii. CEA vide communication dated 30.05.2024 had intimated that Minimum Power Level of **55%** is effective in the country from **01.02.2024**.

iii. MoP vide communication dated 28.08.2024 enclosing a detailed Note on thermal flexing and need for empowerment of State Load Despatch Centre for reliable operation of the synchronous power system in India had sought the intervention of Higher Management(Chief Secretary/Special Secretary(Energy/Power) all States/UTs to pursue the respective SERCs to

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introduce enabling of provisions for Thermal Flexibility in line with the CEA Flexibility Regulations 2023and issue necessary directions to equip and empower the SLDCs

iv. NLDC vide communications dated 02.09.2024 had taken up the urgent need for achieving the Technical Minimum Load of 55 % as mandated by CEA Flexibility Regulations and had sensitized that the flexible operation of conventional generating plants is required for operation with high renewable generation sources.

v. 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.***

vi. 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.*

vii. TPR&M division, CEA vide letter dated 20.11.2025 ***(Annexure-31a)*** communicated regarding Furnishing of progress and updates of Phase-I units identified under CEA (Flexible Operation of Coal Based Thermal Power Generating Units) Regulation. 2023 of Units. The progress and updates as per the format attached with the letter to be sent to TPRM division CEA (<cetprm-cea@gov.in>) with a copy to SRPC. It is requested to furnish the progress and updates (as per the attached format) of Phase-I units by November 2025 end and there after ever month.

viii. **All generators are requested to complete the retrofit, control system tuning, trial runs etc. all off units under Phase-I by June 2026, in consultation with OEM positively**.

ix. In the 235th OCC Meeting, forum was appraised that 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-31b*).**

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***GENCOs noted for compliance.***

## 32. Ensuring Transmission Adequacy and reliable operation of State Networks

All utilities shall furnish updates pertaining to intra-state transmission lines at the earliest.

- ***SRLDC may present the same.***
- ***All utilities may update.***

The updated list of transmission element constraints along with the proposed mitigation measures are enclosed as ***Annexure-32a***. All utilities were requested to review and update the status of the respective constraints and furnish their inputs at the earliest.

## 33. Compliance to direction as per CERC Order dated 11.09.2023 in Petition No. 132/MP/2022

(i) CERC order dated 11.09.2023 in Petition No. 132/MP/2022 in the matter of over drawl from the grid by regional entities leading to insecure operation of the grid and other associated matters had directed the respondent SLDCs to adhere to some action Plan.

a) SRLDC vide communication dated 12.01.2024 had taken up with the concerned States quoting the provisions in the Order and had requested to submit the quarterly report to SRLDC on status of implementation of the action plan.
As per the directions in the Order dated 11.09.2022 on Petition No 132-MP-2022 the following direction may be noted:

**Quote**:

*We direct the respondents to strictly adhere to the Action plan as above. SLDCs are directed to submit the **quarterly report to the SRLDC** on status of implementation of the action plan. **Any modification in action plan** keeping in view issues arising while implementation, **may be discussed and finalised at RPC forum**.*

***Unquote***

- ✓ SRLDC, through its letter dated **22.05.2026 had** reviewed the compliance report submitted by TANTRANSCO regarding the directions issued by the Hon'ble CERC in **Petition No. 132/MP/2022**, which pertained to persistent overdrawal by Southern Region constituents during low-frequency conditions.
- ✓ Based on operational data for **Q4 of FY 2025-26 (January–March 2026)**, SRLDC observed that despite various corrective measures reported by TANTRANSCO, significant overdrawal and schedule deviations continued. During the quarter, **1066 time blocks (12% of total time blocks)** recorded overdrawal exceeding **250 MW**, with the maximum overdrawal reaching **1252.52 MW** and the maximum overdrawal under low-frequency conditions reaching **1224.22 MW**.
- ✓ SRLDC had emphasized that the continued occurrence of such deviations indicates the need for stronger grid discipline and improved operational practices in accordance with the Indian Electricity Grid Code (IEGC). TANTRANSCO was advised to strengthen real-time operational response, improve demand and renewable energy forecasting, ensure adequate reserve management, and minimize persistent overdrawal and large deviations.
- ✓ Accordingly, TANTRANSCO was requested to take necessary corrective actions and ensure strict compliance with the directions of the Hon'ble CERC to facilitate secure and reliable grid operation.

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- ✓ SRLDC noted that AP, TN and Karnataka had furnished the report for Q4 of FY 2025-26. AP and TN had furnished the report for Q1 of FY 2026-27. Karnataka was requested to furnish the report for Q1 of FY 2026-27
  - ➢ ***TN SLDC may respond***
  - ➢ ***States to operate the Grid as per the essence of the Petition/Order.***
- ➢ ***The reports are received from all three states AP, TN and Karnataka for Q1 of FY 2026-27***

## 34. Primary Response Requirement as per Indian Electricity Grid Code – 2023

(i) SRLDC vide communication dated 27.02.2024 had brought attention to the requirements outlined in the Indian Electricity Grid Code (IEGC), 2023, particularly regarding the deployment of Primary, Secondary and Tertiary reserves for the purpose of frequency control, reducing area control error and relieving congestion. These mandates include the necessity for generating stations and units to have electronically controlled governing systems or frequency controllers in accordance with the CEA Technical Standards for Connectivity and provide primary response ancillary service (PRAS). An urgent transition plan is necessary to switch governors from Restricted Governor Mode of Operation (RGMO) to Free Governor Mode of Operation (FGMO) as it is due since 1st October 2023. This plan may be developed in collaboration with respective Original Equipment Manufacturers (OEMs) and implemented promptly.

As intimated by the generators during the deliberations in the OCC meetings, most of the generating units have already shifted to **Free Governor Mode of Operation (FGMO)**. ***Generators still under RGMO mode are requested to expedite change over to FGMO mode. Generators are requested to provide the updated FGMO implementation status. The status of units still operating under Restricted Governor Mode of Operation (RGMO) is placed at Annexure-34a***

**Deliberations/Conclusion**

The forum was informed that an awareness session was planned by SRLDC on 19.08.2026 for SLDCs and GENCOs. Subsequently, a special meeting to review FGMO performance of generators during FY 2025-26 was scheduled on 01.09.2026.

## 35. Monthly Review of LGBR for the next 13 months (Availability & Requirement)

(i) **SRLDC has declared 06:00 Hrs to 08:00 Hrs, 19:00 Hrs to 20:00 Hrs and 21:00 Hrs to 22:00 Hrs as Peak hours for August 2026.**

(ii) SLDCs to furnish the detailed Availability & Requirement for the next 13 months period from **August to August** (13 months LGBR rolling plan for energy and demand (peak hours as well as solar hours**) by 6th August 2026.** SLDCs may furnish the data for analysis.

- ➢ ***SLDCs to furnish the detailed Availability & Requirement for the next 13-month period from July 2026 to July 2027.***
- ➢ ***The plan for meeting the LGB (Month wise) may be submitted in writing.***

**Deliberations/Conclusion**

**SRPC** presented the summary of 13 Month LGBR (based on the data furnished by SLDCs) as follows:

**Andhra Pradesh**

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| ANDHRA PRADESH | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Month | Aug-26 | Sep-26 | Oct-26 | Nov-26 | Dec-26 | Jan-27 | Feb-27 | Mar-27 | Apr-27 | May-27 | Jun-27 | Jul-27 | Aug-27 |
| Solar Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 15078 | 15119 | 14741 | 14024 | 13568 | 14194 | 15080 | 15014 | 15019 | 15161 | 15450 | 15542 | 15304 |
| Requirement | | 13858 | 13316 | 13152 | 12691 | 12161 | 13364 | 14393 | 14976 | 14911 | 15568 | 14589 | 15024 | 14447 |
| Deficit/ Surplus | | 1220 | 1803 | 1589 | 1333 | 1407 | 830 | 687 | 38 | 108 | -407 | 861 | 518 | 857 |
| | % | 9 | 14 | 12 | 11 | 12 | 6 | 5 | 0 | 1 | -3 | 6 | 3 | 6 |
| Evening Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 11056 | 10864 | 10459 | 9831 | 9383 | 9906 | 10742 | 10616 | 10651 | 10936 | 11377 | 11553 | 11192 |
| Requirement | | 10154 | 9703 | 9286 | 8801 | 8595 | 9554 | 10156 | 10245 | 10941 | 10895 | 10491 | 10585 | 10612 |
| Deficit/ Surplus | | 902 | 1161 | 1173 | 1030 | 788 | 352 | 586 | 371 | -290 | 41 | 886 | 968 | 580 |
| | % | 9 | 12 | 13 | 12 | 9 | 4 | 6 | 4 | -3 | 0 | 8 | 9 | 5 |
| MU | | | | | | | | | | | | | | |
| Availability | MU | 8862 | 8514 | 8413 | 7644 | 7604 | 8300 | 7891 | 8696 | 8485 | 8929 | 8958 | 9285 | 8972 |
| Requirement | | 8091 | 7262 | 7720 | 6782 | 6753 | 7331 | 7277 | 8453 | 8614 | 8676 | 8114 | 8636 | 8517 |
| Deficit/ Surplus | | 771 | 1252 | 693 | 862 | 851 | 969 | 615 | 243 | -129 | 254 | 844 | 650 | 456 |
| | % | 10 | 17 | 9 | 13 | 13 | 13 | 8 | 3 | -1 | 3 | 10 | 8 | 5 |

SRPC observed that AP is comfortable with minor deficits coming up late in April and May of 2027

## Karnataka

| KARNATAKA | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Month | Aug-26 | Sep-26 | Oct-26 | Nov-26 | Dec-26 | Jan-27 | Feb-27 | Mar-27 | Apr-27 | May-27 | Jun-27 | Jul-27 | Aug-27 |
| Solar Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 15709 | 15652 | 16214 | 17033 | 18428 | 18793 | 20162 | 21239 | 19826 | 18162 | 15975 | 16533 | 16089 |
| Requirement | | 15417 | 14735 | 14676 | 15591 | 16945 | 18459 | 19252 | 20010 | 19361 | 18386 | 15544 | 16488 | 16188 |
| Deficit/ Surplus | | 292 | 917 | 1537 | 1442 | 1483 | 334 | 909 | 1229 | 466 | -223 | 431 | 45 | -99 |
| | % | 2 | 6 | 10 | 9 | 9 | 2 | 5 | 6 | 2 | -1 | 3 | 0 | -1 |
| Evening Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 11158 | 11920 | 12280 | 12485 | 12688 | 13110 | 13610 | 14501 | 14405 | 13476 | 12217 | 11917 | 11208 |
| Requirement | | 10744 | 11564 | 11698 | 11465 | 11573 | 12315 | 13433 | 14281 | 14005 | 13009 | 11864 | 11713 | 11066 |
| Deficit/ Surplus | | 414 | 356 | 582 | 1020 | 1115 | 795 | 177 | 221 | 401 | 466 | 353 | 204 | 142 |
| | % | 4 | 3 | 5 | 9 | 10 | 6 | 1 | 2 | 3 | 4 | 3 | 2 | 1 |
| MU | | | | | | | | | | | | | | |
| Availability | MU | 7483 | 8187 | 9413 | 9760 | 10123 | 10367 | 9587 | 10696 | 10177 | 10028 | 8877 | 7706 | 7855 |
| Requirement | | 7133 | 8061 | 8456 | 8806 | 9301 | 10048 | 9550 | 10737 | 10425 | 9408 | 9020 | 6466 | 7489 |
| Deficit/ Surplus | | 350 | 127 | 958 | 953 | 822 | 318 | 37 | -41 | -248 | 620 | -142 | 1239 | 365 |
| | % | 5 | 2 | 11 | 11 | 9 | 3 | 0 | 0 | -2 | 7 | -2 | 19 | 5 |

SRPC observed that Karnataka is comfortable except for a deficit of 223 MW during evening peak in May 2027.

## Kerala

| KERALA | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Month | Aug-26 | Sep-26 | Oct-26 | Nov-26 | Dec-26 | Jan-27 | Feb-27 | Mar-27 | Apr-27 | May-27 | Jun-27 | Jul-27 | Aug-27 |
| Solar Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 3514 | 3806 | 3607 | 3556 | 3836 | 3942 | 4247 | 4545 | 4682 | 4631 | 3741 | 3645 | 3657 |
| Requirement | | 3500 | 3800 | 3600 | 3554 | 3832 | 3935 | 4223 | 4532 | 4635 | 4635 | 3708 | 3605 | 3605 |
| Deficit/ Surplus | | 14 | 6 | 7 | 2 | 5 | 7 | 24 | 13 | 47 | -4 | 33 | 40 | 52 |
| | % | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| Evening Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 4339 | 4429 | 4660 | 4548 | 4809 | 4960 | 5080 | 5854 | 6404 | 6454 | 5045 | 4645 | 4645 |
| Requirement | | 4300 | 4400 | 4481 | 4532 | 4790 | 4918 | 5047 | 5814 | 6380 | 6420 | 5030 | 4515 | 4515 |
| Deficit/ Surplus | | 39 | 29 | 180 | 16 | 19 | 42 | 33 | 40 | 24 | 34 | 15 | 130 | 130 |
| | % | 1 | 1 | 4 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 3 | 3 |
| MU | | | | | | | | | | | | | | |
| Availability | MU | 2529 | 2499 | 2640 | 2691 | 2787 | 2894 | 2738 | 3469 | 3776 | 3790 | 2916 | 2677 | 2654 |
| Requirement | | 2495 | 2408 | 2600 | 2545 | 2779 | 2854 | 2645 | 3374 | 3583 | 3726 | 2825 | 2620 | 2620 |
| Deficit/ Surplus | | 34 | 91 | 40 | 146 | 8 | 39 | 92 | 96 | 193 | 64 | 91 | 57 | 34 |
| | % | 1 | 4 | 2 | 6 | 0 | 1 | 3 | 3 | 5 | 2 | 3 | 2 | 1 |

SRPC observed that Kerala is comfortable.

## Tamil Nadu

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| TAMIL NADU | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Month | Aug-26 | Sep-26 | Oct-26 | Nov-26 | Dec-26 | Jan-27 | Feb-27 | Mar-27 | Apr-27 | May-27 | Jun-27 | Jul-27 | Aug-27 |
| Solar Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 25787 | 25826 | 24655 | 22728 | 22091 | 24303 | 25337 | 25370 | 25370 | 25370 | 25370 | 26645 | 26605 |
| Requirement | MW | 20500 | 20600 | 20169 | 18570 | 18570 | 19301 | 21532 | 22673 | 22800 | 21814 | 21840 | 21861 | 21525 |
| Deficit/ Surplus | MW | 5287 | 5226 | 4486 | 4158 | 3521 | 5002 | 3805 | 2697 | 2570 | 3556 | 3530 | 4784 | 5080 |
| | % | 26 | 25 | 22 | 22 | 19 | 26 | 18 | 12 | 11 | 16 | 16 | 22 | 24 |
| PEX | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deficit/ Surplus | MW | 5287 | 5226 | 4486 | 4158 | 3521 | 5002 | 3805 | 2697 | 2570 | 3556 | 3530 | 4784 | 5080 |
| Evening Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 18552 | 18841 | 17710 | 15679 | 15115 | 17559 | 17775 | 17580 | 17580 | 17580 | 17580 | 18738 | 18688 |
| Requirement | MW | 20300 | 20500 | 19566 | 18933 | 18347 | 19112 | 20253 | 21602 | 22900 | 21683 | 21259 | 21420 | 21315 |
| Deficit/ Surplus | MW | -1748 | -1659 | -1856 | -3254 | -3232 | -1553 | -2478 | -4022 | -5320 | -4103 | -3679 | -2682 | -2627 |
| | % | -9 | -8 | -9 | -17 | -18 | -8 | -12 | -19 | -23 | -19 | -17 | -13 | -12 |
| PEX | | 1748 | 1659 | 1856 | 3254 | 3232 | 1553 | 2478 | 4022 | 5320 | 4103 | 3679 | 2682 | 2627 |
| Deficit/ Surplus | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MU | | | | | | | | | | | | | | |
| Availability | MU | 13017 | 13075 | 12821 | 11299 | 11448 | 12636 | 11622 | 12436 | 11975 | 12546 | 12743 | 13100 | 13100 |
| Requirement | MU | 13000 | 12900 | 12000 | 10700 | 10700 | 11000 | 11500 | 13200 | 13000 | 12800 | 12500 | 13300 | 13650 |
| Deficit/ Surplus | MU | 17 | 175 | 821 | 599 | 748 | 1636 | 122 | -764 | -1025 | -254 | 243 | -200 | -550 |
| | % | 0 | 1 | 7 | 6 | 7 | 15 | 1 | -6 | -8 | -2 | 2 | -2 | -4 |
| Purchases | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 764 | 1025 | 254 | 0 | 200 | 550 |
| Deficit/ Surplus | MU | 17 | 175 | 821 | 599 | 748 | 1636 | 122 | 0 | 0 | 0 | 243 | 0 | 0 |

Deficits are observed during evening peak and TN had informed that the deficits are planned to be met through met through Power Exchange purchases as tabulated above.

## Telangana

| TELANGANA | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Month | Aug-26 | Sep-26 | Oct-26 | Nov-26 | Dec-26 | Jan-27 | Feb-27 | Mar-27 | Apr-27 | May-27 | Jun-27 | Jul-27 | Aug-27 |
| Solar Peak (MW) at 12:00 hours | | | | | | | | | | | | | | |
| Availability | MW | 18968 | 18882 | 19466 | 16210 | 17341 | 18284 | 18650 | 18622 | 19131 | 18989 | 17554 | 17502 | 20121 |
| Requirement | MW | 17354 | 17588 | 16587 | 11909 | 14254 | 16086 | 17443 | 19216 | 16215 | 12226 | 12945 | 16928 | 18330 |
| Deficit/ Surplus | MW | 1614 | 1294 | 2879 | 4301 | 3087 | 2198 | 1207 | -594 | 2916 | 6763 | 4609 | 574 | 1791 |
| | % | 9 | 7 | 17 | 36 | 22 | 14 | 7 | -3 | 18 | 55 | 36 | 3 | 10 |
| Evening Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 14470 | 15223 | 15579 | 12135 | 13802 | 14512 | 14694 | 14578 | 16420 | 17028 | 13032 | 13269 | 15305 |
| Requirement | MW | 17987 | 18203 | 17828 | 12742 | 15852 | 17314 | 18267 | 19750 | 17404 | 13128 | 13901 | 17725 | 19140 |
| Deficit/ Surplus | MW | -3517 | -2980 | -2249 | -607 | -2049 | -2802 | -3572 | -5172 | -984 | 3900 | -869 | -4456 | -3835 |
| | % | -20 | -16 | -13 | -5 | -13 | -16 | -20 | -26 | -6 | 30 | -6 | -25 | -20 |
| MU | | | | | | | | | | | | | | |
| Availability | MU | 9990 | 9747 | 10688 | 8143 | 8834 | 9566 | 8875 | 9918 | 9744 | 10036 | 9396 | 9275 | 10925 |
| Requirement | MU | 9271 | 9012 | 9017 | 6943 | 8004 | 8802 | 8755 | 10965 | 9303 | 7726 | 7839 | 8946 | 9923 |
| Deficit/ Surplus | MU | 719 | 735 | 1671 | 1200 | 830 | 764 | 120 | -1046 | 442 | 2310 | 1557 | 329 | 1002 |
| | % | 8 | 8 | 19 | 17 | 10 | 9 | 1 | -10 | 5 | 30 | 20 | 4 | 10 |

- SRPC observed Telangana is experiencing evening peak period deficits, namely, upto 3517 MW in August 2026 and upto 2980 MW in September 2026.
- TG SLDC stated that for August and September 2026, tie-ups are expected with Himachal Pradsesh. Further YTPS Unit-5 is expected by August/September 2026.
- For managing evening peak, RTM would be utilized, along with pumping and generation operations at Nagarjuna Sagar.

## Puducherry

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| PUDUCHERRY | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Month | Aug-26 | Sep-26 | Oct-26 | Nov-26 | Dec-26 | Jan-27 | Feb-27 | Mar-27 | Apr-27 | May-27 | Jun-27 | Jul-27 | Aug-27 |
| Solar Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 590 | 590 | 580 | 580 | 570 | 585 | 585 | 595 | 595 | 650 | 650 | 650 | 590 |
| Requirement | | 510 | 500 | 500 | 490 | 495 | 505 | 510 | 515 | 530 | 534 | 505 | 496 | 490 |
| Deficit/ Surplus | | 80 | 90 | 80 | 90 | 75 | 80 | 75 | 80 | 65 | 116 | 145 | 154 | 100 |
| | % | 16 | 18 | 16 | 18 | 15 | 16 | 15 | 16 | 12 | 22 | 29 | 31 | 20 |
| Evening Peak (MW) | | | | | | | | | | | | | | |
| Availability | MW | 550 | 550 | 545 | 545 | 545 | 545 | 545 | 555 | 560 | 570 | 570 | 550 | 550 |
| Requirement | | 555 | 545 | 545 | 540 | 530 | 545 | 560 | 570 | 585 | 594 | 597 | 604 | 565 |
| Deficit/ Surplus | | -5 | 5 | 0 | 5 | 15 | 0 | -15 | -15 | -25 | -24 | -27 | -54 | -15 |
| | % | -1 | 1 | 0 | 1 | 3 | 0 | -3 | -3 | -4 | -4 | -4 | -9 | -3 |
| (MU) | | | | | | | | | | | | | | |
| Availability | MU | 415 | 400 | 395 | 390 | 380 | 385 | 385 | 395 | 400 | 400 | 400 | 395 | 410 |
| Requirement | | 355 | 350 | 350 | 342 | 345 | 340 | 350 | 356 | 365 | 380 | 378 | 389 | 386 |
| Deficit/ Surplus | | 60 | 50 | 45 | 48 | 35 | 45 | 35 | 39 | 35 | 20 | 22 | 6 | 24 |
| | % | 17 | 14 | 13 | 14 | 10 | 13 | 10 | 11 | 10 | 5 | 6 | 2 | 6 |

SRPC observed LGB of PED mostly comfortable with minor deficits during evening peak, which are planned to be met through market purchases.

## 36. ACTIONABLE POINTS FOR COMPLIANCE AS PER IEGC 2023

### *36.1 Periodic Testing of Generators, HVDC/FACTS Devices*

(i) 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.

(ii) 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.

(iii) Further, Regulation 40(1)(b) stipulate that "*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.*"

(iv) Generators and HVDC/FACT owners were to furnish the Testing schedule for 2024-25 by 31st October 2023.

**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.

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(v) SRPC had expressed concern over the widespread non-compliance by several generators with the provisions of Regulation 40(1) and Regulation 40(1)(b) of the CERC (IEGC) Regulations, 2023, particularly with respect to periodic testing requirements. A non-compliance notice had been issued to such generators. The list of generators who have not furnished the testing schedule for the period 2024–29 and the list of generators who had furnished testing schedules for FY 2024–25 but have not conducted the tests and/or not submitted test reports to SRPC also have been furnished.

(vi) In this regard, SRPC vide letter dtd 27.05.2026 communicated over non-compliance of the above Reg 40 (1) & 40(1)(b) to all the generators.

- A Special Meeting on Non-Compliance of IEGC-2023 Regulation 40 on Periodic Testing of Generators with respect to conventional generators was held on 18.06.2026. A detailed review of the status of all the conventional generators was taken. The record notes of the meeting were issued on 02.07.2026. The testing schedule for the periodic testing schedule for the periodic testing of conventional generating station in the Southern Region for the period 2024-29 is enclosed as ***Annexure-36a***. GENCOs are requested to share any corrections/changes in the schedule to seoprnsrpc-ka@nic.in and srpc.operation@gmail.com for necessary updating.

➢ ***All the generators to note all the above for strict Compliance***

➢ **The agenda was discussed under Agenda item No. 17**

### *36.2 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-day | NLDC, RLDC and SLDC | For various operating conditionsusing online/offline SCADA/EMS system |
| Day-ahead | NLDC, RLDC, and SLDC | For various operating conditionsusing offline tools |
| Weekly | NLDC, RLDC, and SLDC | For various operating conditionsusing offline tools |
| Monthly/Yearly | RPC | For various operating conditionsusing offline tools |

➢ **All concerned entities need to initiate actions to comply the following IEGC provisions:**

(i) 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.

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(ii) 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**"

*(iii)* SRLDC to furnish OP Study for **July 2026**

- **SRLDC /SLDCs may update on the status of RA study.**
- **Review of past month operational studies**
- **This month operational studies**

**Deliberations:**

- SRLDC presented the Operational Planning Study for the shutdown of of 400kV Hoody-Devanahalli D/C on 12.07.2026 at 10:09 hrs for conducting tan-delta testing. KPTCL informed due to high induction, D/C shutdown was required for doing the testing.
- The study results obtained using real-time SCADA data were compared with the results of PSSE analysis. The line, voltage sensitivities are closely matching.

**Line & ICT sensitivities:**

| S No. | AC TRANSMISSION ELEMENT | As per SCADA | | | As per PSS®E | | |
|---|---|---|---|---|---|---|---|
| | | P flow before s/d (MW) | P flow after s/d (MW) | sensitivity (%) | P flow before s/d (MW) | P flow after s/d (MW) | sensitivity (%) |
| 1 | 400kV-KOLAR-HOODY-1 | 269 | 347 | **31** | 276 | 414 | **29** |
| 2 | 400kV-KOLAR-HOODY-2 | 266 | 348 | **33** | 276 | 414 | **29** |
| 3 | 400kV-NELMANGALA-DEVANAHALLI | 101 | 176 | **30** | 98 | 226 | **27** |
| 4 | 400kV-SOMANAHALLI-MYLASANDRA | 570 | 625 | **22** | 470 | 552 | **17** |
| 5 | 400kV-YELHANKA-DEVANAHALLI | 26 | -81 | **22** | 31 | -110 | **17** |
| 6 | 400kV-BIDADI-TUMKUR-1 | 266 | 272 | **2** | 502 | 522 | **4** |
| 7 | 400kV-BIDADI-TUMKUR-2 | 268 | 273 | **2** | 502 | 522 | **4** |
| 8 | 400kV-GOOTY-PAVAGADA-1 | 488 | 522 | **14** | 99 | 140 | **9** |
| 9 | 400kV-GOOTY-PAVAGADA-2 | 488 | 520 | **13** | 99 | 140 | **9** |
| 10 | 400kV/220kV HOODY-ICT-1 | 258 | 226 | **-13** | 340 | 275 | **-14** |
| 11 | 400kV/220kV HOODY-ICT-2 | 259 | 226 | **-13** | 340 | 275 | **-14** |
| 12 | 400kV/220kV HOODY-ICT-3 | 261 | 228 | **-13** | 340 | 275 | **-14** |

**Voltage sensitivities:**

| S No. | SUBSTATION | As per SCADA | | | As per PSS®E | | |
|---|---|---|---|---|---|---|---|
| | | V/G before s/d (kV) | V/G after s/d (kV) | V/G difference (kV) | V/G before s/d (kV) | V/G after s/d (kV) | V/G difference (kV) |
| 1 | 400kV HOODY S/S | 397.51 | 394.43 | **-3.08** | 394.15 | 391.32 | **-2.83** |
| 2 | 400kV HOSUR S/S | 395.34 | 394.21 | **-1.13** | 394.81 | 393.82 | **-1.00** |

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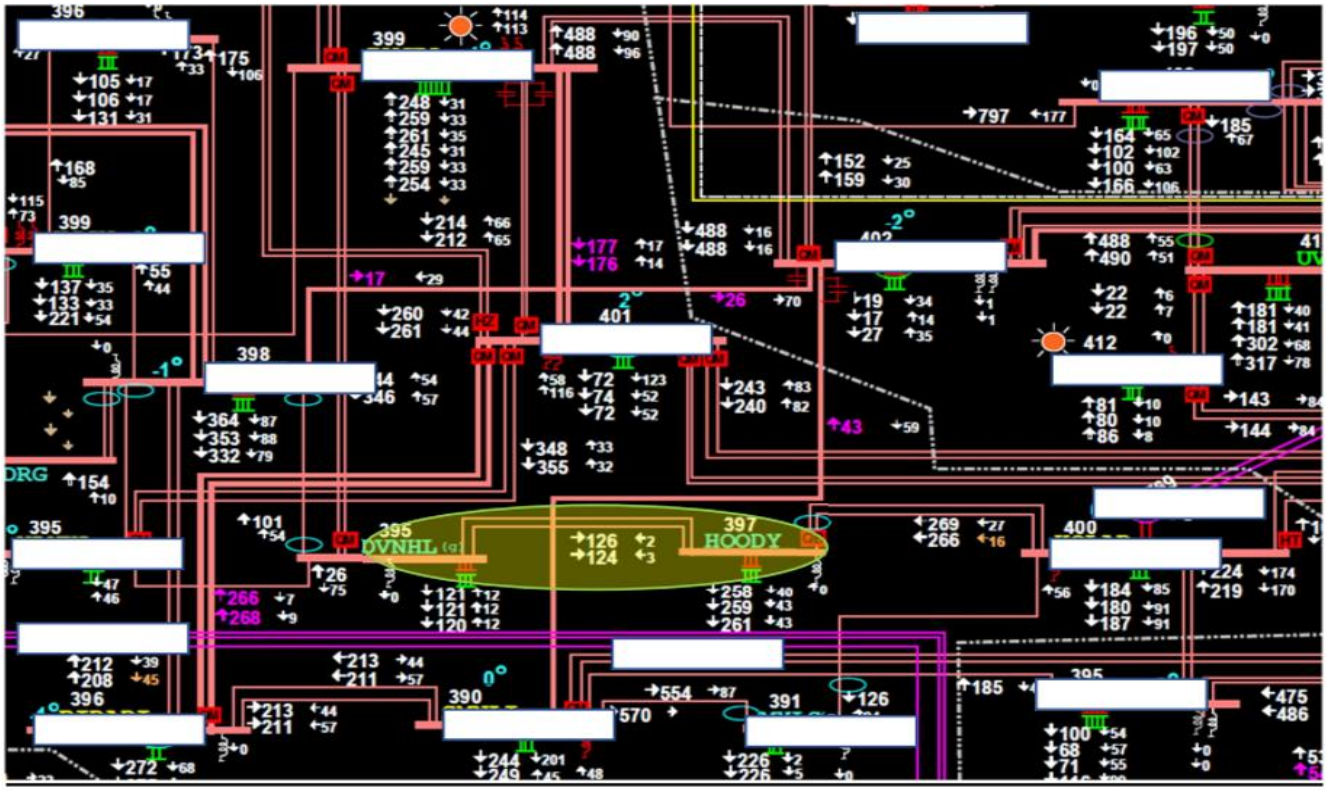
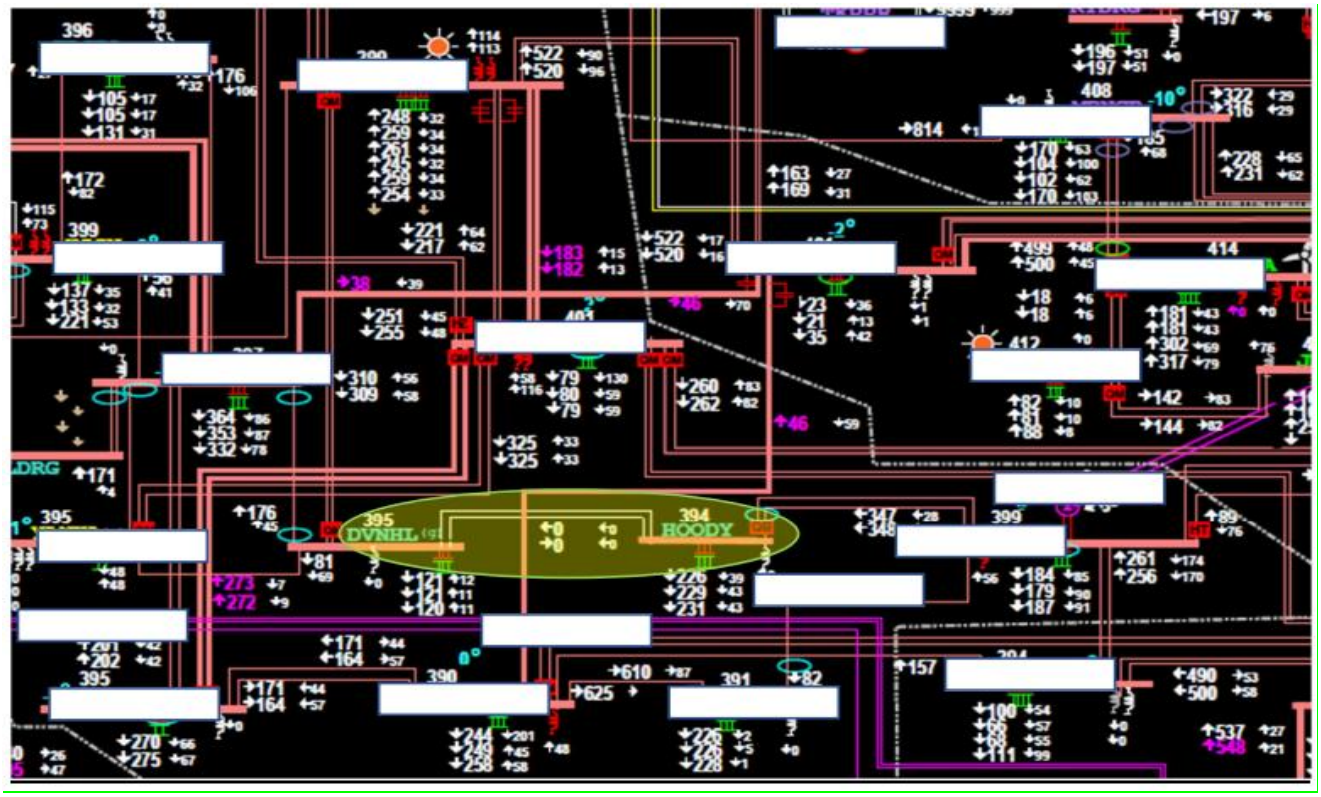
**Snapshot before shutdown:**




**Snapshot after shutdown:**




## 37. Grid Operation during July 2026

### 1) Operational discipline by SLDCs, ISGS and ISTS licensees

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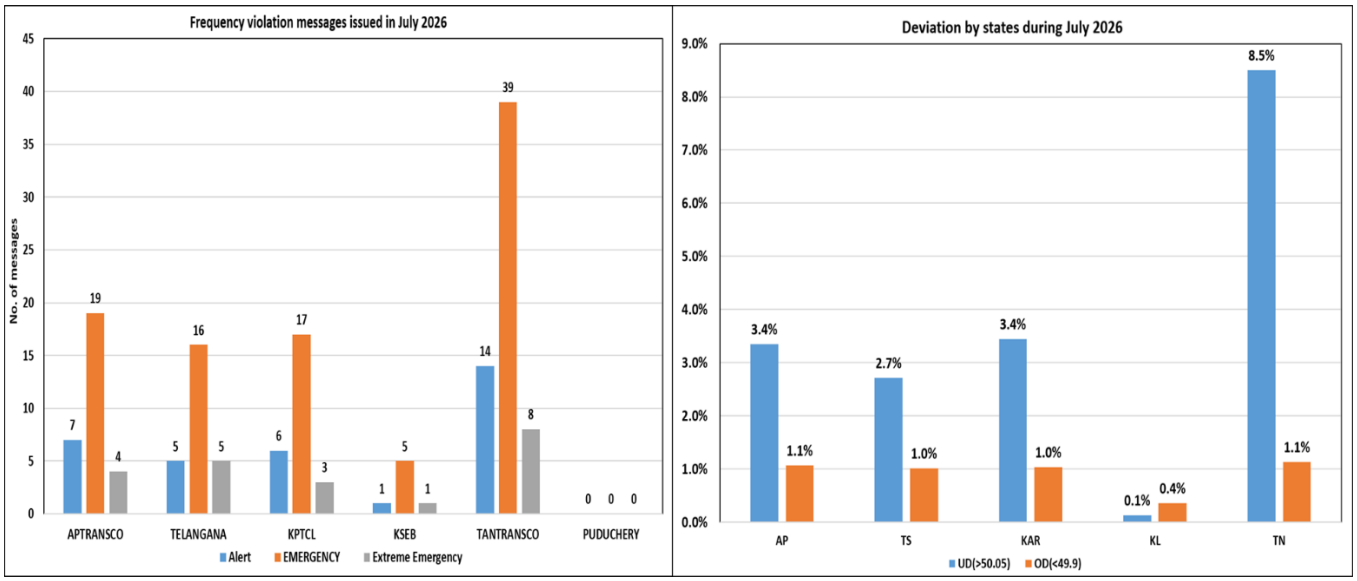
2) **Schedule v/s Actual Generation of various power stations**
3) **SPS Status in SR: Existing and proposed.**
   **Details of utilization of ISGS URS power**
4) **Frequency related issues (underdrawal/overdrawal)**
5) **Instance of deployment of Ancillary Services/AGC**
6) **Maximum demand met and details of mix of generation in meeting the demand.**
7) **Solar generation hours during the month/ solar Peak**
8) **Wind generation pattern and peak**
9) **Transmission network / system operation issues.**
10) **Any specific issues need attention.**

**Deliberations:**

SRLDC presented the monthly highlights for July 2026: (***SRLDC PPT*** - ***Annexure-37a***)

**37.1 Operational discipline by SLDCs, ISGS and ISTS licensees**




(i) SRLDC observed that during July 2026, the majority of extreme emergency/emergency/alert messages were issued to TANTRANSCO, followed by APTRANSCO, KPTCL, TGTRANSCO and KSEBL.

(ii) During high grid frequency conditions (i.e., frequency > 50.05Hz), underdrawal was there by TN, KA, AP, TG and KL for 8.5%, %, 3.4%, 3.4%, 2.7 and 0.1% of time respectively and when the frequency was below 49.9Hz, overdrawal was thereby TN, KA, AP, TG and KL for 1.1%, 1.0%, 1.1%, 1.0% and 0.4% of time respectively.

Frequency violation messages issued in **July 2026:**

| State | Alert messages | Emergency messages | Extreme Emergency messages |
|---|---|---|---|
| AP | 7 | 19 | 4 |
| TG | 5 | 16 | 5 |
| KA | 6 | 17 | 3 |

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| | | | |
|---|---|---|---|
| KL | 1 | 5 | 1 |
| TN | 14 | 39 | 8 |
| PU | 0 | 0 | 0 |

**Conclusion:**

- All states were advised to initiate timely measures to control overdrawal (OD) and underdrawal (UD) in order to avoid large deviations from schedule.
- Adequate reserves to be maintained by the states.

### 37.2 Schedule v/s actual generation of various power stations

SRLDC presented the Schedule v/s Actual generation of various power stations (based upon the SEM data available). The Over Injection and Under Injection at different frequency were analysed.

The following were noted:

✓ When frequency is >= 49.90 to <=50.05: Total No. of blocks: 2032 out of 2496.

- Significant overinjection was observed from NTPC Kudgi (69.4%), NLCIL TPS II St-II (69%) and NLCIL TPS II St-I (55.6%) and underinjection was observed from NTPC Talcher Stage-II (84.6%), RSTPS Unit 7 (77.6%) and NTPC Simhadri Stage-II (71.5%). On MW basis, the highest quantum of overinjection was observed from NTPC Talcher Stage-II (242 MW) and NLCIL TPS II St-II (212 MW) and the highest quantum of underinjection was observed from NTPC Telangana (789 MW) and NTPC RSTPS U 1 to 6 (511 MW).

✓ When frequency is < 49.90: Total No. of blocks: 216 out of 2496.

- Significant underinjection was observed from NTPC Talcher Stage-II (83.8%), and NTPC RSTPS U7 (64.8%). On MW basis, the highest quantum of underinjection was observed from NNTPS (403 MW), NTPC Talcher Stage-II (293%) and NTECL (252 MW).

✓ When frequency is> 50.05: Total No. of blocks: 248 out of 2496.

- NLCIL TPS II St-II and NLCIL TPS II St-I were over injecting 79.8% and 73.4% of the time respectively. On MW basis, the highest quantum of overinjection was observed from NTPC Kudgi (348 MW), NTPC Talcher Stage-II (237 MW) and NLCIL TPS II St-II (213 MW).

**Conclusion**:

- Generators to take necessary steps to avoid over injection at high frequency and under injection at low frequency.

### 37.3 SPS Status in SR: Existing and proposed

❖ Nil

**a) Details of utilization of ISGS URS power**

The following were noted during July 2026:

❖ **APTRANSCO:**

- NLCIL Stations: AP utilized URS power from NTPL on two days during July 2026. Approximately 80 MW was utilized on 14.07.2026, while around 186 MW was utilized on

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20.07.2026.

- NTPC Stations: The maximum URS power utilized from NTPC Kudgi was approximately 140 MW on 20.07.2026. URS power was also utilized from NTPC Ramagundam on 20.07.2026.

❖ **KPTCL:**

- NLCIL Stations: Karnataka utilized URS power on several days during the month. The average utilization of URS power from different stations was approximately 50–60 MW. The maximum URS power utilized was approximately 500 MW from NTPL.
- NTPC Stations: Karnataka utilized URS power on several days during the month. The average utilization of URS power from different stations was approximately 100–200 MW. The maximum URS power utilized was approximately 800 MW from NTPC Kudgi.

❖ **KSEBL:**

- ER Generating Stations: Kerala utilized URS power from the ER NTPC stations, namely Barh-I and Barh-II, with an average utilization of approximately 10 MW.
- NTPC Stations: The maximum URS power utilization was approximately 50 MW on 18.07.2026. From NTPC Kudgi, the maximum utilization was approximately 225 MW on 04.07.2026, 05.07.2026, 07.07.2026, and 25.07.2026, with an average utilization of approximately 50 MW over the month.
- NLCIL Stations: From NTPL, the maximum URS power utilization was approximately 95 MW on 01.07.2026.

❖ **TANTRANSCO:**

- Approximately 40–80 MW of URS power was utilized on 08.07.2026 and 12.07.2026.

❖ **TGTRANSCO:**

- ER Generating Stations: The maximum URS power utilization from NTPC FSTPP-I & II was approximately 500 MW on 21.07.2026, 24.07.2026, and 25.07.2026. The average URS power utilization from all stations was approximately 60–70 MW over the month.
- NLCIL Stations: From NTPL, URS power utilization exceeded 100 MW on several days during the month.
- NTPC Stations: From NTPC Kudgi, the maximum URS power utilization was approximately 375 MW on 19.07.2026.
- WR Generating Stations: The maximum URS power utilization was approximately 900 MW, with an average utilization of around 100 MW from all stations over the month.

The URS was effectively utilized by Karnataka and Telangana on several days during July 2026. Kerala's utilization of URS also increased compared to the previous month.

❖ **PED:**

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- NLCIL Stations: The maximum URS power utilization from NNTPS was approximately 9 MW on 15.07.2026.
- NTPC Stations: The average URS power utilization from various stations was approximately 20–30 MW over the month. The maximum utilization from NTPC Telangana was approximately 75 MW on 22.07.2026.

❖ **Power made available in the market by GENCOs during July 2026:**

The following were noted during July 2026:

- DAM sale by NTPC/NTECL generators: Maximum power sold was around 280-290 MW by NTPC Telangana on 13.07.2026. Average power sale of around 50 MW was also observed from NTPC stations was observed on several days of the month.
- DAM sale by NLCIL/NTPL generators: The average sale from the NLCIL generators was presented. Maximum power sold was around 150 MW by NTPL.
- RTM sale by NTPC/NTECL generators: The quantum of RTM sale is observed to be more than that of DAM sale during the month. Maximum power sold was around 650 MW. Average power sale by various stations is around 100 -150 MW on different days of the month.
- RTM sale by NLCIL/NTPL generators: The quantum of RTM sale is observed to be more than that of DAM sale during the month. Maximum power sold is around 330 MW by NTPL. Average power sale by various stations is around 100 MW on different days of the month.

### 37.4 Frequency related issues (under drawal(UD)/ over drawal(OD))

State wise deviation Vs frequency presented by SRLDC for July 2026.

The following were highlighted regarding the UD and OD beyond the prescribed limit:

| State | OD beyond the limit at low frequency | UD beyond the limit at high frequency |
|---|---|---|
| AP | 1.1 | 2.5 |
| TG | 0.5 | 1.3 |
| KA | 0.6 | 3.1 |
| TN | 0.8 | 7.6 |
| KL | 0.2 | 0.6 |

- AP: OD instances up to 1200 MW, UD instances up to 1500 MW
- TG: OD instances up to 1000 MW, UD instances up to 1100-1200 MW
- KA: OD instances up to 1250 MW, UD instances up to 1200 MW
- TN: OD instances up to 1500 MW, UD instances up to 1500 MW
- KL: OD instances up to 1200 MW, UD instances up to 700 MW

**Conclusion:**

- SLDCs to take necessary measures to restrict over drawal and under drawal instances.

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### 37.5 Instance of deployment of Ancillary Services/AGC

SRLDC presented the SRAS and TRAS deployed in July 2026 in SR

a. SRAS Maximum UP dispatch: 515 MW on 24.07.2026, during solar hours.

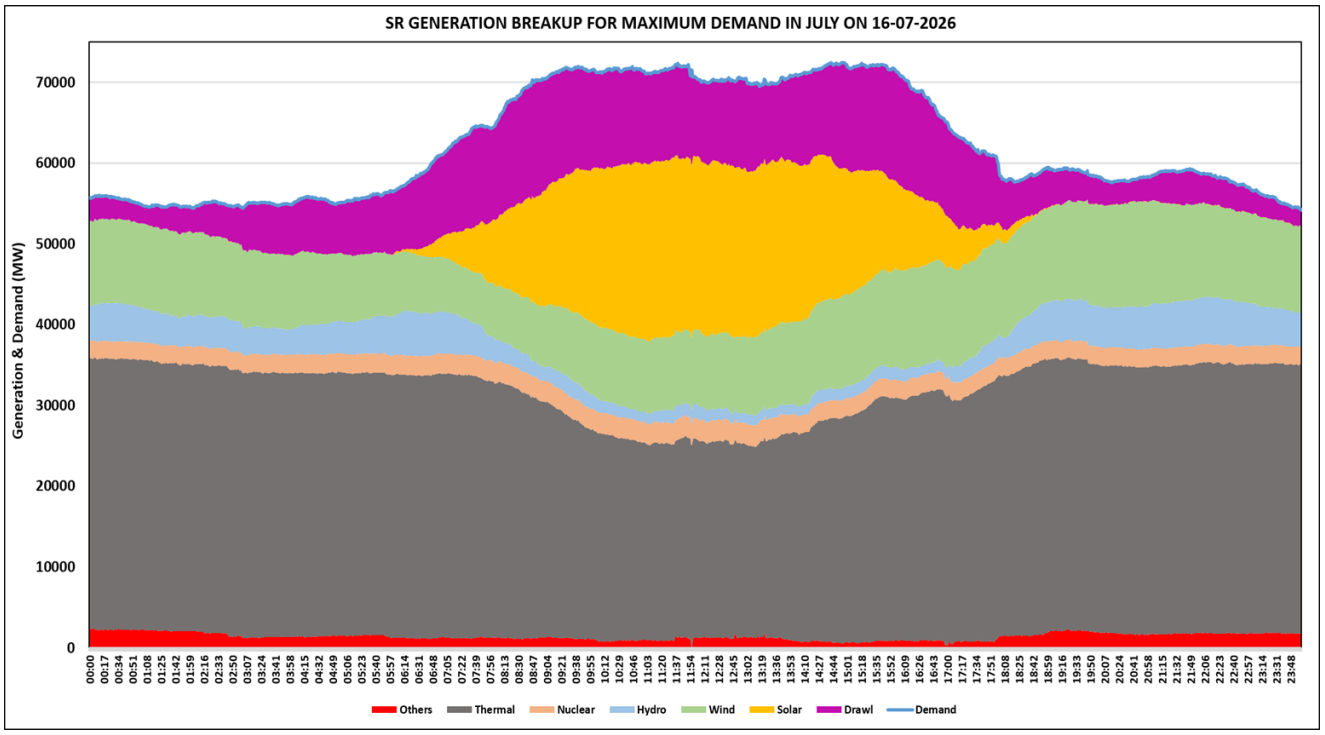
b. SRAS Maximum DOWN dispatch: 520 MW on 21.07.2026, during evening peak/morning peak hours.

c. TRAS Maximum UP dispatch: 2382 MW on 30.07.2026, during evening peak hours.

d. TRAS Maximum DOWN dispatch: 3035 MW on 17.07.2026, during morning peak hours.

### 37.6 Maximum demand met and details of mix of generation in meeting the demand.

SRLDC presented the following:




- It was noted that the Southern Region achieved its maximum demand in the month of July 2026 on **16.07.2026**, when the demand touched **72471 MW** at **14:42 hours**.
- The generation breakup indicated that thermal power was contributing 27967 MW, hydro generation was contributing 1461 MW, while renewable energy sources - solar was contributing 15671 MW and wind was contributing 11494 MW, drawal was 13003 MW.
- The energy generation on 16.07.2026 was 1493 MU. Thermal contribution was 49%, Hydro contribution was 5%.

### 37.7 Solar generation hours during the month/solar Peak

SRLDC presented the Solar generation pattern for the month of July 2026, highlighting the maximum and minimum generation day patterns. The following were noted:

- Maximum solar generation was **198 MU on 13.07.2026**. On that day, Maximum Solar Generation was **24189 MW at 12:21 hours.**
- Minimum solar generation was **113 MU on 04.07.2026**. On that day, Maximum Solar Generation was **15240 MW at 11:45.**

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### 37.8 Wind Generation pattern and peak

SRLDC presented the Wind generation pattern for the month of June 2026, highlighting the maximum and minimum generation day patterns. The following were noted:

- ❖ Maximum wind generation was **405 MU** on **30.07.2026**. On that day, Max Wind Generation was **18435 MW at 15:18 hours.** The trend of increasing wind generation is observed.
- ❖ Minimum wind generation was **239 MU** on **16.07.2026**. On that day, Max Wind Generation was **13027 MW at 20:42 hours.**
- ❖ Maximum total Renewable Energy generation was 526 MU on 30.07.2026, due to increase in wind generation.
- ❖ Minimum total Renewable Energy generation was 387 MU on 18.07.2026.
- ❖ The comparison of Renewable Energy generation in July 2026 and July 2025 was also presented.

### 37.9 Transmission network/system operation issues.

**Voltage Related Issues**

- SRLDC presented the analysis on the % of time voltages were beyond IEGC limit (26 S/S details were presented). It was observed that high-voltage conditions are likely to prevail during the upcoming months due to increased renewable energy generation, reduced demand, and lower transmission system loading. In view of the anticipated voltage profile, it is suggested that the commissioning of the planned reactors may be expedited.
- TGSLDC/TRANSCO stated that rectors at Yedula and Vattem stations are planned to be commissioned by August 26 end.
- High voltage conditions were observed across Telangana during night hours.

**Conclusion**

- ➢ TGSLDC/Other SLDCs to coordinate internally to plan measures to control high voltages effectively, ensuring protection of capital assets.

### 37.10 Any specific issues need attention

**Non-Furnishing/Delayed Furnishing of Flash Report for July 2026**

- SRLDC highlighted that, as indicated in the table(Refer SRLDC PPT), timely submission of reports was received only from 220 kV Vemagiri S/S. Delayed submission of reports was observed from two substations, while no reports were received from the remaining substations listed in the table.
- All utilities were requested to furnish the necessary reports with respect to GD/GI within the timelines specified in the CEA Grid Standards.

## 38. SRLDC Agenda Items

SRLDC vide mail dated 30.07.2026, had furnished the Agenda ***(Annexure-38a)***

1. **Prolonged outage of Bus reactors & Line reactors w.r.t following substations**

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| Sl. No | 400 kV Element | Reason | Outage Date and Time | Update as per SLDC/240th OCCM |
|---|---|---|---|---|
| 1 | HEBBANAHALLI - 400KV B/R 1 | Forced outage due to CB issues. R phase bushing flashover | 22-Nov-2024 20:39 | KAR SLDC informed that the required material is yet to be received for installation of Hebbanahalli B/R. It is awaited to arrive from Germany. |
| 2 | SEIL_P2 - 400KV B/R 1 | Oil Leak from the Radiator. Later isolator got damaged | 24-Jun-2025 10:01 | SEIL P2 informed that material is expected to be dispatched from Sweden by July 2026 end. Restoration of the B/R is planned by September 26. |
| 3 | KV_KOTA - 400KV B/R 1 | PRV Operated | 21-Aug-2025 10:54 | BHEL (OEM) is required to carry out physical inspection and submit the quotation, which is presently under process. It was further informed that issuance of LOI to BHEL and finalization of the exact restoration timeline would be taken up after approval of the quotation. BHEL is not responding for quotation. Matter is being pursued. |
| 4 | TALGUPPA - 400KV B/R 2 | Y-ph CB failed | 07-Feb-2026 06:46 | KAR SLDC informed that OEM had submitted a quotation earlier. Following subsequent negotiations, the quoted price was reduced, and the revised quotation has been forwarded for approval. The restoration of failed CB is planned by September 26/October 26. |

**Deliberations:**

- ✓ **Hebbanahalli - 400KV B/R 1**: KAR SLDC informed that the required material is yet to be received for installation of Hebbanahalli B/R. It is awaited to arrive from Germany.
- ✓ **SEIL P2 - 400KV B/R 1**: SEIL P2 informed that material is expected to be dispatched from Sweden by August 2026 end. Restoration of the B/R is planned by September 26.
- ✓ **KV KOTA - 400KV B/R 1**: Quotation sanction is under process. Upon approval, the matter regarding the deputation of a BHEL (OEM) engineer will be taken up.
- ✓ **Talguppa - 400KV B/R 2**: KAR SLDC informed that OEM had submitted a quotation earlier. Following subsequent negotiations, the quoted price was reduced, and the revised quotation has been forwarded to management for approval.

2. **Prolonged AC transmission elements outage**
   -Nil
3. **Operational issues faced in SR Grid:**

   i. **ICT loading issues**

ICT N-1 loading violation observed at Bidadi, Gazuwaka, Hoody, Kalikiri, Mysore, Kalvendapattu, Narendra, Nelamangala, NNTPP, Sholinganallur, Sattenapally, Vijayawada, Vemagiri and Yelahanka substations during July 2026. Respective entity may please take action.

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**Deliberations:**

SRLDC presented the N-1 violation of the following ICTs during July 2026:

| S.No | Element | N-1 Limit | N-1 Violation (%) |
|---|---|---|---|
| **Karnataka** | | | |
| 1 | 400/220 kV Mysore ICTs (2 x 315 + 2 x 500 MVA) | 218, 218, 347, 347 | 2, 2, 2, 2 |
| 2 | 400/220 kV Hoody ICTs (3 x 500 MVA) | 316, 316, 316 | 32, 32, 32 |
| 3 | 400/220 kV Nelamangala ICTs (3 x 500 MVA) | 316, 316, 316 | 59, 59, 59 |
| 4 | 400/220 kV Narendra(PG) ICTs (2 x 500 MVA) | 308, 308 | 12, 12 |
| 5 | 400/220 kV Raichur ICTs (2 x 315 + 1 x 500 MVA) | 190, 190, 301 | 18, 18, 18 |
| 6 | 400/220 kV UPCL ICTs (2 x 315 MVA) | 175, 175 | 7, 7 |
| 7 | 400/220 kV Bidadi(PG) ICTs (2 x 500 MVA) | 272, 272 | 56, 56 |
| 8 | 400/220 kV Yelahanka ICTs (2 x 500 MVA) | 238, 238 | 67, 67 |
| **Andhra Pradesh** | | | |
| 1 | 400/220 kV KV Kota ICTs (2 x 315 MVA) | 218, 218 | 11, 11 |
| 2 | 400/220 kV Vemagiri(AP) ICTs (3 x 315 + 1 x 500 MVA) | 228, 228, 228, 361 | 18, 18, 18, 18 |
| 3 | 400/220 kV Maradam ICTs (2 x 315 + 2 x 500 MVA) | 200, 200, 317, 317 | 3, 3, 3, 3 |
| 4 | 400/220 kV Gazuwaka ICTs (2 x 315 + 1 x 500 MVA) | 236, 236, 373 | 18, 18, 18 |
| 5 | 400/220 kV Vijayawada ICTs (2 x 315 + 1 x 500 MVA) | 210, 210, 333 | 9, 9, 9 |
| | | | |
| **Tamil Nadu** | | | |
| 1 | 400/230 kV Kalivanthapattu ICTs (2 x 315 + 1 x 500 MVA) | 223, 223, 353 | 31, 31, 31 |
| 2 | 400/230 kV Neyveli TS-II ICTs (2 x 250 MVA) | 158, 158 | 46, 46 |
| 3 | 400/220 kV NNTPS ICTs (2 x 500 MVA) | 283, 283 | 69, 69 |

**ii. Low voltages in Southern Region**

Low voltage conditions were observed at 400 kV stations, particularly during the morning peak hours, at Doni, Guttur, Kaiga, Munirabad, Kalvendapattu, Kamudhi, Kannarpatti, Karaikudi,Madurai, Munirabad, NNTPP, Puducherry, Sholinganalur, Sunguvarchatram, Tharamani, Trichy and Vellalaviduthi.

As per IEGC 2023 Annexure-4 regarding Reactive Power Compensation,

*"Reactive power compensation should ideally be provided locally, by generating reactive power as close to the reactive power consumption as possible. The regional entities are expected to provide*

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*local VAR compensation or generation such that they do not draw VARs from the EHV grid, particularly under low-voltage condition. "*

It is therefore requested that, corrective actions in this regard may please be taken for safe & secure operation of the grid.

**Deliberations:**

- The following is noted from the graphs wrt Substations:

| Substation | Duration for which voltage is less than 390 kV | Duration for which voltage is more than 420 kV | Minimum Voltage (kV) |
|---|---|---|---|
| 400kV Bidadi | 4.85 | 6.76 | 380.11 |
| 400kV Devanahalli | 4.47 | 1.7 | 370.78 |
| 400kV Doni | 17.2 | 0 | 372.45 |
| 400kV Guttur | 7.98 | 0 | 370.3 |
| 400 kV Hebbanahalli | 0.01 | 2.28 | 384.95 |
| 400 kV Hoody | 11.08 | 0.98 | 375.45 |
| 400 kV Hosur | 18.22 | 0 | 370.45 |
| 400 kV Jagalur | 7.26 | 0.92 | 377.17 |
| 400 kV Jindal | 4.91 | 0 | 380.4 |
| 400 kV Munirabad | 28.25 | 0 | 370 |
| 400 kV Mylasandra | 11.19 | 1.97 | 370.78 |
| 400 kV Nelamangala | 3.53 | 9.66 | 374.82 |
| 400 kV Somanahalli | 13.82 | 0.06 | 373.96 |
| 400 kV Kalivanthapattu | 6.15 | 0 | 378.18 |
| 400 kV Kanarpatty | 2.16 | 0.02 | 373.97 |
| 400 kV Karaikudi | 2.07 | 0.6 | 377.42 |
| 400 kV Manali | 2.22 | 0 | 385 |
| 400 kV Madurai | 4.78 | 0 | 375.47 |
| 400 kV Yelahanka | 3.42 | 8.52 | 373.84 |
| 400kV Puducherry | 40.13 | 0 | 370.07 |
| 400kV Puliyanthope | 3.54 | 0 | 384.69 |
| 400kV Sriperumbudur | 9.79 | 0 | 379.38 |
| 400kV SV Chatram | 14.95 | 0 | 377.69 |
| 400kV Trichy | 5.27 | 0 | 372.13 |
| 400kV Vellalaviduthi | 14.43 | 0 | 370.05 |
| 400kV NNTPS | 14.37 | 0 | 378.7 |

**iii. Deviation in drawal by States**

Persistent deviations from the schedule by Tamil Nadu have been observed on 02nd, 05th, 06th, 12th, 13th, 14th, 15th and 16th July 2026. This issue has been consistently taken up through various communications and real-time messages. On certain occasions physical regulatory measures were also taken in view of the obstinate deviations.

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However, despite these efforts, instances of significant deviations have continued. At times, these deviations have pushed the grid into critical operating conditions, particularly during non-solar hours, thereby adversely affecting frequency stability and overall grid security.
Persistent deviations from the schedule by Andhra Pradesh have been observed on 17th and 19th July 2026.

In light of the above, it is reiterated that proactive planning of the Load-Generation Balance (LGBR) and optimal management of the State's power portfolio must be ensured.
In this regard following clauses of the Indian Electricity Grid Code (IEGC) 2023 shall be noted and complied:

30.(3) All users shall adhere to their schedule of injection or drawl, as the case may be, and take such action as required under these regulations and as directed by NLDC or respective RLDCs or respective SLDCs so that the grid frequency is maintained and remains within the allowable band.
45. (6) Each regional entity shall regulate its generation or demand or both, as the case may be, so as to adhere to the schedule of net injection into or net drawal from the inter-State transmission system.

Communications issued in this regard on 08th, 15th, 16th and 20th July 2026.

**Deliberations:**

✓ From the graphs, the following is noted(Refer SRLDC PPT)

**Tamil Nadu:**

| Date | OD quantum (MW) | UD quantum (MW) |
|---|---|---|
| 02.07.26 | 445 | 1224 |
| 05.07.26 | 1255 | 1592 |
| 06.07.26 | 663 | 2207 |
| 12.07.26 | 1445 | 1423 |
| 13.07.26 | 1256 | 1843 |
| 14.07.26 | 1056 | 1067 |
| 15.07.26 | 925 | 1309 |
| 16.07.26 | 1273 | 1320 |

**Andhra Pradesh:**

| Date | OD quantum (MW) | UD quantum (MW) |
|---|---|---|
| 17.07.26 | 765 | 1032 |
| 19.07.26 | 1085 | 660 |

**iv. SPS Mock test of KK-1 & KK-2 and RP-1 & RP-2**

Covered at Agenda item no. 5

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## 39. Status of Augmentation capacity under implementation by PGCIL/RTM

The following ICTs are under implementation in SR under RTM route:

| S.No. | Substation | ICT Capacity | Latest Update (241st OCC) |
|---|---|---|---|
| 1 | **Kurnool-3** new S/S | 9 x 500 MVA, 400/220 kV, **ICT (1 to 9)** | **54 JCC:** ICT 1-4,6-7: commissioned in March 2025<br>ICT 5: Charged in October 2025<br>ICT 8-9: Oct 2027 |
| 2 | **Kurnool New S/s** | 1 x 1500 MVA, 765/400 kV **ICT (3)** | **54 JCC:** charged on 28.03.2026 |
| 3 | **Koppal PS** | 1x500MVA, 400/220kV **ICT (6th)** | **54 JCC:** charged on 03.12.2025 |
| 4 | **Gadag PS** | 1x500MVA, 400/220kV **ICT (6th)** | **54 JCC:** charged on 11.03.2026 |
| 5 | **Tuticorin-II GIS PS** | 500 MVA, 400/230kV **ICT (6th)** | **54 JCC:** By August 2026 |
| 6 | **NP Kunta PS** | 1x500 MVA, 400/220kV **ICT (5th)** | **54 JCC:** By August 2026 |
| 7 | **Tumkur (Pavagada) 400/220kV PS** | 2x500MVA, 400/220kV **ICTs (7th & 8th)** | **54 JCC:** ICT 7: By July 2026<br>ICT 8: By October 2026 |
| 8 | **Karur PS** | 2x500 MVA, 400/230 kV ICT (3rd & 4th) | **54 JCC:** ICT 3: By Oct 2026<br>ICT 4: By Jan 2027 |
| 9 | **Onshore Pooling Station (GIS)** near Avaraikulam, Tirunelveli District and **Offshore (OSS-1) SS-1 (GIS)** | 2x500 MVA, 400/230 kV ICTs at Onshore Pooling Station<br>300 MVAr STATCOM along with 2x125MVAr MSR<br>2x315 MVA, 230/66kV ICTs at OffShore Substation-1 (GIS) | **54 JCC:** By end of March 2030 |
| 10 | **Tumkur (Pavagada) PS** | 2x500 MVA, 400/220 kV ICTs (9th & 10th) | **54 JCC:** By December 2026 |
| 11 | **Yelahanka (GIS) S/S** | 1x500MVA, 400/220kV **ICT (3rd)** | **54 JCC:** By June 2027 |
| 12 | **Bidadi (GIS) S/S** | 1x500 MVA, 400/220kV **ICT (3rd)** | **54 JCC:** By June 2027 |
| 13 | **Tuticorin-II GIS S/S** | 1x500 MVA, 400/230kV **ICT (7th)** | **54 JCC:** By February 2028 |
| 14 | **Nagarjunasagar S/S** | 1x500 MVA, 400/230kV **ICT (4th)** | **54 JCC:** By May 2027 |
| 15 | **Kozhikode S/S** | 1x500 MVA, 400/220kV **ICT (4th)** | **54 JCC:** By Feb 2027 |

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|---|---|---|---|
| 16 | **Trivandrum S/S** | 1x500 MVA, 400/220kV **ICT (4th)** | **54 JCC:** By June 2027 |
| 17 | **Udumalpet S/S** | 1x500 MVA, 400/220kV **ICT (2nd or new)** | **54 JCC:** By June 2027 |
| 18 | **Thrissur VSC HVDC S/S** | 1x500 MVA, 400/220kV **ICT (3rd)** | **54 JCC:** By December 2027 |
| 19 | **Narendra S/S** | 1x500 MVA, 400/220kV **ICT (3rd)** | **54 JCC:** By Sept 2027 |
| 20 | **Kalivanthapattu S/S** | 1x500 MVA, 400/220kV **ICT (4th)** | **54 JCC:** By June 2027 |

**40. The following ICTs are under implementation in SR under TBCB route:**

| S.No. | Substation | TBCB | ICT Capacity | Latest update (241st OCC) |
|---|---|---|---|---|
| 1 | **Kasargode GIS S/S** | Udupi Kasargode TL (Sterlite) | 2x500MVA, 400/220 kV **ICTs** | **54 JCC:** COD is dependent on completion of Udupi-Kasargode line which is delayed due to RoW issues |
| 2 | **Narendra (New) (GIS)** | WRSR Power TL (Adani) | 4x1500 MVA, 765/400 kV ICTs | **54 JCC:** By October 2026 |
| 3 | **New pooling station** at suitable border location between Ananthpuram & Kurnool distt | Ananthpuram Kurnool TL (PGCIL) | 7x500MVA, 400/220 kV **ICTs** | **54 JCC:** Deemed CoD declared wef 21.06.2026 |
| 4 | **Koppal-II (Phase- A) Pooling Station** | Koppal II Gadag II TL (PGCIL) | 4x1500 MVA, 765/400 kV ICTs (1-4)<br>4x500 MVA, 400/220 kV ICTs (1-4) | **54 JCC:** progressively Jul 2026 – Sept 2026 |
| | **Gadag-II (Phase -A) Pooling Station** | | 2x500 MVA, 400/220 kV ICTs (1-2) | **54 JCC:** by July 2026 |
| 5 | **Bidar SS** | Bidar TL (PGCIL) | 3x1500 MVA, 765/400 kV ICTs (1-3)<br>5x500 MVA, 400/220 kV ICTs (1-5) | **54 JCC:** Aug 2026 |
| 6 | **Tumkur-II PS** | Tumkur-II REZ Power TL (GR Infra) | 4x500 MVA, 400/220 kV ICTs | **54 JCC:** By Nov 2026 |
| 7 | **Bijapur PS** | Bijapur REZ TL (GR infra) | 5x500 MVA, 400/220 kV ICTs | **54 JCC:** By Mar 2027 |
| 8 | **Koppal-II PS** | Gadag II and Koppal II TL (PGCIL) | 3x1500 MVA, 765/400 kV ICTs (5-7)<br>5x500 MVA, 400/220 kV ICTs (5-9) | **54 JCC:** By Mar 2027 |

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|---|---|---|---|---|
| | **Gadag-II PS** | | 7x500 MVA, 400/220 kV ICTs (3-9) | |
| 9 | **Bidar PS** | Bidar TL (PGCIL) | 1x1500 MVA, 765/400 kV ICT (4)<br>3x500 MVA, 400/220 kV ICTs (6-8) | **54 JCC:**<br>765/400 kV ICTs by June 2027<br>400/220 kV ICTs by June 2027 |
| 10 | **Davanagere /Chitradurga** | Chitraddurga Bellary REZ TL (PGCIL) | 4x1500 MVA, 765/400 kV ICTs (1-4)<br>4x500 MVA, 400/220 kV ICTs (1-4) | **54 JCC:** By Sept 2027 |
| | **Bellary PS** | | 4x500 MVA, 400/220 kV ICTs (1-4) | **54 JCC:** By Sept 2027 |
| 11 | **Kurnool-IV PS** | Kurnool-IV TL (PGCIL) | 4x1500 MVA, 765/400 kV ICTs (1-4)<br>4x500 MVA, 400/220 kV ICTs (1-4) | **54 JCC:** By Sept 2027 |
| | **C'Peta SS** | | 1x1500 MVA, 765/400 kV ICTs (3) | |
| 12 | **Kurnool-III PS** | Kurnool-III PS RE TL (PGCIL) | 3x1500MVA, 765/400 kV **ICTs**<br>1x1500 MVA, 765/400 kV ICTs ($7^{th}$) | **54 JCC:** March 2027 |
| 13 | **Anathapuram-II PS** | Anathapur II REZ TL (Resonia) | 4x1500 MVA, 765/400 kV ICTs (1-4)<br>6x500 MVA, 400/220 kV ICTs (1-6) | **54 JCC:** March 2027 |
| 14 | **Anathapuram-II PS** | Anantapur II Power TL (Shivalaya construction Ltd.) | 1x500 MVA, 400/220 kV ICT<br>2x1500 MVA, 765/400 kV ICTs<br>6x500 MVA, 400/220 kV ICTs | **54 JCC:** April 2028 |
| | **CN'Halli SS** | | 3x1500 MVA, 765/400 kV ICTs | **54 JCC:** April 2028 |
| 15 | **Davanagere PS** | Davanagere Power TL (PGCIL) | 4x500 MVA, 400/220 kV ICTs (5-8) | **54 JCC:** September 2027 |
| | **Davanagere /Chitradurga PS** | | 1x1500 MVA, 765/400 kV ICT | **54 JCC:** September 2027 |
| 16 | **Davanagere PS** | Bellary Davanagere TL (PGCIL) | 2x1500 MVA, 765/400 kV ICTs (6-7) | **54 JCC:** February 2028 |
| | **Bellary PS** | | 6x500 MVA, 400/220 kV ICTs | **54 JCC:** February 2028 |
| 17 | **Tumkur-II PS** | Tumkur II RE TL (PGCIL) | 3x500 MVA, 400/220 kV ICTs (5-7)<br>3x500 MVA, 400/220 kV ICTs (8-10) | **54 JCC:** May 2029 |

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|---|---|---|---|---|
| 18 | **Kurnool-IV PS** | Kurnool IV REZ Power TL (Re-sonia) | 4x500 MVA, 400/220 kV ICTs<br>2x1500 MVA, 765/400 kV ICTs<br>6x500 MVA, 400/220 kV ICTs | **54 JCC:** May 2029 |
| | **Doma SS** | | 4x1500 MVA, 765/400 kV ICTs | |

## 41. Assessment of online Dynamic Line Rating-Pilot Scheme

a) The DLR pilot project on the **400 kV Tuticorin PS–Madurai D/C line**, approved by SRPC (TP) The Dynamic Line Rating (DLR) pilot project, approved by SRPC with PGCIL as the Nodal Agency, was commissioned on the 400 kV Tuticorin PS–Madurai D/C line under PGCIL's R&D fund. However, due to inadequate line loading, the intended sag measurement could not be completed, necessitating identification of an alternate line. Subsequently, SRPC, TCC, and OCC forums directed PGCIL, in consultation with SRLDC, to identify a suitable high-loading transmission corridor, assess the feasibility of shifting the DLR system, and submit the associated implementation timeline and cost implications. After technical evaluation, the 400 kV Pavagada–Gooty line was identified as the most suitable location for the pilot, considering its sustained high loading and potential to demonstrate renewable energy evacuation benefits. PGCIL has initiated action with the OEM/agency to assess feasibility and submit the commercial offer and implementation schedule, which are presently awaited.

b) 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.

c) Subsequent to the deliberations in the 239th OCC meeting, PGCIL 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. Accordingly, shutdown of the line was sought for installation of the sensors. During the coordination process, SRLDC requested PGCIL to furnish details regarding the number and proposed locations of the DLR sensors (KMZ file), along with arrangements for providing dashboard access to enable real-time monitoring of DLR measurements and line ratings during system operation. Subsequently, SRPC advised that the shutdown may be facilitated subject to prevailing grid conditions, while directing PGCIL to adhere strictly to the approved outage schedule for execution of the installation works.

d) 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. Further, PGCIL requested SRPC/SRLDC to furnish the email IDs of the concerned officials for inclusion in the DLR platform user list, to facilitate provisioning of dashboard access and enable real-time monitoring of DLR measurements and line ratings during the pilot operation.

e) PGCIL conducted a training session on the DLR Sensors Dashboard through Siemens Energy on 13.07.2026 for the sensors installed on the 400 kV Gooty–Pavagada transmission line

- ***SR-I may update the status.***

- ***Status was updated in 58th SRPC meeting. MOM is awaited***

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## 42. Status of New Thermal Projects of Central /State Sector (Scheduled for COD during 2026-27)

| Sl No | Name of project | Capac-ity in MW | Status (240th OCC) |
|---|---|---|---|
| 1 | **TANGEDCO-North Chennai Stage III** | 1 x 800 | **235th OCC:** COD declared on 24.01.2026.<br>SRPC requested TNPGCL/SLDC to formally communicate the commissioning details as well as trail run particulars. |
| 2 | **TANGEDCO-Udangudi Stage I** | 2 x 660 | **57th SRPC:**<br>Trial operations commenced on 04.02.2026, and coal synchronization has been successfully achieved. The unit is currently being operated at a load of around 400–500 MW, considering the prevailing summer demand requirements.<br>**240th OCC:**<br>Unit 1: COD is expected by August 2026.<br>Unit 2: COD is expected by December 2026 |
| 3 | **TANGEDCO-Ennore SEZ STPP (North Chennai Stg IV)** | 2 x 660 | **240th OCC:** Expected date of commissioning for<br>Unit 1: August 2027<br>Unit 2: October 2027 |
| 4 | **TANGEDCO-Ennore TPS Exp.** | 1 x 660 | **240th OCC:** 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 15.07.2026. |
| 5 | **Uppur TPS** | 2x800 | **54th TCC**<br>Regarding continuation of Uppur TPS: Policy decision has to be taken<br>**240th OCC**<br>GOTN accorded approval for establishing 1 × 800 MW coal-based thermal power project in Thoothukudi District, making use of the existing Udangudi Stage I land, coal jetty, common facilities, and relocating materials originally procured for the 2 × 800 MW Uppur Project under TBCB mode vide GO(Ms) No. 45, dt. 14.03.2026.<br>To make optimal use of the high-cost materials already procured for the 2 × 800 MW Uppur Project for the implementation of the newly proposed thermal power plant in Tuticorin District is currently under study |
| 6 | **TSGENCO-Damaracherla (Yadadri)** | 5 x 800 | **239th OCC**<br>Unit-1: COD declared on 12.07.2025<br>Unit 2: COD declared on 25.01.2025<br>Unit-3: COD declared on 13.05.2026<br>Unit-4: COD declared on 08.01.2026<br>Unit-5: COD expected in August 2026 |

- ***Status was updated in 58th SRPC meeting. MOM is awaited***

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## 43. Implementation of Bus and Line Reactors by the Utilities

### 1. APTRANSCO:

| Sl. No | Substation (400kV) | Type/Capac-ity | Approved in | Status (241st OCC) |
|---|---|---|---|---|
| 1 | **Atchutapuram** | **1x125+2x80** | | Expected completion by De-cember-2026. Works are un-der progress for SS and the Reactor. |
| 2 | **Kakinada SEZ** | **125** | | Expected completion by June-2027. Works are under progress for SS and the Reac-tor. |

### 2. APGENCO:

| Sl. No | Substation (400kV) | Type/Capacity | Approved in | Status (241st OCC) |
|---|---|---|---|---|
| 1 | **VTPS Stage IV** | **Bus Reactor/ 1x125 MVAr** | 39th SC | Material reached site. Civil works in progress. Expected by end of August, 2026 |
| 2 | **Polavaram HEP** | **Bus Reactor/ 2x125 MVAr** | 42nd SC | Included in EPC contract. Drawings are submitted. Reactor is a part of Switchyard commis-sioning works. Work of switchyard are still to com-mence. Once the line works is completed, then erection will be started. |

### 3. KPCL:

| Sl. No | Substation (400kV) | Type/Capacity | Approved in | Status (241st OCC) |
|---|---|---|---|---|
| 1 | **Yeramarus** | **Bus Reactor/ 1x125 MVAr** | 1st SRSCT | **57th SRPC**<br>**KPCL** had informed that the project cost is ~₹53 Cr (in-cluding bay & civil works) and indicated requirement of PSDF funding.<br>**KAR SLDC** had emphasized the criticality of the reactor for voltage control and urged early implementation.<br>**SRPC** had noted prolonged delay (~8 years) and advised pursuing approval through **KERC** for tariff-based re-covery instead of PSDF.<br>**KPCL** had stated that the proposal would be placed be-fore higher management for necessary approvals. |

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### 4. TANTRANSCO:

| Sl. No. | Substation | MVAR | Type | Approved in | Status (241st OCC) |
|---|---|---|---|---|---|
| 1 | **Coimbatore (765kV)** | 2 x 330 | Line | 42nd SC | Portion of land required for Coimbatore 765KV SS to be acquired. G.O. issued on 29.12.2022 for compulsory acquisition of land and being processed. Tender floated under TBCB. The reactor will be commissioned along with SS. |
| 2 | **Kayathar** | 1x125 | Bus | 42nd SC | Space availability confirmed from the field for provision of these Bus reactors in the Substations. Administrative Approval yet to be obtained. |
| 3 | **Kamuthi** | 1x125 | Bus | 42nd SC | |
| 4 | **Parali** | 125 | Bus | 42nd SC | Awarded on 21.01.2021. Work will be taken up along with establishment of Substation. |
| 5 | **Arni** | 2 x 125 | Bus | 42nd SC | Administrative Approval for SS and Reactor to be obtained. |
| 6 | **Edayarpalayam** | 2 x 125 | Bus | 38th SC | Contract terminated. Retendered under TBCB. The reactor will be commissioned along with SS. |
| 7 | **Ottiyambakkam** | 2x125 | Bus | 2nd SRSCT | DPR to be evolved and Fund to be tied up. |

### 5. TGTRANSCO:

| Sl. No | Substation (400kV) | Bus Reactor MVAr | Approved in | Status (241st OCC) |
|---|---|---|---|---|
| 1 | Uddandapur | 1x125 | 1st SRPC (TP) | Contract awarded on 04.03.2022. Reactor received at site. Reactor foundation works under progress |
| 2 | Narlapur | 1x125 | 1st SRPC (TP) | Contract has been awarded for the erection of 400KV LI SS along with the supply & erection of 125 MVAR Reactors. The civil works of associated equipment are completed. The 125MVAR Reactors are supplied to respective 400kV substations.<br>Erection works at Yedula & Vattem completed and erection works at Narlapur are under progress.<br>Expected date of commissioning:<br>Vattem : **31.08.2026**<br>Yedula : **31.08.2026**<br>Narlapur : **31.10.2026** |
| 3 | Yedula | 1x125 | 1st SRPC (TP) | |
| 4 | Vettam | 1x125 | 1st SRPC (TP) | |

## 44. Daily Load Forecast by SLDCs

(i) SLDCs are requested to divide the state load in to area-wise (district-wise/Substation wise) while carrying out the forecasting incorporating weather conditions etc.

(ii) SLDCs are requested to furnish the load forecast error (forecast Vs actual demand) on monthly basis to SRLDC along with reasons for sustained deviation.

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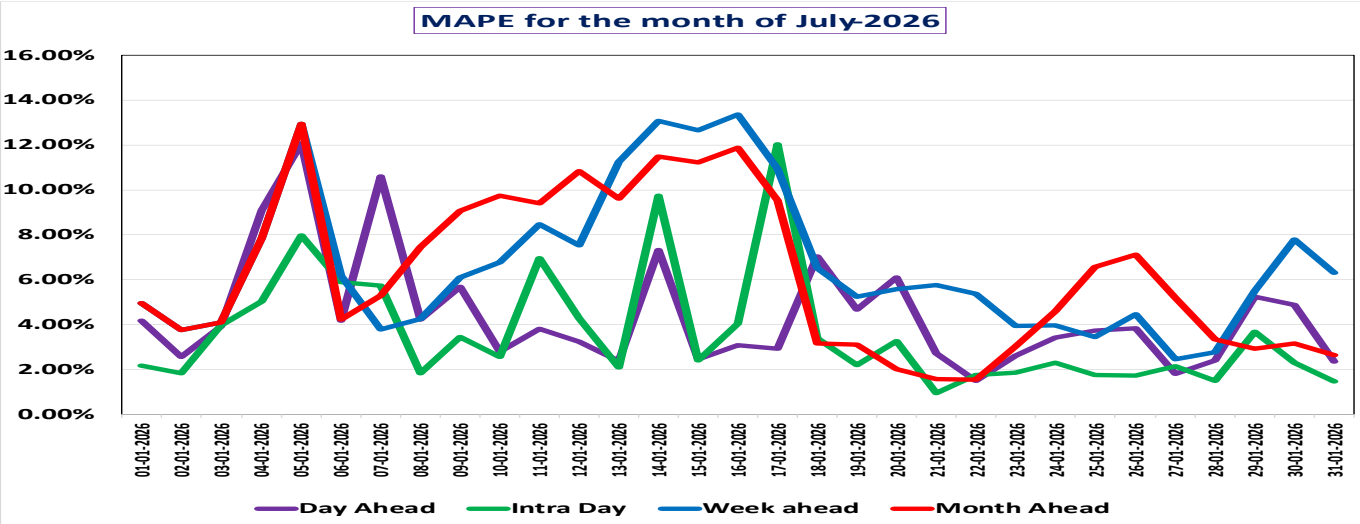
(iii) SLDCs may share the day-ahead forecast by 12:00 hrs every day to SRLDC, for the subsequent day.

(iv) In the **208th/209th** Meetings of OCC, **SRLDC has circulated standardized formats for presentation of data over a period of days (weekly/monthly/yearly).**

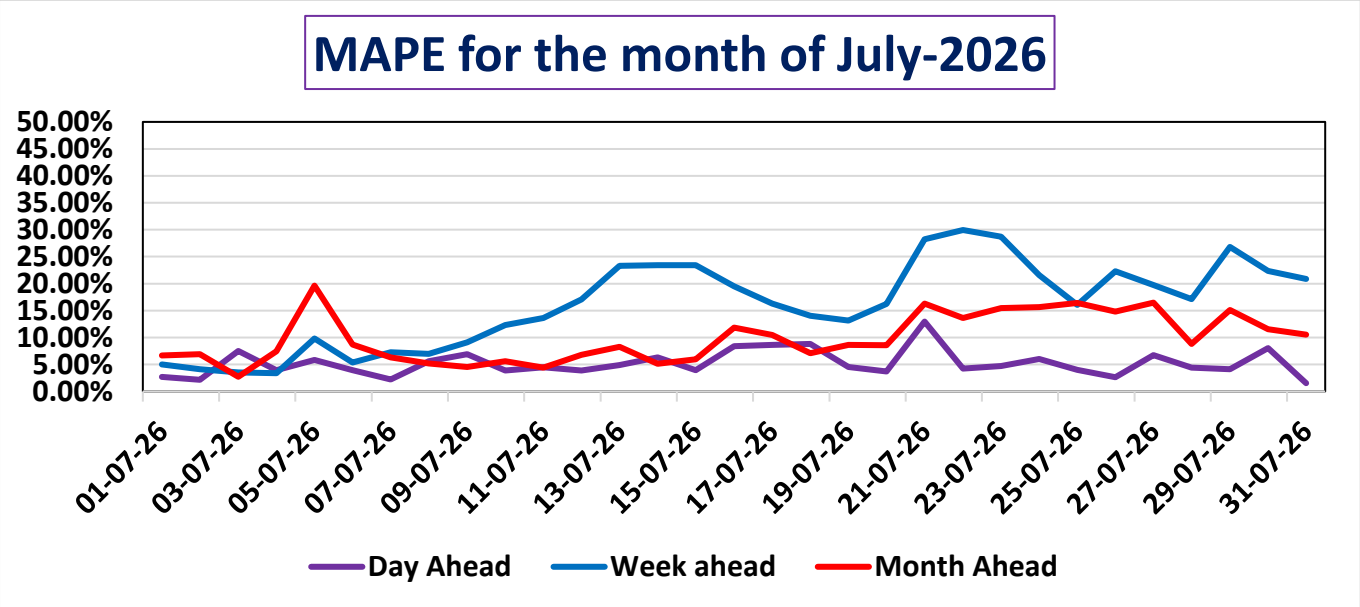
**Deliberations**

The forecast errors presented by SLDCs are as follows:

**Andhra Pradesh**




**Telangana**




**Tamil Nadu**

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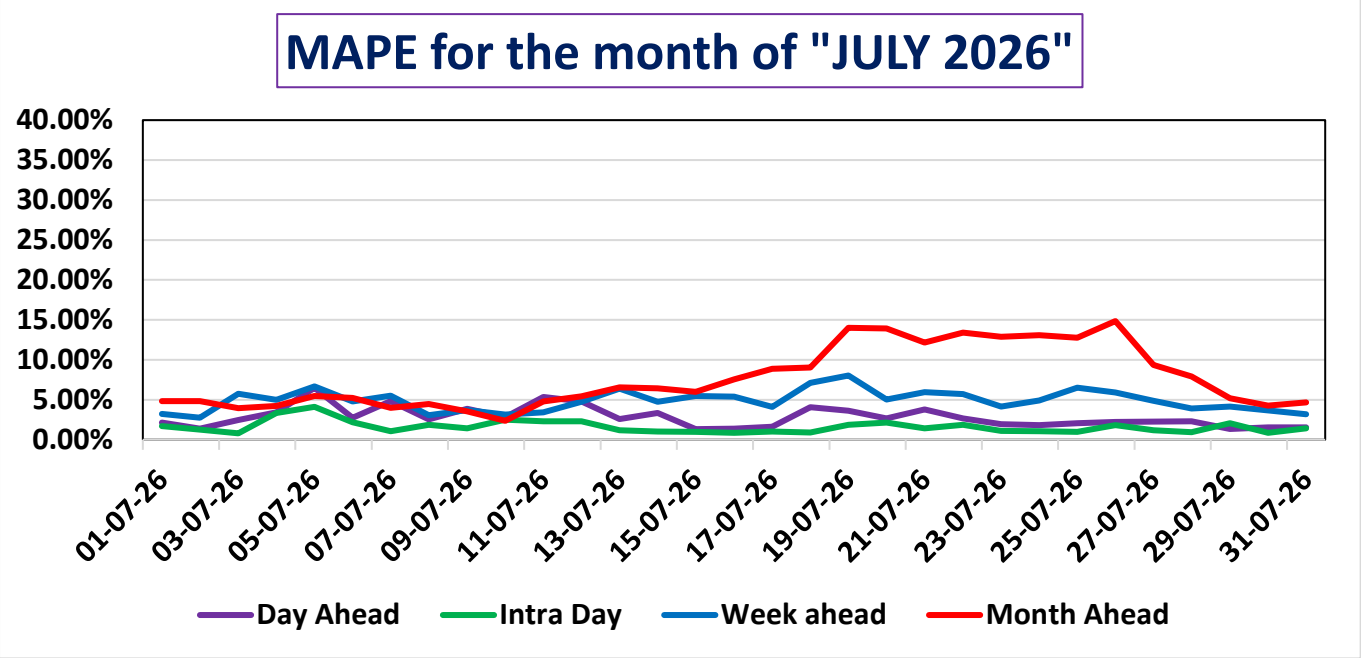
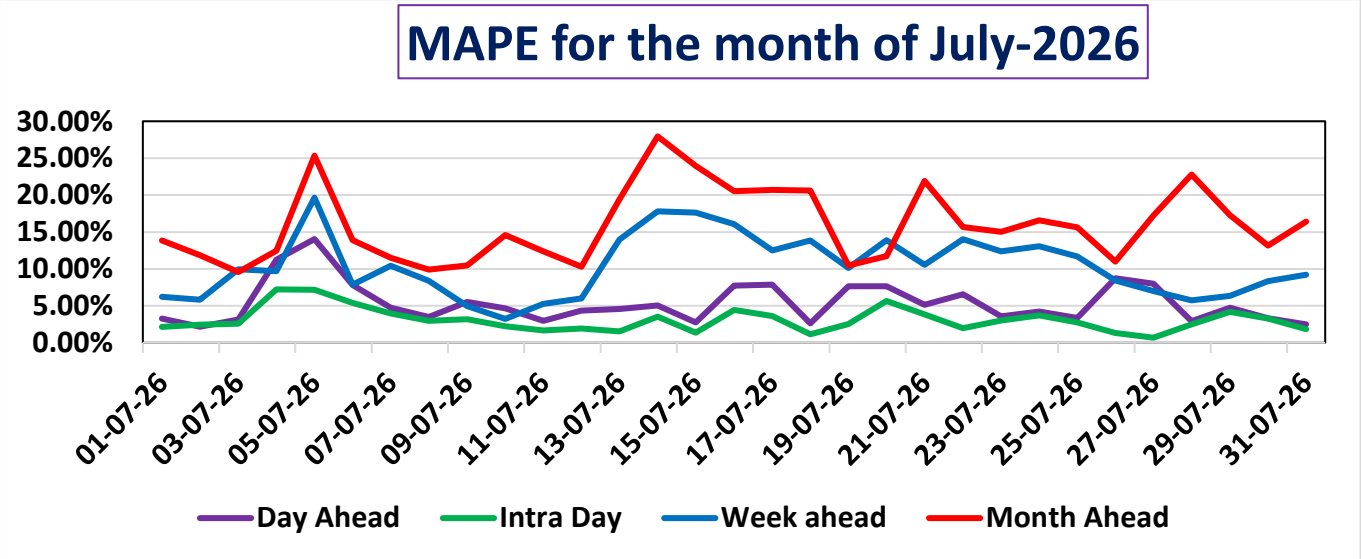
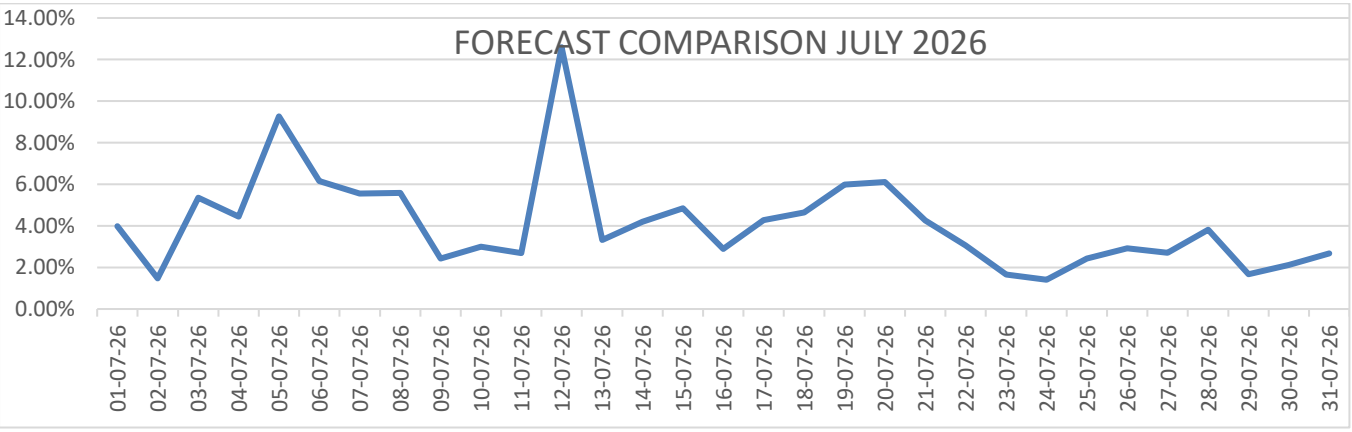



**Karnataka**




**Kerala**



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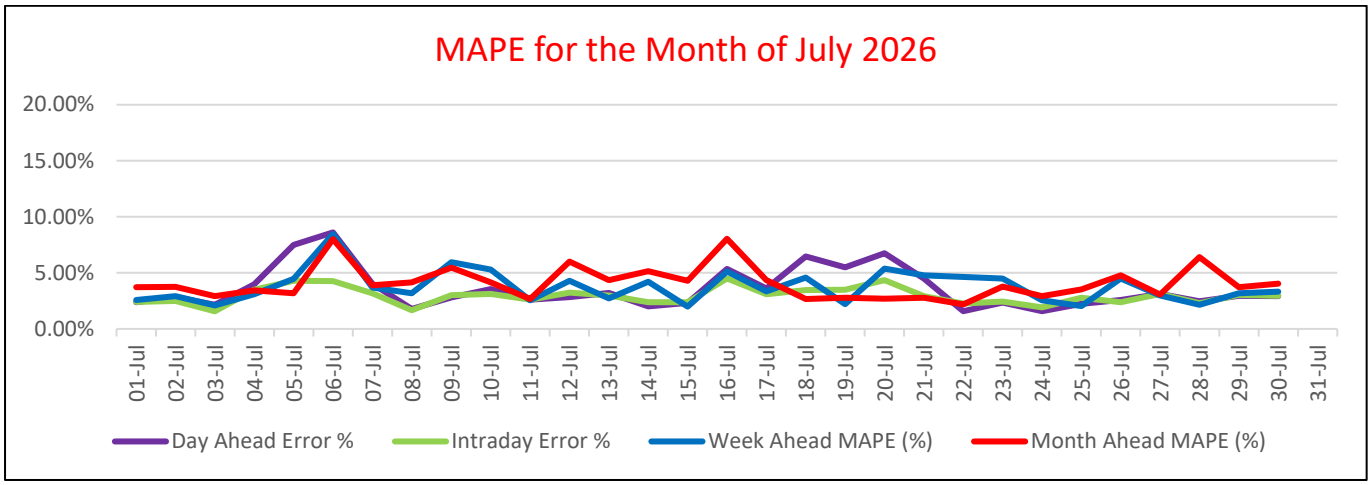
**Puducherry**




## 45. RE Forecast by SRLDC/SLDCs

(i) SRLDC to present the forecast, actual and forecast errors for wind and solar for the previous month in the OCC Meeting. All states had been requested to furnish the implemented forecast, day ahead forecast &actual also (before 5th of every month).

(ii) SLDCs may also carry out the analysis and present the observations of their RE forecast, issues faced etc. in the meeting.

- ***SRLDC/SLDCs may present the data for June 2026.***

**Regulatory Reference: IEGC 2023 - Clause 31 (3) b**

**Quote**

*According to Clause 31 (3) b of the IEGC 2023, RLDC is responsible for forecasting generation from wind, solar, ESS, and Renewable Energy hybrid generating stations that are regional entities, while SLDC is responsible for forecasting generation from intra-state renewable energy sources for various time horizons, as per Clause (1) of Regulation 31 of these regulations for operational planning.* **Unquote**

- ***All SLDCs may note & present the same.***

**Deliberations**

- SRLDC presented on the Normalized Root Mean Square Error (NRMSE) of ISTS renewable for July 2026. (Refer PPT at ***Annexure-37a***)
- DA NRMSE %: Wind average error was 10.9%, Solar average error was 6.9 % and combined average error was 7.0 %. (Refer PPT at ***Annexure-37a***
- Intraday NRMSE %: Wind average error was 8.8 %, Solar average error was 6.1 % and combined average error was 6.1 %. (Refer PPT at ***Annexure-37a***)
- SR ISTS RE Blockwise Error, SR ISTS Solar forecast Vs Actual and SR ISTS Wind forecast Vs Actual was also projected. (Refer PPT at ***Annexure-37a***)
- RE forecast errors presented by SLDCs are as follows:

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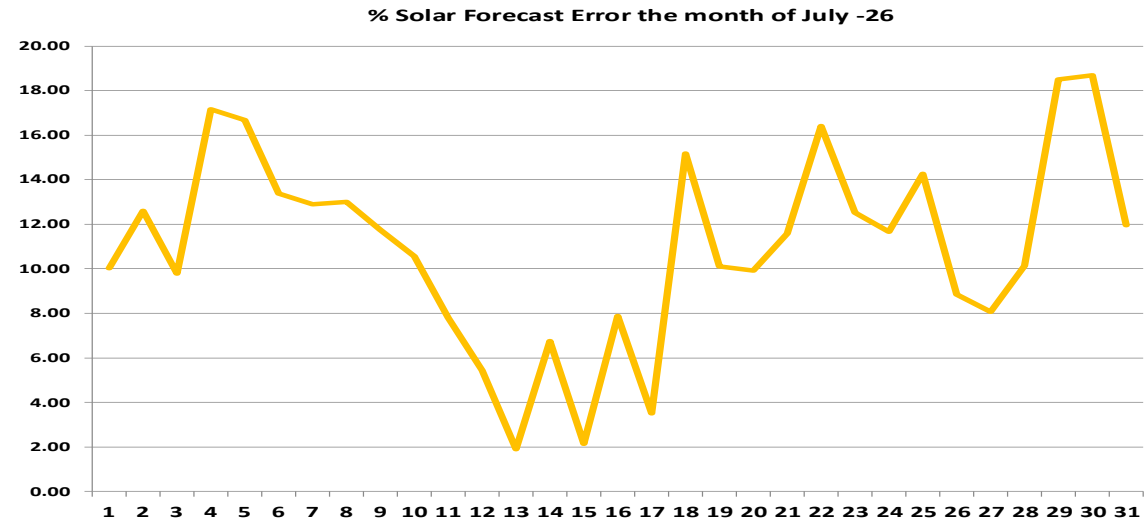
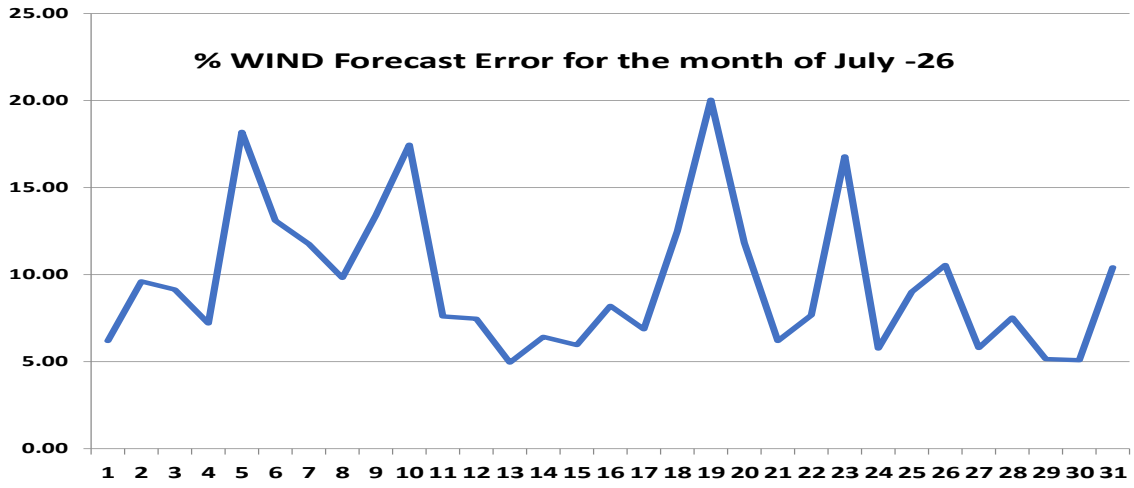
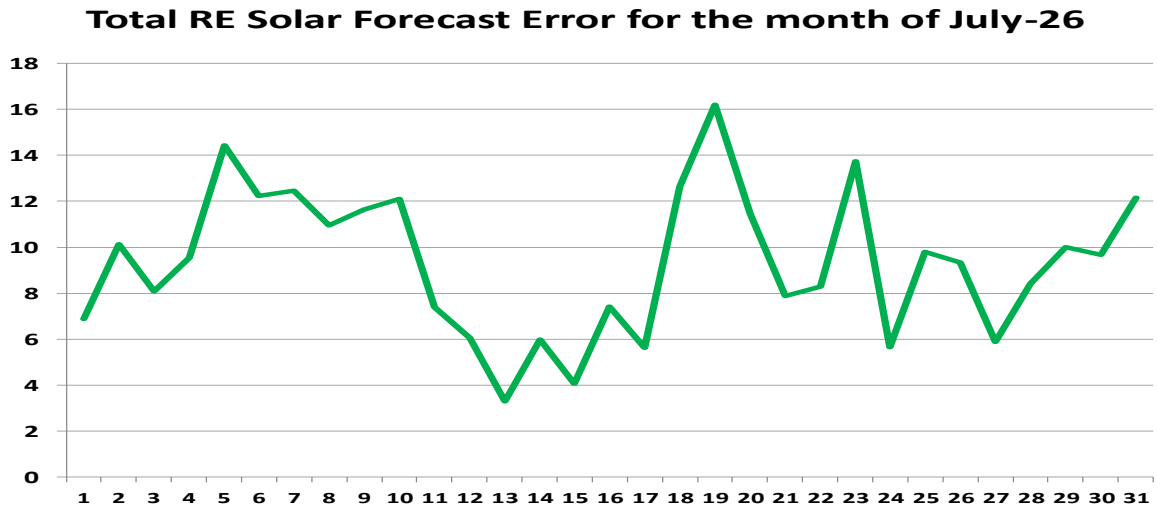
## Andhra Pradesh



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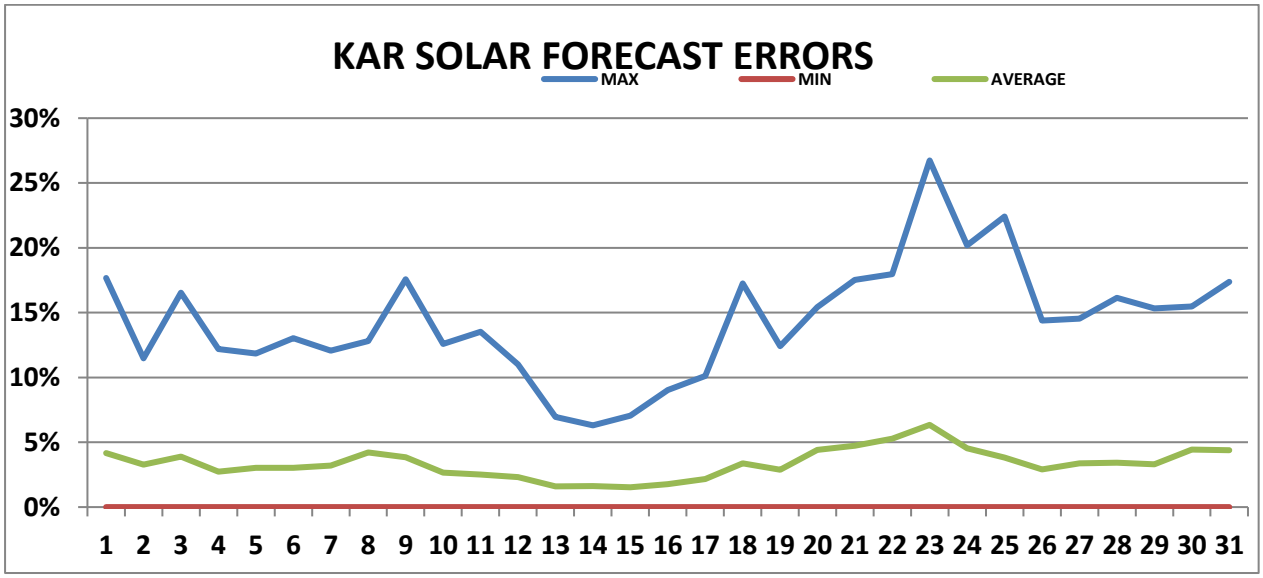
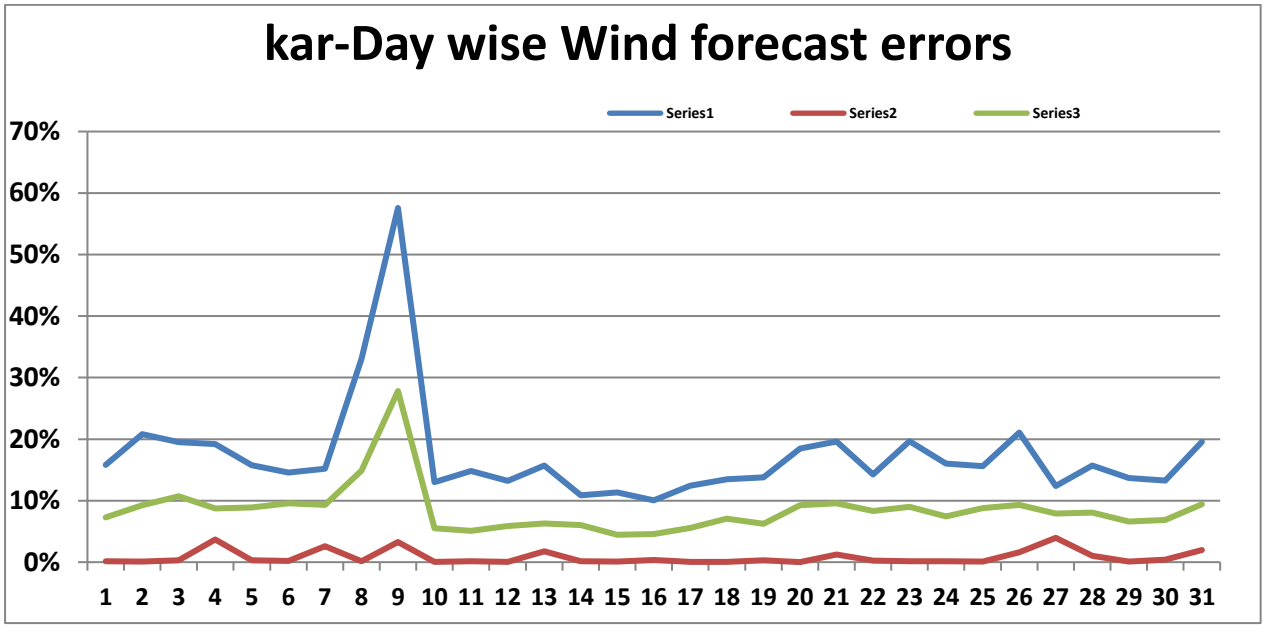
**Karnataka**




## 46. Automatic Demand Side Management Scheme (ADMS)

(i) As per clauses 36 (2) of IEGC, SLDC, in coordination with STU and Distribution Licensee (s), shall develop Automatic Demand Management scheme with emergency controls at SLDC.

(ii) CERC order dated 11.09.2023 in Petition No. 132/MP/2022 in the matter of over drawl from the grid by regional entities leading to insecure operation of the grid and other associated matters had directed the respondent SLDCs to ensure Automatic Demand Management System (ADMS) is in place in accordance with the Grid Code with appropriate feeders mapping to get the desired load relief. If the ADMS is in implementation stage in any State then till the time of implementation of ADMS manual load shedding of radial feeders identified by SLDCs which shall be done with concerned SLDCs instructions without any delay during emergency conditions shall be shared with SRLDC. **The Status of the implementation of ADMS shall be updated to the SRLDC on quarterly basis by the respective SLDC**.

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- ***TNSLDC to take immediate corrective action so that ADMS function properly & SLDCs may update on the action taken.***
- ***All the States to develop ADMS SCADA screen in the Control Room & maintain healthiness of ADMS.***
- ***SRLDC/SLDCs to present ADMS incidence.***

**Deliberations**

- SRLDC presented the ADMS occurrences during July 2026:

| State | No of instances |
|---|---|
| Andhra Pradesh | 5 |
| Karnataka | 5 |
| Telangana | 2 |
| Kerala | 5 |
| Tamil Nadu | 6 |
| **Total** | **23** |

- SRLDC highlighted the relatively high number of ADMS instance in July 2026
- SRLDC and SRPC expressed concern over the increasing trend of ADMS events (April-14, May-11, June-21) along with limited quantum of relief realised in several instances.

- **Tamil Nadu**

| Date & Time/ Stage | Relief Observed (As per state) | Deviation at the time of expected relief (MW) | SCADA Snapshot | Remarks |
|---|---|---|---|---|
| 13-07-2026 Stg-I 19:35 Hrs. | | 473 MW | | |
| 15-07-2026 Stg-I 21:47 Hrs. | 299 MW | 854 MW | Received | 220 MW observed as per SCADA. Two number of feeders didn't trip. Status of one number of feeder is suspect. |
| 15-07-2026 Stg-I 22:30 Hrs. | | 696 MW | | |
| 16-07-2026 Stg-I 06:00 Hrs., Stg-II 06:10 Hrs., Stg-III 06:20 Hrs. | | 473 MW, 685 MW, 828 MW | | |
| 16-07-2026 Stg-I 06:37 Hrs. | | 1146 MW | | |
| 16-07-2026 Stg-I 22:19 Hrs. | 275 MW | 780 MW | Received | 251 MW observed as per SCADA. Status of one number of feeder is suspect. |

- SRLDC informed that on 16.07.2026, all 3 stages of ADMS were triggered. However, relief was observed in only 2 out of 6 instances.
- TN SLDC stated that the relief details had been validated from field. The instances where ADMS did not operate would be examined and the reasons would be furnished subsequently.
- SRLDC stated that the details of the ADMS events are shared with the concerned SLDCs on the very next day of occurrence, thereby providing sufficient time for analysis and verification. TN SLDC was requested to examine the events and furnish the reasons by the time of the OCC meeting.
- SRPC requested TN SLDC to furnish event-wise clarification, particularly for the instances where ADMS did not operate or the expected relief was not realised.

- **Kerala**

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| Date & Time/ Stage | Relief Observed (As per state) | Deviation at the time of expected relief (MW) | SCADA Snapshot | Remarks |
|---|---|---|---|---|
| 06-07-2026 Stg-I 20:46 Hrs. | 135 MW | 260 MW | Not received | |
| 11-07-2026 Stg-I 22:33 Hrs. | | 212 MW | | stipulated conditions for its operation were not met since the frequency reached 49.857 Hz at 22:33:57 hrs. |
| 13-07-2026 Stg-I 19:35 Hrs. | 153 MW | 449 MW | Not received | |
| 15-07-2026 Stg-I 22:30 Hrs. | | 170 MW | | stipulated conditions for its operation were not met since the drawal had reduced to 137 MW at 22:30:58 hrs. |
| 16-07-2026 Stg-I 22:19 Hrs. | 143 MW | 589 MW | Not received | |

- SRLDC identified 5 instances, out of which operation was observed in 3 instances.
- KSEBL stated that the requisite conditions for ADMS operation were not met in the other 2 instances. It was further informed that, during the event on 15.07.2026, SLDC took measures to reduce ISTS drawal before completion of the 16-minute period.
- Regarding the event on 11.07.2026, KSEBL stated that, as per KSEBL SCADA data, the frequency had improved to above 49.85 Hz during the event. SRLDC acknowledged that this improvement in frequency may not have been captured in the minute-wise data available with SRLDC.

➢ **Telangana**

| Date & Time/ Stage | Relief Observed (As per state) | Deviation at the time of expected relief (MW) | SCADA Snapshot | Remarks |
|---|---|---|---|---|
| 15-07-2026 Stg-I 06:21 Hrs. | 93 MW (Group –A) | 328 MW | Received | Few feeders didn't trip. Status of many feeders is suspect/transit |
| 19-07-2026 Stg-I 03:19 Hrs., Stg-II 03:29 Hrs. | -VE, | 394 MW, 433 MW | Received | Few feeders didn't trip. Status of many feeders is suspect/transit |

- SRLDC stated that the SCADA snapshots received for these events indicated that the status of several feeders was shown as "suspect" or "transit", while some feeders did not indicate operation. It was further observed that only 93 MW of relief was realised on 15th, whereas on 19th, the drawal had shown an increase.
- TG SLDC confirmed that ADMS operated on 19.07.2026 and stated that a load relief of 63 MW was realized.
- SRLDC highlighted that, as per the SCADA snapshots furnished, the feeder load was observed to increase from around 167 MW to 169 MW, while the status of several feeders was not clear
- TG SLDC stated that the matter would be examined by the SCADA team and the correct feeder-wise details would be furnished.
- SRLDC requested that while furnishing SCADA snapshots, to furnish comments such as the number of feeders that operated and did not operate, reasons for non-operation of feeders, and the total quantum of relief realised.

➢ **Karnataka**

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| Date & Time/ Stage | Relief Observed (As per state) | Deviation at the time of expected relief (MW) | SCADA Snapshot | Remarks |
|---|---|---|---|---|
| 01-07-2026 Stg-I 06:23 Hrs. | 694 MW | 1695 MW | Received (Not feeder wise) | |
| 11-07-2026 Stg-I 22:33 Hrs. | 14 MW | 438 MW | Received (Not feeder wise) | |
| 15-07-2026 Stg-I 06:26 Hrs. | 15 MW | 544 MW | Received (Not feeder wise) | |
| 16-07-2026 Stg-I 06:00 Hrs., Stg-II 06:10 Hrs., Stg-III 06:20 Hrs. | | 787 MW, 856 MW, 1044 MW | | Not operated |
| 16-07-2026 Stg-I 06:37 Hrs. | | 929 MW | | Not operated |

- SRLDC highlighted the low quantum of relief realised during the events on 11.07.2026 and 15.07.2026 and the non-operation observed on 16.07.2026, during which two events involving three stages were reported.
- Karnataka SLDC stated that on 16.07.2026, a SCADA system issue occurred, due to which the ADMS event was not generated. Regarding the events on 11.07.2026 and 15.07.2026, it was informed that the events occurred during late-night/early-morning hours, when the loading on the agricultural feeders mapped under ADMS was relatively low.
- SRLDC raised a query regarding the non-operation of the subsequent set of feeders under the round-robin scheme implemented in Karnataka. Karnataka SLDC clarified that the requisite frequency and overdrawal conditions did not persist for a sufficient duration to initiate tripping of the subsequent set of feeders under the round-robin logic.

➢ **Andhra Pradesh**

| Date & Time/ Stage | Relief Observed (As per state) | Deviation at the time of expected relief (MW) | SCADA Snapshot | Remarks |
|---|---|---|---|---|
| 11-07-2026 Stg-I 22:33 Hrs. | | 493 MW | | Condition not sustained for 16 minutes as per APSLDC |
| 15-07-2026 Stg-I 06:23 Hrs. | | 595 MW | | Not operated |
| 16-07-2026 Stg-I 22:19 Hrs. | | 330 MW | | OD became less than 250 MW at 22.10 hrs., and hence condition failed as per APSLDC |
| 19-07-2026 Stg-I 03:19 Hrs., Stg-II 03:29 Hrs. | 72.1 MW | 594 MW, 590 MW | Received | Operated at 02:51 Hrs. Few feeders didn't trip. Status of few feeders is suspect/transit. |
| 19-07-2026 Stg-I 21:23 Hrs. | 57.4 MW | 775 MW | Received | Few feeders didn't trip. Status of few feeders is suspect/transit. |

- SRLDC highlighted the low quantum of relief realised during ADMS operation and opined that the feeders identified under ADMS may be carrying relatively low loads.
- SRLDC further highlighted a discrepancy in the timing of ADMS operation on 19.07.2026, wherein ADMS was observed to have operated at around 02:51 hrs, whereas, as per SRLDC, the requisite conditions were met at around 03:19 hrs.
- AP SLDC stated that, on 15.07.2026, a delay occurred due to the Vemagiri SPS logic. Previously itself, to compensate for the delay, the ADMS time setting had been reduced to 15 minutes. However, by the time the ADMS logic operated, the requisite conditions were no longer sustained.
- Regarding the event on 19.07.2026, AP SLDC stated that the event commenced at around 02:49 hrs and ADMS operated within 1–2 minutes thereafter. The feeders remained open at 03:19 hrs

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and 03:29 hrs. However, the reason for non-operation of Stage-II could not be identified despite examination.

- Regarding the non-operation of two feeders, AP SLDC informed that gas-related issues in the respective circuit breakers had been identified. The breakers had been sent for repair and the issue would be rectified.
- SRLDC highlighted the low quantum of relief being realised from the identified ADMS feeders. AP SLDC stated that these feeders had previously provided relief of up to 150 MW; however, the quantum of relief being realised at present was considerably lower.
- AP SLDC further stated that the feeder-wise relief had earlier been assessed based on maximum loading. It was informed that, if the feeders are recommended to be identified based on average loading, the same would be carried out.
- Further, with reference to the discussions under the AUFLS agenda, AP SLDC reiterated that the scope for identifying additional load was limited due to the presence of two islanding schemes and Vemagiri SPS. It was informed that implementation of additional load relief under AUFLS scheme was being finalised during the current month, following which similar exercise would be undertaken to enhance the available load relief under ADMS, to the extent possible.

**Conclusion/Action Points**

- SRPC and SRLDC observed that the issue of low performance of ADMS has been persisting for the last two to four months, with increased number of instances and several instances of non-operation or inadequate load relief. It was noted that the concerned SLDCs had indicated that they would examine the respective events and revert.
- It was concluded that the ADMS events would be taken up for detailed review in the next OCC meeting. SLDCs were requested to furnish a detailed analysis of the events, particularly in cases of non-operation or low quantum of load relief, including the reasons for the observed performance. It was stated that the events would be scrutinized in detail, including the shortcomings in operation and the possible remedial measures. The SLDCs were also requested to identify and propose appropriate corrective measures, wherever required, for further deliberation in the forum.
- SLDCs are requested to maintain healthiness of ADMS systems.

## 47. MVAR Performance of generating units

(i) Generators to take necessary action for absorption of MVAR up to the Capability. OEMs needed to be approached in case of less absorption and ensure MVAR absorption up to Capability.

(ii) At any point of time injection of MVAR shall be strictly avoided if voltages are higher than rated voltages. Tap position to be relooked wherever found feasible.

(iii) All the generators to analyze MVAR interchange on monthly basis and address the issues, if any, with intimation to SRLDC/SRPC.

(iv) In 239$^{th}$ OCC meeting, SRPC observed that the matter requires further examination and it was concluded that the observations and data presented by both sides would be examined in detail. The issue may be further deliberated between APL, SRLDC and SRPC.

(v) Further, the 16$^{th}$ Meeting on MVAR Performance Analysis of State Generating Stations was convened on 06.07.2026, followed by the meeting on MVAR Performance Analysis of ISTS-connected Generating Stations on 07.07.2026. During the meetings, all SLDCs, SRLDC, and the individual generating stations presented their respective analyses. The Minutes of Meeting (MoM) are awaited.

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**Deliberations**

SRLDC presented the generating units exhibiting poor MVAR performance (SRLDC presentation is at ***Annexure-37a***) as follows:

- **CEPL Unit 1**: No absorption of MVAR. The issue is persisting since past 1 year
- **NTPL Unit 1:** Many instances of injection at high voltages
- **SEPC Unit 1:** no absorption upto 410 kV
- **Tuticorin Unit 3**: No absorption. The issue is being highlighted since last 1 year.
- **NTECL Unit-1**: Many instances of injection at high voltages
- **Simhadri St-II Unit 4:** Many instances of injection at high voltages
- **HNPCL Unit 2:** Many instances of injection at voltage greater than 410 kV
- **Vijayawada TPS Unit 2:** No absorption
- **Kakatiya Unit 1:** Many instances of injection at high voltage of 405-410 kV
- **Kothagudem TPS Unit 11:** Many instances of injection at voltage greater than 410 kV
- **Yadadri Unit 2:** Many instances of injection at voltage greater than 410 kV
- **Kaiga St-I Unit 2:** Many instances of injection at voltage greater than 230 kV
- **UPCL Unit 2:** Many instances of injection at voltage greater than 410 kV

## 48. Black Start Mock Drill Exercises

(i) Regulation 5.8b of CERC IEGC Regulation stipulates that "*Mock trial runs of the procedure for different subsystems shall be carried out by the Users/CTU/STU at least once every six months under intimation to the RLDC. Diesel Generator sets for black start would be tested on weekly basis and test report shall be sent to RLDC on quarterly basis".*

(ii) Point to point mock exercise for black start to be carried out by the constituents.

(iii) SRLDC had clarified that as per new IEGC Black-start mock drill is to be conducted **once in every financial year** and requested all the constituents to furnish the tentative schedule of Black start exercise for 2026-27.

The tentative schedule of Black start exercise for the year 2026-27 may be updated by all states.

- ***SRLDC/SLDCs may update the status of the tests carried out during June 2026 & Plan for June 2026, as well as the proposed schedule for the period July-September 2026.***

As per IEGC 2023, Regulation 34

**Clause 2**

***Quote***

*Each RLDC, in consultation with the NLDC, CTU, and the concerned STUs, SLDCs, users and RPC, shall prepare detailed procedures for restoration of the regional grid under partial and total blackouts which shall be reviewed and updated annually by the concerned RLDC*

***Unquote***

**Clause 4**

***Quote***

*Simulation studies shall be carried out by each user in coordination with RLDC for preparing, reviewing and updating the restoration procedures considering the following:*

*(a) Black start capability of the generator;*

*(b) Ability of black start generator to build cranking path and sustain island;*

*(c) Impact of block load switching in or out;*

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*(d) Line/transformer charging;*
*(e) Reduced fault levels;*
*(f) Protection settings under restoration condition.*

***Unquote***

- States were requested to inform SRLDC, CROOM on D-1 basis regarding the Black-start mock exercise to enable real-time monitoring from SRLDC
- In 233rd OCC, the following points were noted
  - The Actual Dates of Mock drill exercise to be informed on D-7 basis.
  - To inform Control Room, SRLDC on D-1 basis regarding the Black-start mock exercise for monitoring in real-time.
  - Point-to-point Mock drills to be completed

  In 240th OCC, it was informed that there were no mock drill was conducted in June 2026 & only Lower Sileru was planned in the month of July 2026.
- States were requested to update the tentative schedule of Black start exercise for the year 2026-27 to SRLDC. SRLDC further emphasized that 3 months of FY 2026-27 have already completed and requested all GENCOs to finalize and furnish their testing schedule for 2026-27 at the earliest and plan the completion of all mock-drills by December 2026
- SRLDC appraised that the workshop is due to be conducted this year and requested all states to propose suitable dates for conduct of the workshop with their stakeholders.

**Action Points**

- **States are requested to update the tentative schedule for 2026-27**
- **Point to Point criteria needs to be ensured during Black Start Mock Drill**
- **States are requested to propose dates for workshop on black start procedures.**
- ***SLDCs/Utilities may update.***

**Deliberations**

- No mock drills were conducted in July 2026:
- The following mock drills are planned during August 2026.

| Station (State) | Proposed date | Remarks |
|---|---|---|
| SARKARPATHY PH (TN) | 19.08.2026 | |

- SRLDC informed that workshops for review of the Black Start Restoration Procedure are required to be conducted during the current year and requested the States to propose suitable dates for conducting the workshops.
- SRLDC further informed that, during the previous year, the Black Start exercise for the Pugalur–Thrissur HVDC link was conducted; however, the exercises for Gazuwaka and Bhadravati HVDC stations could not be conducted. It was therefore proposed to undertake the pending HVDC Black Start exercises during the current year.
- Accordingly, SRLDC requested the States and POWERGRID, to propose suitable dates for the Black Start exercises and workshops, based on the availability of the concerned stakeholders.
- SRLDC informed that, during the proposed workshops, the respective States would involve their concerned entities, explain the Black Start Restoration Procedure and obtain feedback directly from the utilities.
- It was informed that the workshops may be conducted either online or offline, as considered suitable by the respective States based on the availability of stakeholders.

**Action Points**

- **States are requested to update the tentative schedule for 2026-27**

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- **Point to Point criteria needs to be ensured during Black Start Mock Drill**
- **States are requested to propose dates for workshop on black start procedures.**
- **PowerGrid may propose suitable dates for Black Start mock drill exercises of HVDC stations**

## 49. PSS Tuning of Generating Units

(i) The Regulation 29(7) of CERC (IEGC) Regulations 2023 stipulates that 'The tuning of AVR, PSS, Voltage Controllers (PPC) including for low and high voltage ride through capability of wind and solar generators or any other requirement as per CEA Technical Standards for Connectivity shall be carried out by the respective generating station:

- *at least once every five (5) years;*
- *based on operational feedback provided by the RLDC after analysis of a grid event or disturbance; and*
- *in case of major network changes or fault level changes near the generating station as reported by NLDC or RLDC(s), as the case may be.*
- *in case of a major change in the excitation system of the generating station.*

(ii) Regulation 29(8) of CERC (IEGC) Regulations 2023 stipulates that Power System Stabilizers (PSSs), AVRs of generating units and reactive power controllers shall be properly tuned by the generating station as per the plan and the procedure prepared by the concerned RPC. **In case the tuning is not complied with as per the plan and procedure, the concerned RLDC shall issue notice to the defaulting generating station to complete the tuning within a specified time, failing which the concerned RLDC may approach the Commission under Section 29 of the Act**.

(iii) The Procedure finalised in the Meeting held on 27.09.2023 through VC is available at SRPC website. As per the Procedure, the Annual Plan for PSS turning of generating units under commercial operation in SR will be prepared by SRPC and finalized every year in the February-March month OCC Meetings for next FY. The plan will be reviewed in monthly OCC Meetings.

(iv) **Plan for PSS Tuning for the Year 2026-27 (Five Year cycle basis)** ***Annexure-49a***

In case the tuning is not complied with as per the plan and procedure, SRLDC shall issue notice to the defaulting generating station to complete the tuning within a specified time, failing which the concerned RLDC may approach the Commission under Section 29 of the Act.

✓ **In 233rd OCC,** it was observed that the following units retuning of PSS is pending as per the 5 year timeline considering upto March 2026: SDSTPS units, Lower Sileru Units, Srisailam RB units, HNPCL units, Bellary TPS Units, Nagjheri HEP Units, UPCL units, NCTPS Stage I units, Tuticorin TPS Unit, Kadamparai units, Nagarjuna sagar HEP Unit 1, Yadadri Units, Srisailam LB Unit 4, NTPC Ramagundam Units, NTPC Simhadri Units, Vallur units(final reports to be furnished), NLCIL TPS-I Exp units , NLCIL TPS-II Exp units, MAPS, MPGL units.

✓ Further, NTPC stated that PSS tuning for Ramagundam units 4, 5 and 6 was carried out on 14th/15th November 25. The reports would be furnished. HNPCL stated that PSS tuning was carried out in January 2024(10.01.24) for Unit 2. HNPCL may furnish the reports for analysis in the next PSS tuning meeting. PSS tuning for Unit 1 is planned by end of January 2026.

**Actionable Points**

- All the Generators may take necessary action as per the recommendations in Record Notes of the 15th PSS Meeting.

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- Generators may carry out the retuning of PSS as per the schedule mentioned in Record Notes of the 15th PSS Meeting.
- All the simulation studies/field tests mentioned in the PSS tuning procedure (available on SRPC website) to be carried out by the generators.
- Report in the final form to be furnished by the generators to SRPC/SRLDC.
- NTECL Vallur to furnish final report all the 3 units for analysis**.**

**Past OCC Conclusion:**

- SRPC stated the following:
  - ✓ Partial Reports/data received from NLC TPS II U6, Yeramarus TPS U2, NPH U3, NTPC Ramagundam 4,5,6; NTPC Simhadri Units 1 to 4.
  - ✓ Status of PSS tuning of NLCIL TS2 U5& U3, KKNPP 2, SEL units to be confirmed.
  - ✓ Pending units to carry out PSS tuning as per the tuning schedule**.**
- NLCIL TPS-II stated that PSS tuning for Units 5 and 7 has been carried out, and the reports will be furnished within this month. AVR upgradation has been completed for Unit 3. The overhaul (OH) of Unit 3 was deferred during the current financial year. PSS tuning for Unit 3 will be carried out during the OH planned in the next financial year.
- NTPC Simhadri stated that the PSS tuning carried out in December 2024 was not satisfactory, as the waveforms were not captured properly. Therefore, re-tuning of the PSS is planned from 06th April to 11th April 2026 in coordination with the OEM, BHEL. The PSS tuning of Units-3 and 4 had been carried out, and the reports are being finalized. PSS tuning for Units-1 and 2 will be planned at a later stage.
- Adani Power Ltd. stated that PSS tuning of MPGL Unit 2 was carried out in March 2026. For UPCL Units 1 and 2, PSS tuning is planned in April 2026.
- SRPC requested Adani Power Ltd. to furnish the PSS tuning report of MPGL Unit 2, which will be discussed in the upcoming PSS tuning meeting.
- HNPCL stated that PSS tuning for Unit 1 is planned in March 2026, and the purchase order has already been placed. The PSS tuning will be carried out at the earliest opportunity.
- HNPCL further stated that PSS tuning for Unit 2 was carried out on 10.01.2024. SRPC requested HNPCL to furnish the report for analysis in the next PSS tuning meeting.
- KKNPP vide letter dated 04.04.2026 furnished the PSS tuning report of Unit 2
- Adani PL stated that PSS tuning for UPCL units 1 and 2 is planned to be carried out after the Hebbanahalli line termination works in the new S/S. MPGL Unit 2 PSS tuning report would be furnished.
- It was noted that PSS tuning details for a total of 13 generating units, including those of NTPC, SEIL, and NLCIL, had been received.
- Further, SRPC had conducted the 16th PSS Tuning Meeting with all the utilities on 13.07.2026 to review the pending PSS tuning activities. Subsequently the recommendations and reports received for 20 units (including NLCIL TPS-II Unit 1) were analyzed during the meeting. MoM will be issued shortly

➢ ***Generators may update the status.***

**Deliberations:**

- 16th PSS tuning meeting was held on 13.07.2026. MoM will be issued shortly.

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## 50. Implementation of Scheduling, Accounting, Metering and Settlement of Transactions in Electricity (SAMAST) by State Utilities

- ❖ 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.

This agenda item was taken up in the recent 57 SRPC-54 TCC meeting held on 16-17th March 2026

| State/Utility | Status (240th OCC) |
|---|---|
| **Andhra Pradesh/ AP-TRANSCO** | **240th OCC:** PSDF requested to resend the proposal after some modifications suggested by them. Subsequently, proposal has been submitted to NLDC seeking PSDF funding, and their response is awaited.<br>Meanwhile, the management has taken a decision to proceed with the project using internal funds. Accordingly, the process for obtaining Administrative Approval has been initiated, and the proposal note is currently under circulation. |
| **Kerala/ KSEBL** | Hardware SAT completed in first week of October 2025.<br>**54th TCC:**<br>It was informed that issues are being faced with API integration for WBES data, as the number of polling requests permitted is limited.<br>**240th OCC:** SAT completed. Rectification of SAT punch points in progress. Scheduled to go live by August 2026 |
| **Telangana/ TGTRANSCO** | **240 OCC**:<br>Metering module: 689 out of 701 Energy Meters installation is completed<br>IT Module: Tender evaluation is in progress<br>Subsequently, the remaining two modules, namely AMR and hardware part, will be taken up. Expected to be completed by December-2026 |

- ➢ ***Status was updated in 58th SRPC meeting. MOM is awaited***

## 51. 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 (57th SRPC / 54th TCC) |
|---|---|---|
| **NTPC** | **Ramagundam STPS Stage-I** (3x200MW) | **53rd TCC:** Completion is expected by December 2025.<br>**54th TCC:** Equipment had been reached site. NTPC is ready for implementation.<br>Unit 3: By March 2026<br>Unit 1 & 2: will be taken along with Approved Annual Overhaul. |

| | | |
|---|---|---|
| | | **238th OCC: AGC implemented in Unit 2 & 3 on 18.04.2026**<br>**Unit 1: will be implemented at the next opportunity** |
| **All the Generators to furnish the AGC Status at present. Issues after implementation, if any also may be highlighted.** | | |

1. 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 ongoing communication with NLDC to address any issues promptly, especially given the current unavailability of machines.
2. **SRLDC** may schedule sessions with relevant stakeholders to discuss specific issues related to AGC performance, especially concerning lower frequency scenarios. Provide additional training or resources to operators to help them better understand AGC corrections and responses, especially in complex scenarios. Create a feedback loop for operators to report issues or **confusion regarding AGC operations so that they can be addressed in real-time.**
   - ***All the ISTS Generators may update the status***

**b) State Level-Pilot Project identification &Implementation:**

| State | Generator | Status (57th SRPC / 54rd TCC) |
|---|---|---|
| **Andhra Pradesh** | **Krishnapatnam (2x800MW)** | **53rd TCC**: All units will be put under AGC by 2026-27(along with SCADA up gradation).<br>**54th TCC:** Order would be placed shortly, for RTU once new SCADA is commissioned. |
| **Karnataka** | **Sharavathy Generating Station** (1035MW)<br>(Available MW for AGC is 10 % of live load up to maximum of 100 MW (10% of 1035 MW) | Sharavathy: Recently tested.<br>Varahi: Test is planned.<br>**54th TCC:** Sharavathy GS & Varahi: Testing had been completed. KAR SLDC stated that the matter needs to be taken up with Karnataka Electricity Regulatory Commission for approval of the commercial mechanism, following which implementation can be carried out. MS, SRPC stated in KERC Advisory Committee meeting, KERC had advised KARSLDC & KPCL to move ahead. |
| | **Varahi** Under Ground Power House (4x115 MW)<br>(Available MW for AGC is 20% of live load up to maximum of 80 MW as per the programme planned) | |
| **Kerala** | **Kuttiady Unit No.5 (50 MW)** | **52nd TCC**<br>Being in the Northern Kerala, dedicated resources cannot be allocated for AGC at the moment.<br>**54th TCC:** No resources are available |
| | **Idukki Unit No.1 (130 MW)** | **52nd TCC**<br>OPGW works completed. Work has been awarded for the integration by OEM, M/s GE.<br>**54th TCC**: Still pending for revised estimation by OEM |

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|---|---|---|
| **Tamil Nadu** | **1 North Chennai TPS Stage-II (2 x 600 MW)**<br>**2 MTPS-II(1 x 600MW)** | 52nd TCC: RTU at Generating end to be provided. At SLDC, the work is completed.<br>**53rd TCC:** The matter was discussed with the management and required funding had been agreed to be provided. Procurement of RTUs would be taken up.<br>**54th TCC :** Tenders were awarded for both stations |
| **Telangana** | **TS GENCO Stations** | **53rd TCC:** All units will be put under AGC by 2026-27(Along with SCADA upgradation**.)** However, all GENCOs have been requested to complete their respective works. They are progressing with AGC implementation and that the work on hardware and communication infrastructure will be completed ahead of SCADA upgrades, ensuring that integration with SCADA will be smooth once completed.<br>**54th TCC/241st OCC:** TGGENCO informed that as a pilot project at KTPS-VI stage (1x500MW), end to end communication was established and verified between SLDC and KTPS-VI stage including data exchange and communication response and found to be satisfactory in both directions.<br>The process of obtaining quotations for the remaining 12 units was underway. |

- ***Status was updated in 58th SRPC meeting. MOM is awaited***

## 52. Furnishing of information/data to SRPC Secretariat/CEA on regular basis

1) **PSP-daily Demand and Consumption pattern (CEA requirement):**

   The daily Demand and Consumption pattern and the reason for significant variations w.r.t last year and past few days **is to be furnished in the prescribed format.**

2) **Category-wise Consumption Pattern (CEA requirement):**

   RPCs had been requested to discuss/collect the data in respect of category-wise consumption of electricity in the States/UTs in OCC meetings on a regular basis in the prescribed format. All utilities may furnish data**.**

3) **Status of Implementation of the revised FGD Installation/ESP Up-gradation Plan (CEA/MoP requirement):**

   (i) All the concerned to comply with norms, as per CPCB timelines and changes thereof since the activity is monitored by Hon'ble Supreme Court/Government.

   (ii) **Updated information in respect of implementation of revised FGD installation/ESP to be furnished to CE (TPR&M), CEA** (cetprm-cea@gov.in) with a copy to SRPC**.**

4) **Strict Compliance of Environment Emission Norms**

   CEA is monitoring the compliance of Environment Emission norms. In this regard, it is requested that the requisite information in the specific format may kindly be furnished by all the TPPs on monthly basis **to CE (TPR&M), CEA** (cetprm-cea@gov.in) with a copy to SRPC.

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The progress of Installation of Pollution control equipment may kindly be updated in the OCC meetings.

5) **Capacitor Installation:**

Details of capacitors installed by all the states needed to be submitted on monthly basis to SRPC Secretariat.

- **SLDCs/TRANSCOs to carry out studies on voltage issues and plan for Capacitor Installation in low voltage pockets. Especially KPTCL to look into Bangalore area and TN SLDC to Chennai Area.**

6) **U/F & df/dt Relays Schemes:**

Utilities are requested to update the status on regular basis.

7) **Compliance of CEA Regulations for Grid connectivity of RE Sources:**

All the SLDCs are requested to update the status on RE SCADA availability on monthly basis. All the states/STUs should adhere to the Grid Connectivity Regulations as amended.

8) **Certification of Healthiness of Islanding Scheme (CEA/MoP requirement):**

- ✓ Participating Generator Utilities /transmission utilities/SLDCs/SRLDC may confirm the healthiness of the Islanding Schemes. This is a monthly requirement and all the utilities to furnish the information by first week of the every month so that the consolidated information can be passed on to CEA/MoP.
- ✓ Utilities are requested to confirm the Healthiness of Islanding scheme on monthly basis in the prescribed format within the specified dates (by the 3rd working day of the month) mailed to srpc.protectiondata@gmail.com & srpc.operation@gmail.com.

9) **Updating Daily/Monthly Generation and outages Data online at National Power Portal (NPP):**

- ✓ The generating stations are requested to update the data online on NPP portal regularly.
- ✓ SLDCs are responsible for the updating of data for all the generators including IPPs which are connected to respective network (even though in some stations PPA might have expired). The issues if any faced in updating the data may be taken up with CEA.

10) **Furnishing of Monthly Operating Report/Monthly Generation Report (CEA requirement):**

- ✓ CEA, OPM Division vide E-mail dated 28.06.2022 had informed that as per CEA (Furnishing of Statistics, Returns and Information) Regulations, 2007 data for the Monthly Operating Report/ Monthly Generation Report should be submitted by 7th of the month. However, it is noticed that the data is being sent by many stations/utilities till 15th of the month which results in inordinate delay in preparation of report by CEA.
- ✓ In view of above, it is requested that the data for the Monthly Operating Report/ Monthly Generation Report should be submitted by 7th of the month to the email id: mgrceaopm@gmail.com
- ✓ The monthly generation data w.r.t SR generators are being furnished to CEA by SRPC Secretariat. It is requested to all SLDCs and Generators to submit the generation data by 5th of every month (irrespective of date of OCC Meeting) to enable SRPC to consolidate the same and furnish to CEA by 5thof every month.

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11) **Monitoring of Unscheduled Capacity in Intra-State Thermal Stations**

(i) MoP vide letter dated 13.10.2023 has been conveyed that for State Generating Companies, it has been decided that CEA will obtain the details from each State Generating company (pant wise) in the prescribed format. From this format, conclusion can be drawn whether or not thermal stations are offering its unscheduled capacity to the market for optimum resource utilization.

(ii) It is requested to furnish the unscheduled capacity in Intra- State Thermal Stations for each state generating company (plant wise) in the prescribed format on a daily basis.

(iii) The data may please be mailed in the prescribed format by SLDCs to GM division, CEA (gmcea@nic.in) with a copy to SRPC Secretariat.

12) **Shifting of agricultural loads from Non-Solar hours to solar hours.**

*(i) MoP vide communication dated 01.02.2024 had communicated certain observations regarding RE installed capacity and meeting the huge demand anticipated in the coming years.*

(ii) **The following were the updates furnished by the SLDCs in the OCC meetings w.r.t shifting of agricultural loads to solar hours as per MoP communication:**

| State/UT | Status of Agricultural Load Shifting | Remarks/Next Steps |
|---|---|---|
| Andhra Pradesh | - AP SLDC (05.03.2024): All 3 DISCOMs shifted 100% agricultural loads from non-solar to solar hours. | Fully implemented as per MoP directives. |
| Karnataka | - Except feeders with transmission constraints, all other agricultural feeders shifted to solar hours. | ESCOMs & transmission wings following up on remaining feeders. |
| Kerala | - Agricultural load is minimal (~2% of total load). | Impact of rooftop solar installations on power distribution being addressed. |
| Tamil Nadu | - Agricultural feeder segregation under RDSS and in progress. | - Current supply hours: 08:00-18:00 & 22:00-06:00. |
| Telangana | - TS SLDC: As per Telangana Govt. policy, 24-hour agricultural supply is provided. | No action taken to restrict load to solar hours. |
| Puducherry | - 24×7 agricultural power supply ensured. No load scheduling enforced. | - No feeder segregation done. |
| | - Consumers are being sensitized about MoP directives to encourage appropriate power consumption. | |

**AA A3: Frequent switching / tripping of 765KV Maheswaram – Warangal – 1&2 lines and 765KV Maheswaram – Kurnool – 1- & 2-lines causing stress on 765KV GIS equipment at Maheswaram**

It is pertinent to mention that frequent switching operations of the above transmission lines for attending defects, as well as repeated trippings due to line faults, are imposing considerable operational stress on the GIS equipment at Maheswaram Substation. The repeated opening and closing of GIS switching devices not only accelerates equipment wear and tear but also adversely impacts the reliability and service life of the associated GIS components. Abstract of the switching operations and line trippings pertaining to the above transmission lines is furnished below :

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| Name of Transmission Line | Year | No of trippings / Switching operations | Avg fault current (kA) | Remarks |
|---|---|---|---|---|
| 765KV Maheswaram – Warangal – 1 & 2 lines | 2024 | 09 | 9.65 | 03 switching opern & 06 trippings |
| | 2025 | 18 | 7.45 | 07 switching opern & 11 trippings |
| | 2026 (till date) | 09 | 9.54 | 03 switching opern & 06 trippings |
| | | 36-Nos | | |
| 765KV Maheswaram – Kurnool – 1 & 2 lines | 2024 | 12 | 13.1 | 02 switching opern & 10 trippings |
| | 2025 | 27 | 13.6 | 13 switching opern & 14 trippings |
| | 2026 (till date) | 8 | 15.4 | 01 switching opern & 07 trippings |
| | | 47-Nos | | |

From the above, it is evident that the number of line trippings and switching operations on the aforesaid transmission lines is showing an increasing trend, which is a matter of concern. During the recent tripping of the 765 kV Maheswaram–Warangal #2 transmission line, the line attempted auto-reclosure and subsequently tripped on a persistent fault on 26.07.2026 at 17:04 hrs, with a fault current of 17 kA. Thereafter, on 27.07.2026 at 00:31 hrs, the main circuit breaker of the said line failed due to an internal flashover.

It is pertinent to note that the Mean Time to Restoration (MTTR) for GIS equipment is considerably high, and restoration of failed GIS components generally involves prolonged outage durations, extensive maintenance efforts, high replacement cost & multiple Bus / Element outages also required for longer periods. Further, frequent switching operations in GIS installations need to be minimised to preserve the health and reliability of the system, as excessive switching duty accelerates deterioration of critical GIS components and adversely impacts their operational life.

In view of the above, the issue may be deliberated and corrective measures to minimise defects and line faults, thereby reducing unnecessary switching operations and avoiding undue operational stress on the GIS equipment at Maheswaram Substation. This will help in enhancing system reliability, improving asset life, and ensuring secure operation of the transmission network.

**Deliberations:**

- SR-I POWERGRID expressed concern regarding the 36 trippings/switching operations on the 765 kV Maheswaram–Warangal-1 & 2 lines and 47 trippings/switching operations on the 765 kV Maheswaram–Kurnool-1 & 2 lines, as indicated in the above table. These lines are owned by WKTL, and the frequent trippings/switching operations are imposing considerable operational stress on the GIS equipment at Maheswaram Substation.

  In addition to the above, opening and closing operations are also carried out for voltage regulation as per the requirements of the system operator. The repeated opening and closing of GIS switching devices may accelerate equipment wear and tear and adversely affect the reliability and service life of the associated GIS components.

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It is suggested that the number of outages availed by WKTL may be reduced by clubbing insulator replacement and other maintenance activities, wherever feasible, so as to minimise the number of switching operations and avoid undue operational stress on the GIS equipment.

- MS, SRPC opined that a letter may be addressed by CGM (AM), SR-I, POWERGRID to WKTL, advising them to optimise and minimise the outages on the above-mentioned 765 kV lines by suitably clubbing maintenance activities, so as to minimise the number of switching operations and avoid undue operational stress on the GIS equipment.

**Conclusion:**

- Forum concluded that WKTL should optimise and minimise the number of outages on the 765 kV Maheswaram–Warangal-1 & 2 and Maheswaram–Kurnool-1 & 2 lines by suitably clubbing insulator replacement and other maintenance activities, wherever feasible. This would help reduce the frequency of switching operations and minimise operational stress on the GIS equipment at Maheswaram Substation. Accordingly, CGM (AM), SR-I, POWERGRID may take up the matter with WKTL through a formal communication.

**AA A4: PID (Puncture Insulation detection) testing of 400KV Transmission lines aged more than > 10years in SR – I POWERGRID**

Presently, in SR-I Region, 53 nos. of 400 kV / 765KV transmission lines are equipped with porcelain insulators that have completed 10-years to 42-years of service life. In recent years, incidents of porcelain insulator failures have shown an increasing trend, resulting in transmission line outages due to decapping of insulator strings.

To assess the health condition of these insulators and prevent unexpected failures, puncture insulator detection (PID) Testing on the identified transmission lines is being carried out by climbing towers. Accordingly, testing teams from an external agency have been mobilised and the testing is being undertaken in a phased manner. Priority has been accorded to critical lines having a history of insulator failures.

For ensuring the safety of personnel engaged in PID testing, the Auto Reclose (A/R) function of the concerned transmission lines is required to be kept in non-auto mode during the testing period.

Requisitions for keeping the lines in non-auto mode are being submitted through the outage portal on a D-4 basis as there is no outage involved. However, these requisitions are frequently being denied due to system constraints and/or multiple concurrent shutdown requests.

As a result, the testing teams remain idle despite mobilisation, leading to loss of productive man-hours and delays in completion of the testing programme. The delay in conducting PID testing may also increase the risk of insulator failures and consequential transmission line outages.

*In view of the above, the matter may be deliberated so that suitable provisions/mechanisms can be evolved for facilitating approval of non-auto mode requisitions required for PID testing, thereby enabling timely completion of testing, preventing insulator failures, and improving transmission system reliability.*

**Deliberations:**

- SR -I POWERGRID informed the forum that approximately 53 transmission lines, having an age ranging from 10 to 42 years, are in service. As per the POWERGRID guidelines, transmission lines that have completed more than 10 years of service, having porcelain insulators are required to undergo

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Polymer Insulator Detection (PID) testing to assess the condition of the insulators. During PID testing, defective/punctured insulators, if identified, are replaced with new insulators.

He stated that a drive has recently been undertaken for PID testing of lines that have completed more than 10 years of service. In this context, it was highlighted that the Nagarjunasagar - Mahbubnagar line had experienced two instances of decapping and one auto-reclosure operation during the preceding 20 days. Such decapping incidents pose a safety hazard to personnel working in the field as well as to livestock in the vicinity of the transmission lines.

He therefore, requested that the concerned lines be permitted to be operated in A/R non-auto mode during PID testing. It was explained that PID testing is carried out at the tower level, requiring personnel to climb the towers and conduct the testing. Keeping the auto-reclose function in the non-auto mode during such activities is considered necessary from the personnel safety perspective.

He further stated that PID testing would help identify defective insulators at an early stage, enabling their replacement during a planned shutdown. This would minimise the possibility of insulator failures, decapping incidents and consequential prolonged outages.

- Sr. GM, POWERGRID informed that most of the lines for which PID testing is being requested are more than 35 years old. Considering the age of these lines, PID testing is considered necessary to assess the healthiness of the insulators and prevent unexpected failures and prolonged outages.
- POWERGRID clarified that the testing would not require a continuous outage of the transmission line. Typically, PID testing would be carried out on about 5–6 towers per day, during a limited period, approximately from 06:00 hrs to 14:00 hrs. The testing would therefore be undertaken on a daily basis, as required, rather than as a continuous outage extending over several days.
- SRLDC clarified that requests for non-auto A/R operation/shutdown would be processed based on the prevailing system conditions and availability of parallel transmission elements. In case of overlapping shutdowns or other system constraints, the requested operation may not be permitted.
- MS SRPC observed that, since the PID testing does not involve a continuous outage and is proposed to be carried out on a daily basis for limited durations, POWERGRID may submit the requests to SRLDC. SRLDC would process the requests based on the prevailing system conditions.

- SRLDC stated that approval of the requested A/R in non-auto mode for the lines cannot be guaranteed in all instances and would be subject to system requirements and operational constraints.

**Conclusion:**

- Forum agreed that POWERGRID may continue to submit requests for PID testing i.e. A/R in non-auto mode operation on a daily basis. SRLDC shall process the requests based on prevailing system conditions.

**Additional agenda item F:**

- TGTRANSCO vide communication dated 03.08.2026 **(Annexure-F)** had submitted regarding the frequent log off of WBES Portal and requested for needful to rectify the issue.
  - May be discussed

**Deliberations:**

- TGSLDC raised a concern regarding the session timeout duration, stating that a short timeout would require the user to log in again and repeat the necessary steps for carrying out system operations. It

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was explained that, in certain instances, manual inputs may have to be provided for approximately 45–50 generators, which may require additional time, particularly when the operator is simultaneously engaged in other activities.

- SRLDC further clarified that, as per the applicable cybersecurity requirements, 15 minutes is the maximum permissible period of user inactivity. If the user remains inactive for 15 minutes, the session will be logged out. It is as per cyber security norms. However, the timer will reset whenever the user performs an active operation.
- TGSLDC acknowledged the clarification and agreed to proceed accordingly

## 53. Grid Highlights July 2026

### (i) System Frequency

1 The grid operated above the IEGC range of 50.05 Hz for 18.70% of the time. It is concerning that the frequency was higher than normal for considerable durations on certain days, with the grid operating within the IEGC range only 72.47% of the time.

2 On **July 0**1, 2026, the maximum frequency reached 50.35 Hz at 13:06 hours, while Tamil Nadu was underdrawings by approximately 500 MW. Notably, there was no significant over-drawal by other SR states during this instant. The drawal pattern for that day is presented in the graphs provided by SRLDC (see PPT at ***Annexure-37a***).

3 Additionally, the grid frequency occasionally fell below the IEGC range, operating below 49.90 Hz for 8.83% of the time during the month. The minimum frequency recorded was 49.42 Hz at 19:20 hours on 25.07.2026. TN was over drawing at that instant. The corresponding drawal pattern for that day is also available in the graphs presented by SRLDC (refer to PPT at ***Annexure-37a***)

### (ii) Pump Mode Operation:

- Srisailam pump mode consumption was 0.00MU.
- N' Sagar pump mode consumption was -83.92 MU.
- Kadamparai pump mode consumption was 0.00 MU.

### (iii) Generation Capacity Addition:

**Tamil Nadu**

| S. No | Developer | Capacity (MW) | Location | Make | Voltage Level | Commissioning Date |
|---|---|---|---|---|---|---|
| **1** | M/s. FPEL TN Wind Farm Private Limited | 4x 3.300 (13.2) | Dindigul | Adani | 33 KV | 04.07.2026 |
| **2** | M/s. Dahlia Green Energy (P) Ltd | 2x 2.100 (4.200) | Tuticorin | Suzlon | 33 KV | 07.07.2026 |
| **3** | M/s. Lavender Eco Power (P) Ltd | 4x 2.100 (8.400) | Tuticorin | Suzlon | 33 KV | 17.07.2026 |
| **4** | | 12.3 | Tirunelveli | - | - | July 2026 |
| **5** | | 13.2 | Udumalpet | - | - | July 2026 |

**Andhra Pradesh – NIL**

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**(iv) Transmission elements commissioned:**

| S.NO | Name of Element | Date of Charging |
|---|---|---|
| 1 | LILO of existing 220 KV c.k.palli -Renigunta line to the proposed 220KV SS Rajampeta in Kadapa & Tirupathi Dist. | 25.07.2026 |
| | (a) 220 KV c.k.palli to Rajampeta. | 25.07.2026 |
| | (b) 220 KV Rajampeta to Renigunta. | 25.07.2026 |

## 54. Date &Venue/Mode of the 242nd Meeting of OCC/Outage coordination.

| Meeting | Date | Time | Mode |
|---|---|---|---|
| 242nd OCC Outage Coordination Meeting for Transmission Elements | 09-09-2026 | 10:00Hrs | Online |
| 242nd OCC Meeting | 11-09-2026 | 09:30Hrs | Physical Mode (Hampi,Vijayanagara Karnatka, hosted by SR I PGCIL) |

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