

भारतसरकार  
केंद्रीय विद्युत प्राधिकरण  
दक्षिण क्षेत्रीय विद्युत समिति  
29, रेस कोर्स क्रॉस रोड  
बेंगलुरु-560 009



Government of India  
Central Electricity Authority  
Southern Regional Power  
Committee  
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Bengaluru - 560 009

E-mail/Website



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सं/No.SRPC/SE (PC&SS)/143PCSC/2026/ 2181-2227 दिनांक /Date 29<sup>th</sup> May 2026

To,

संलग्न सूची के अनुसार  
As per attached List

**विषय: संरक्षण समन्वय उप-समिति (PCSC-143) की 143<sup>वीं</sup> बैठक का एजेंडा, जो 8 जून, 2026 को आयोजित की जाएगी।**

**Sub: Agenda for the 143<sup>rd</sup> Meeting of Protection Coordination Sub-Committee (PCSC-143) to be held on 08<sup>th</sup> June, 2026.**

महोदय/महोदया/ Sir/ Madam,

यह सूचित किया जाता है कि संरक्षण समन्वय उप समिति (पीसीएसी) की 143<sup>वीं</sup> बैठक का एजेंडा, जो 8 जून, 2026 को सुबह 10:00 बजे वीडियो कॉन्फ्रेंसिंग के माध्यम से आयोजित होने वाली है, एसआरपीसी वेबसाइट (<http://www.srpc.kar.nic.in>) पर अपलोड कर दिया गया है।

It is informed that the agenda for the 143<sup>rd</sup> Meeting of Protection Coordination Sub Committee (PCSC) scheduled to be held on 08<sup>th</sup> June, 2026 at 10:00hrs through VC, is uploaded on the SRPC Website (<http://www.srpc.kar.nic.in>).

संरक्षण समन्वय उप-समिति के सदस्यों/नामित व्यक्तियों से अनुरोध है कि वे पीसीएससी-143 की बैठक में उपस्थित होने की सुविधा प्रदान करें।

The Protection Coordination Sub-Committee Members / Nominees are requested to kindly make it convenient to attend the PCSC-143 meeting.

धन्यवाद / Thanking You,

भवदीय/Yours faithfully,

(लन. जे. बी / Len. J. B)

अधीक्षक अभियंता (पीसी&एसएस)/ Superintending Engineer (PC&SS)

## डाक-सूची/ Mailing List

1. मुख्यअभियंता (एचपीसीवजलपरियोजना) एपीजेनको, 4 वी मंजिल, गुणदल, विजयवाडाआं 520004/ Chief Engineer (Generation), APGENCO, 4th Floor, Vidyut Soudha, Eluru Road, Gunadala, Vijayawada, AP – 520004
2. मुख्यअभियंता (परियोजना), एपीजेनको, 4वीमंजिल, गुणदल, विजयवाडाआं 520004 / Chief Engineer (Projects), APGENCO, 4th Floor, Vidyut Soudha, Eluru Road, Gunadala, Vijayawada, AP – 520004
3. मुख्यअभियंता(आईपीसीविविद्युतप्रणाली), एपीट्रान्स्को, 3रीमंजिल, गुणदल, विजयवाडाआं 520004 / Chief Engineer (IPC & Power Systems), APTRANSCO, 3rd Floor, Vidyut Soudha, Eluru Road, Gunadala, Vijayawada, AP-520 004
4. श्री के लिंगमूर्ती, महा प्रबंधक ( QC & Planning), एपीसीपीडीसीएल, विजयवाडा / Sh. K Linga Murthy, General Manager (QC & Planning), APCPDCL, Vijayawada
5. मुख्यअभियंता (इले. डिजाईन), केपीसीएल, बेंगलूर/ Chief Engineer (Ele. Designs), KPCL, Bangalore
6. मुख्य अभियंता (आरटी और आर &डी), केपीटीसीएल, बेंगलूर/ Chief Engineer (RT and R&D), KPTCL, Bangalore
7. मुख्यअभियंता (एम.टी.एस), टैनजोडको चैनै/ Chief Engineer (MTS), TANGEDCO, Chennai (Fax No: 044-28585804)
8. मुख्य अभियंता (जलविद्युत) टैनजोडको चैनै/ Chief Engineer (Hydro), TANGEDCO, Chennai (Fax No: 044-28553356)
9. मुख्यअभियंता (संरक्षणएवंसंचार), टीएनईबी, चैनै/ Chief Engineer (Protection & Communication), TANTRANSCO, Chennai
10. मुख्यअभियंता (पारेषण) प्रणालीप्रचालन, एचएमटीकालोनी, केएसईबी, कलमस्सेरी-683503/ Chief Engineer (Transmission) System Operation, HMT Colony, KSEB, Kalamassery-683503
11. मुख्य अभियंता ( उत्पादन), टीएसजेनको, हैदराबाद/ Chief Engineer (Generation), TGGENCO Hyderabad
12. मुख्य अभियंता (परियोजना), टीएसजेनको, हैदराबाद / Chief Engineer (Projects), TGGENCO Hyderabad
13. मुख्य अभियंता (विद्युतप्रणाली), टीएसट्रान्स्को, हैदराबाद / Chief Engineer (Power System), TGTRANSCO, Hyderabad
14. श्री पी आनंद, मुख्य महा प्रबंधक, आर आर जोन, टीएसएसपीडीसीएल, हैदराबाद / Shri. P. Anand, Chief General Manager, RR Zone, TGSPDCL, Hyderabad.
15. अधीक्षक अभियंता-1, विद्युतविभाग 137, एनएससीबोससाले, पुदुचेरी- 605001 / Superintending Engineer 1, Electricity Department, 137, NSC Bose Salai, Puducherry-605001
16. महाप्रबंधक (ओएस), एनटीपीसी, दक्षिणक्षेत्रीयमुख्यालय, सिकंदराबाद / General Manager (OS), NTPC SRHQ, Secunderabad
17. मुख्यमहाप्रबंधक टीपीएस- विस्तार, एनएलसीआईएल जैवेली / 607807 - Chief General Manager, TPS 1 Expn. NLCIL, Neyveli-607807 (Fax No: 04142-265303)
18. मुख्यअभियंता (पारेषण) एनपीसीआईएल, मुंबई Chief Engineer (Transmission), NPCIL, Mumbai.
19. केंद्रनिदेशक, केजीएस, कैगा, कर्नाटक/ Station Director, KGS, Kaiga, Karnataka
20. केंद्रनिदेशक, एमएपीएस, कल्पक्कम / Station Director, MAPS, Kalpakkam
21. केंद्रनिदेशक, केकेएनपीपी, तिरुनल्वेली जिला, तमिलनाडु - 627106/ Station Director, KKNPP, Tirunelveli Dist, TamilNadu-627106
22. श्रीअनिलकुमार, एजीएम (ईएमडी), एनटीईसीएल, चैनै- 103/ Sh. Anil Kumar, AGM (EM), NTECL, Vallur, Tamil Nadu.
23. श्रीएमप्रभाकर, महाप्रबंधक ( प्रवअ), एनटीपीएल, हार्बरएस्टेट, तूतुकुडी 628004 / Sh. M. Prabhakar, GM (O&M), NTPL, Harbour Estate, Tuticorin – 628004
24. जीएम (प्रचावअनु) दक्षे, पावरग्रिड सिकंदराबाद / GM (O&M), SR-I, PGCIL, Secunderabad
25. जीएम ( प्रचावअनु) दक्षे-II, पावरग्रिड, बेंगलूर GM (O&M), SR-II, PGCIL, Bengaluru
26. Sh.Sourov Chakraborty, Sr. GM, CTU, Plot No. 2, Sector-29, Gurugram, Haryana-122 001.
27. श्री चंद्रशेखर रेड्डी, डीजीएम, इलेक्ट्रिकल मेंटेनेंस, मेसर्स जेएसडब्ल्यू एनर्जी लिमिटेड, तोरणगल्लु, बल्लारी- 583275/ Sh. Chandrashekar Reddy, DGM, Electrical Maintenance, M/s JSW Energy Ltd, Toranagallu, Bellary-583275
28. श्री आशीष बाविसकर, सह महाप्रबंधक,यूपीसीएल, बेंगलूर Sh. Ashish Baviskar, Associate General Manager, UPCL, Bangalore

29. प्रधानविद्युतएवंसीआईअनुरक्षण, एसईआईएल, प्यानपुरम / नेलतूरुग्राम, मुतुकूरमंडल, एसपीएस आरनेल्लूर- 524344/ Head Electrical and C&I Maintenance, SEIL, Pyanampuram / Nelaturu Village Muthukur Mandal, SPSR Nellore 524344
30. श्री. के बालमुगुन, रखरखाव प्रमुख, आईएलवएफएस, टीपीसीएल, सीपदुपेट्टेडाक, परनगीपेट्टे, भुवनगिरिताल्लूक, कुडलूरजिला, तमिलनाडु 608502/ Sh. K Balamurugan, Maintenance Head, IL&FS Tamilnadu Power Company Ltd., C.Pudhupettai (post), Parnagipettai, Bhuvanagiri Taluk, Cuddalore Dist, Tamilnadu- 608502
31. श्री सी रामकृष्ण, एजीएम (ऑपरेशन), हिंदुजाएनपीसीएल, पेटगंटयडमंडल, विशाखपट्टनम, आप 530031 / Sh. C Ramakrishna, AGM (Operations), Hinduja NPCL, Pedagantyada Mandal, Visakhapatnam, AP – 530031.
32. श्री विवेक कार्तिकेयन सहायक महाप्रबंधक, महेश्वरम ट्रांसमिशन लिमिटेड (एमटीएल), 101, विंडसर, सीएसटी रोड, सांताक्रूज ईस्ट, मुंबई400098/ Sh. Vivek Karthikeyan Assistant General Manager, Maheshwaram Transmission Limited (MTL), 101, Windsor, CST Road, Santacruz East, Mumbai 400098
33. निदेशक (जीएम), केविप्रा, नईदिल्ली / Director ( GM Division), CEA, New Delhi
34. निदेशक (एनपीसीप्रभाग), केविप्रा, नईदिल्ली / Director (NPC Division), CEA, New Delhi
35. कार्यकारीनिदेशक, पोसोको, एसआरएलडीसी, बेंगलूर Executive Director, SRLDC, Grid-India, Bengaluru
36. Manager, Electrical-HOD, SEPC Power Plant, Harbour Estate, VOC Road, Thoothukudi, Tamil Nadu– 628 004
37. Technical Services Superintendent, Prototype Fast Breeder Reactor Project, BHAVINI, Kalpakkam 603 102
38. सहायक महाप्रबंधक, महेश्वरम ट्रांसमिशन कर्पि फलषमटेड, मबई/ Head Regulatory, Adhani Energy Solutions Ltd., Ahmedabad
39. वररक्षिदेशक , एमपीआईएिजीमाकटसइषडयाप्राइवेटफलषमटेड/ Senior Director , AMPIN Energy Markets India Pvt. Ltd.
40. मुख्य महाप्रबंधक, संचालन एवं अनुरक्षण, ए.पी.एस.पी.डी.सी.एल., तिरुपति / Chief General Manager, O&M, APSPDCL, Tirupati
41. निदेशक) तकनीकी(, टी.एन.जी.ई.सी.एल., चेन्नई / Director (Technical), TNGECL, Chennai
42. श्री केराजू चौलहान ., मुख्य अभियंता -संचालन)II), टीजीएनपीडीसीएल /Sri K. Raju Chowhan, Chief Engineer (Operation-II), TGPNDCL
43. श्री एल. पांड्या, मुख्य अभियंता / आरआर जोन / टीजीएसपीडीसीएल, मीसेवा बिल्डिंग, मंजीरा मॉल के पीछे, केपीएचबी कॉलोनी, फेज-II, हैदराबाद – 500072 / Sri. L. Pandya, CE/RR Zone/TGSPDCL, MeeSeva Building, Backside of Manjeera Mall, KPHB Colony, Phase-II, Hyderabad – 500072
44. श्री रवीन्द्र वल्लूरु, मुख्य महाप्रबंधक, ग्रीनको ग्रुप, हाईटेक सिटी लेआउट, माधापुर, हैदराबाद - 500081, तेलंगाना / Raveendra Valluru, Chief General Manager, Greenko Group, Hitech City Layout, Madhapur, Hyderabad – 500081, Telangana.
45. श्री रविन्द्र नारायण टी., मुख्य महाप्रबंधक, ग्रीनको ग्रुप, हाईटेक सिटी लेआउट, माधापुर, हैदराबाद – 500081, तेलंगाना / Ravindra Narayana T., Chief General Manager, Greenko Group, Hitech City Layout, Madhapur, Hyderabad – 500081, Telangana.
46. महाप्रबंधक (स्टेट लीड-एसेट मैनेजमेंट), रिन्यू पावर प्राइवेट लिमिटेड, गुरुग्राम / GM (State Lead-Asset Management), Renew Power Private Limited, Gurugram (manjunatha.h@renew.com, padmanava.swain@renew.com)
47. मेसर्स सुजलॉन एनर्जी लिमिटेड, नई दिल्ली / M/s Suzlon Energy Limited, New Delhi

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# SOUTHERN REGIONAL POWER COMMITTEE

## BENGALURU

### Agenda for the 143<sup>rd</sup> Meeting of Protection Coordination Sub- Committee of SRPC scheduled on 08.06.2026 through VC.

#### 1. Introduction

The 143<sup>rd</sup> Meeting of the Protection Coordination Sub-Committee of SRPC is scheduled to be held on 8<sup>th</sup> June 2026 at 10:00 AM through VC.

#### 2. Confirmation of Minutes of last PCSC meeting

Minutes of 142<sup>nd</sup> Protection Coordination Sub-Committee meeting held on 06<sup>th</sup> May 2026 was issued vide letter No: SRPC/SE (P, C & SS)/142 PCSC/2026/ 2123-2169 dated 22<sup>nd</sup> May 2026.

*Minutes of the Meeting may be confirmed.*

#### 3. Grid Occurrences

Grid Occurrences which took place during the period April 2026 – May 2026, given at **Annexure-3a**, would be discussed in the meeting.

##### I. The Grid Disturbances (GDs) [Draft Analysis Reports furnished by SRLDC are at Annexure-3b]:

Name of the Utility who would present the GD in all its details	Sl.No. of the GD as per Annexure-3a
APGENCO	I.1
GIREL	I.2, I.16
Vena Energy	I.3, I.12, I.15
TNPGCL	I.4, I.5, I.9
JSW_RE	I.6, I.11,
SAEL	I.7, I.20
TANTRANSCO	I.8
UPCL / KPTCL	I.10
INDIGRID / RENEW POWER PVT LTD	I.13
TP SAURYA LIMITED	I.14
KSEB	I.17
OSTRO_KANNADA	I.18
TANTRANSCO / TNPGCL	I.19

##### II. The Grid Incidences (GIs) [Draft Analysis Reports furnished by SRLDC are at Annexure-3b]:

Name of the Utility who would present the GI in all its details	Sl.No. of the GI as per Annexure-3a
APTRANSCO	II.1, II.2
TGTRANSCO	II.3

### III. Single/ Multiple Element tripping:

Name of the Utility who would present the GI in all its details	Sl.No. of the Single /Multiple tripping as per Annexure-3a
APGENCO	III.1
JSW_THERMAL	III.2, III.14
TANTRANSCO	III.3, III.15, III.26, III.27, III.33
PGCIL SR-1	III.4, III.11, III.13, III.17, III.19, III.32
GREENKO	III.5
KPTCL	III.6, III.7, III.31
TNPGCL	III.8
TGTRANSCO	III.9, III.12
TGGENCO	III.10, III.30
APTRANSCO	III.16, III.28
NTPC_RSTPS	III.18
PGCIL SR-2	III.20, III.21, III.23
NTECL	III.22, III.25
APSPCL	III.24
KSEB	III.29
TGTRANSCO / PGCIL SR-1	III.34

- a) All the Utilities, as listed above, to give a presentation (for not more than 10 minutes per GD; for not more than 5 minutes per GI and Single/ Multiple Trippings) for the Events mentioned against them.
- b) The presentation shall cover all pertinent aspects such as Antecedent conditions, Bus-configuration, Reasons of GD/ GI occurrence, Relevant Diagrams showing location of the fault, Bus bar arrangement/configuration of feeders and other connected equipment with proper CB positions (OPEN/ CLOSE) at the time of occurrence of the fault, Type of protections operated, Substantiation of the protections operated by relevant DRs & ELs, Reasons for protection systems mal-operation/non-operation, Remedial measures taken/ proposed, etc.
- c) Constituents shall furnish the following details to SRPC by **01.06.2026** (in **WORD** format) in respect of all the above grid occurrences (GD, GI) to have fruitful discussions:
  - (i) Detailed analysis of the events
  - (ii) SLD or equivalent pictorial representation clearly showing:
    - a. Location of fault with distance
    - b. Fault details with type & relay indications
    - c. CT/PT/CVT rating details with location
    - d. Bus-bar arrangement/ Configuration of feeders
    - e. CB positions (OPEN/ CLOSE) at the time of fault
    - f. Isolator & Earth-switch positions (OPEN/CLOSE)
    - g. Voltage, frequency & power flows with direction at the time of fault
  - (iii) Output of Event logger & Disturbance recorder
  - (iv) Remedial Action(s) taken
  - (v) Relay setting details

**IV. W.r.t. Failure or Non-operation of A/R events included at Item No. IV of Annexure-3a, PLCC mal-operation events included at Item No. V of Annexure-3a and DR Time Synchronization Issues related Events included at Item No. VI of Annexure-3a, the concerned Utilities, as listed below, shall furnish the reasons for the same, along with remedial action taken, to SRPC latest by **01.06.2026** so that the same may be closed. Else, the same shall be presented by respective Utilities in the meeting:**

**A/R related Events:**

Name of the Utility who would present the A/R Event in all its details, if not furnished beforehand	Sl.No. as per Annexure-3a
KPTCL	IV.1, IV.7, IV.16, IV.17, IV.18, IV.20
TGGENCO	IV.2, IV.9
KPTCL / APTRANSCO	IV.3
APGENCO / TGTRANSCO	IV.4
KSEB	IV.5
TANTRANSCO	IV.6, IV.8, IV.10, IV.11, IV.13
APTRANSCO	IV.12, IV.22
PGCIL SR-2 / TANTRANSCO	IV.14
PGCIL SR-1	IV.15
TGTRANSCO	IV.19, IV.21

**PLCC related Events:**

Name of the Utility who would present the A/R Event in all its details, if not furnished beforehand	SN as per Annexure-3a
KPTCL	V.1
APGENCO	V.2

**DR Time Synchronization Issues related Events:**

Name of the Utility who would present the DR Time synchronization Event in all its details, if not furnished beforehand	Sl.No. as per Annexure-3a
APGENCO	VI.1, VI.15, VI.27
TANTRANSCO	VI.2, VI.17, VI.21, VI.22, VI.23, VI.36
TGGENCO	VI.3, VI.8, VI.12, VI.16
KPTCL	VI.4, VI.7, VI.11, VI.26, VI.29, VI.31, VI.34, VI.35
PGCIL SR-1	VI.5
APTRANSCO	VI.6, VI.10, VI.13, VI.14, VI.19, VI.37
KSEB	VI.9
TNPGCL	VI.18, VI.20, VI.24, VI.25
NPCIL-Kaiga	VI.28, VI.30, VI.32
NTPC RSTPS	VI.33

- V. *SRLDC to furnish the PMU plots, for the above Grid Occurrences (GDs, GIs, Single/Multiple Element Trippings, A/R, PLCC Events) with delayed fault clearance, to SRPC Secretariat by **01.06.2026**.*

#### 4. Status of Implementation of Pending Recommendations of PCSC

- a) The status of implementation of PCSC recommendations (**up to 142<sup>nd</sup> PCSC meeting**), have been updated in P-REC Module in PMS suite. List of pending recommendations is at **Annexure-4a**.
- b) The latest status on the same may please be sent by **01.06.2026**, to place the same before the sub-committee.
- c) PCSC had earlier decided to review the status of implementation of the recommendations on the Grid occurrences that were finalized in the previous three PCSC meeting. Hence, the recommendations finalized in the **140<sup>th</sup> to 142<sup>nd</sup>** PCSC meeting would be deliberated in the meeting. Details are at **Annexure -4b**.

**+** *Entities to update/furnish the status/action plan on the PCSC recommendations i.r.o Grid Occurrences analysed in the 140<sup>th</sup> to 142<sup>nd</sup> PCSC Meetings, through PMS portal.*

**+** *Status of the recommendations that were not complied/updated in the PMS portal would be deliberated in the meeting.*

#### 5. Outage Planning of Protection systems/relays

1. In the 114<sup>th</sup> PCSC Meeting held on 05.01.2024, the following were noted: The Regulation 32(2)(d) of CERC (Indian Electricity Grid Code) Regulations 2023, regarding protection systems related outages, stipulates as below:

*Quote*

*“Protection relay related outages, auto reclosure outages and SPS testing outages shall be planned on a monthly basis with the prior permission of the concerned RPC, which shall consult the concerned RLDC & NLDC”*

*Unquote*

2. To comply with the above, it was decided that all entities shall furnish the planned/ annual relay & protection system outage proposals in advance to the forum for approval of the same.
3. The entities are requested to furnish the details in the following format for the scheduled/planned protection systems related outages during the period from 10.06.2026 to 09.07.2026 for approval of PCSC:

Sl. No	Name of Requesting Agency	Element Name	Voltage level	Relay details	Owner	Reason for the Outage	Outage proposed from	Outage proposed to	Remarks

4. TANTRANSKO, vide mail dated 13.05.2026, informed that at Shenbagaraman Pudhur 230 kV SS, 230kV BBP relay will be kept out of service from 07-05-2026 to 31-05-2026, due to Y phase hardware issue.

**All entities shall plan the protection system related outages on monthly basis in advance and furnish the same for approval of PCSC.**

## 6. Proposals of Protection Relay Settings

- a) As per the Protection Protocol of Southern Region prepared in compliance with the IEGC Regulations 2023, for voltage levels 400kV & above and interstate lines, entities shall submit the protection settings in advance to SRPC/SRLDC for every new element to be commissioned. The Protection Co-ordination Sub-Committee (PCSC) of SRPC shall review the settings to ensure that they are properly coordinated with adjacent system and comply with the existing guidelines. Also any change in the existing protection settings of the elements, for voltage levels 400kV and above & interstate lines, shall be carried out only after prior approval from the SRPC.
- b) As decided in the 112<sup>th</sup> PCSC Meeting held on 06.11.2023, a Protection Setting Sub-Group (PSSG) was constituted with the members from APTRANSKO, KPTCL, KSEBL, TANTRANSKO, TGTRANSKO, PGCIL SR-I & SR-II, NTPC, SRLDC & SRPC Secretariat. PSSG shall analyse/review the proposed protection settings for new power system elements & revision of settings for existing elements proposed by the entities and shall suggest/recommend the finalized settings to the respective entity. The recommended settings shall be put up to PCSC, in monthly PCSC meetings, for ratification.
- c) Following proposals have been received by the PSSG. Proposed relay settings have been circulated among PSSG members through e-mail. The same were reviewed/assessed by PSSG and recommended the protection settings with following observations/suggestions:

S No.	Proposal	Proposed Entity	PSSG Meeting / Group deliberation	Observations/Views Received
1	SRPC approval for commissioning of New bays at Kudgi & ICT-3 at Madurai SS	PGCIL SR-2	23.04.2026	<p><i>PSSG in the meeting held on 23.04.2026 analysed the proposed settings furnished by PGCIL SR-II and concluded that the settings may be implemented in compliance with the SR Protection Protocol with following recommendations:</i></p> <p><i>Observations on 765kV KUDGI-KOPPAL Line:</i></p> <p><b>1. 765kV Kudgi end PGCIL end</b></p> <p><i>PSSG recommended the following:</i></p>

				<ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC OVR grading guidelines.</li> <li>2. Until the remote end line is commissioned, keep all zone time settings to zero.</li> </ol> <p><i>PSSG recommended to ensure the coordination of distance as well as backup overcurrent &amp; earth fault protection of all the elements connected at 765kV Kudgi SS</i></p>
2	Request for approval for the relay settings of 220kV Line Bay - 300MW solar Project at Pavagada	KSPDCL	23.04.2026	<p><i>PSSG in the meeting held on 23.04.2026 analysed the proposed settings furnished by M/s JSW -RE and concluded that the settings may be implemented in compliance with the SR Protection Protocol with following recommendations:</i></p> <p><i>PSSG analysed the following settings:</i></p> <p><u><i>220kV line from JSW Solar to PAVAGADA PGCIL SS</i></u></p> <ol style="list-style-type: none"> <li>1. 220kV JSW end</li> </ol> <p><i>PSSG had recommended the following:</i></p> <ol style="list-style-type: none"> <li>1. Enable Zone-1 tripping in case of communication failure in the line differential protection scheme.</li> <li>2. Ensure that all zone setting calculations are carried out in accordance with remote end utility, i.e., PGCIL philosophy.</li> <li>3. Enable SOTF with a time delay after pole dead detection (typically 110 s), ensuring its operation is limited within the Zone-2 impedance reach.</li> <li>4. Enable auto-reclosure with a dead time of 1 second and a reclaim time of 25 seconds.</li> <li>5. Enable load encroachment with appropriate load angle settings as per RK Committee Guidelines.</li> <li>6. Configure PSB such that Zone-1 is allowed to trip, while Zone-2 and</li> </ol>

				<p>higher zones remain unblocked with a time delay of 2 seconds.</p> <ol style="list-style-type: none"> <li>7. Enable DEF with suitable TMS and plug setting values as per the Fault level at the station.</li> <li>8. Disable overvoltage protection for 220kV Transmission lines.</li> <li>9. Enable broken conductor detection for alarm purposes only and trip to be disabled.</li> </ol> <p><b>2. 220kV PGCIL end:</b></p> <p><i>PSSG had recommended the following:</i></p> <ol style="list-style-type: none"> <li>1. Enable Zone-1 tripping under communication failure conditions in the line differential protection scheme.</li> <li>2. Ensure that all zone setting calculations are carried out in accordance with remote end utility, i.e., PGCIL philosophy.</li> <li>3. Enable SOTF with a time delay after pole-dead detection (typically 110 s), restricting its operation within the Zone-2 impedance reach.</li> <li>4. Enable auto-reclosure with a dead time of 1 second and a reclaim time of 25 seconds.</li> <li>5. Implement load encroachment with appropriate load angle settings as per RK Committee guidelines.</li> <li>6. Configure PSB such that Zone-1 is permitted to trip, while Zone-2 and higher zones remain unblocked with a time delay of 2 seconds.</li> <li>7. Enable DEF with suitable TMS and plug setting values as per the Fault level at the station.</li> <li>8. Disable overvoltage protection for 220kV Transmission lines.</li> <li>9. Enable broken conductor detection for alarm purposes only and trip to be disabled</li> </ol> <p><i>PSSG recommended to ensure the coordination of distance as well as backup overcurrent &amp; earth fault protection of all the elements connected</i></p>
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				<i>at 220kV JSW-Solar &amp; 220kV PAVAGADA PGCIL SS</i>
3	Approval of Protection settings of 55MVA, 400KV FGD Station Transformer of Yadadri TPS- TGGENCO- Requested	TGGENCO	23.04.2026	<p><b><i>PSSG in the meeting held on 23.04.2026 analysed the proposed settings furnished by TGGENCO and concluded that the settings may be implemented in compliance with the SR Protection Protocol with following recommendations:</i></b></p> <p><b><i>400kV FGD Station Transformer of Yadadri TPS</i></b></p> <p><b>1. 55MVA 400/11.5 kV TRANSFORMER</b></p> <p><b><i>PSSG recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Review the transformer high-set settings in consultation with OEM, as the set Values are less than the through fault current. Proper Relay Coordination studies to be performed.</li> <li>2. Proper Coordination for Stage-2 non-directional overcurrent settings to be done considering the downstream elements fault clearing time.</li> <li>3. Set the high-set stage-2 time delay for Differential protection to 50 ms.</li> </ol> <p><b><i>PSSG recommended to ensure the coordination of distance as well as backup overcurrent &amp; earth fault protection of all the elements connected at 400kV Yadadri TPS SS.</i></b></p>
4	Submission of Protection Settings for Hybrid PSS-1 (400/33 kV) – 1710 MW Hybrid Power Project for Connectivity at ISTS 400 kV Ananthapuram Pooling Station	Renew	15.05.2026	<p><b><i>PSSG in the meeting held on 15.05.2026 analysed the proposed settings furnished by M/s Renew and concluded that the settings may be implemented in compliance with the SR Protection Protocol with following recommendations:</i></b></p> <p><b><i>Renew 400kV GOOTY Wind PSS - 400kV SOLAR PSS</i></b></p>

				<p><b>1. 400kV GOOTY Wind PSS End</b></p> <p><i>PSSG recommended the following:</i></p> <ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC OVR grading guidelines</li> <li>2. Load encroachment protection shall be enabled with appropriate load angle settings, and the load impedance shall be calculated as per the RK Committee recommendations.</li> <li>3. Mutual compensation shall be disabled for single circuit line.</li> <li>4. Configure PSB such that Zone-1 is allowed to trip, while Zone-2 and higher zones remain unblocked with a time delay of 2 seconds.</li> </ol> <p><i>PSSG had suggested:</i></p> <ol style="list-style-type: none"> <li>1. Zone -4 time delay shall be made same as Zone-2 time delay.</li> </ol> <p><b>2. 250 MVA 400kV/33kV GOOTY Wind PSS End</b></p> <p><i>PSSG recommended the following:</i></p> <ol style="list-style-type: none"> <li>1. A margin of 20–30% in voltage shall be considered for stabilizing resistance calculations of REF protection.</li> <li>2. The high-set Earth fault protection shall be enabled with a time delay of 50 ms, and it shall be configured as non-directional.</li> </ol> <p><b>3. 400kV BUSBAR GOOTY Wind PSS End</b></p> <p><i>PSSG recommended the following:</i></p> <ol style="list-style-type: none"> <li>1. Busbar differential Slope-1 setting shall be configured in accordance with the OEM recommendations.</li> </ol>
5	PSS request for approval for relay	KPTCL	15.05.2026	<i>PSSG in the meeting held on 15.05.2026 analysed the</i>

	settings for 220kV Koar-Kolar PGCIL line			<p><i>proposed settings furnished by KPTCL and concluded that the settings may be implemented in compliance with the SR Protection Protocol, with following recommendations:</i></p> <p><b>220kV Kolar –Kolar PGCIL Line</b></p> <p><b>1. 220kV Kolar KPTCL END</b></p> <p><b>PSSG had recommended the following:</b></p> <ol style="list-style-type: none"> <li>1. The DEF protection settings shall be recalculated based on the actual fault current contribution from 220kV Kolar end for a remote end Bus fault.</li> <li>2. Mutual compensation shall be enabled for double circuit lines.</li> <li>3. As per CEA Technical Standards for construction of Electrical Plants &amp; Lines, for short line (less than 10 km) or cable or combination of overhead line and cable, line differential protection shall be used with built-in backup distance protection for both Main –I &amp; II</li> </ol>
6	SPV ReNew Vyoman Power Private Limited, the protection settings of Wind PSS-2	Renew	15.05.2026	<p><b>PSSG in the meeting held on 15.05.2026 has analysed the proposed settings furnished by M/s Renew and concluded that the settings may be implemented in compliance with the SR Protection Protocol, with following recommendations:</b></p> <p><b>Renew 400kV GOOTY Wind PSS - 400kV SOLAR PSS</b></p> <p><b>1. 400kV GOOTY Wind PSS End</b></p> <p><b>PSSG had recommended the following:</b></p> <ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC OVR grading guidelines</li> <li>2. Load encroachment protection shall be enabled with appropriate load angle settings, and the load</li> </ol>

				<p>impedance shall be calculated as per the RK Committee recommendations.</p> <ol style="list-style-type: none"> <li>Mutual compensation shall be disabled for single circuit line.</li> <li>Configure PSB such that Zone-1 is allowed to trip, while Zone-2 and higher zones remain unblocked with a time delay of 2 seconds.</li> </ol> <p><b>PSSG had suggested:</b></p> <ol style="list-style-type: none"> <li>Zone -4-time delay shall be made same as Zone-2-time delay.</li> </ol> <p><b>2. 250 MVA 400kV/33kV GOOTY Wind PSS End</b></p> <p><b>PSSG had recommended the following:</b></p> <ol style="list-style-type: none"> <li>A margin of 20–30% in voltage shall be considered for stabilizing resistance calculations of REF protection.</li> <li>The high-set Earth fault protection shall be enabled with a time delay of 50 ms, and it shall be configured as non-directional.</li> </ol> <p><b>3. 400kV BUSBAR GOOTY Wind PSS End</b></p> <p><b>PSSG had recommended the following:</b></p> <ol style="list-style-type: none"> <li>Busbar differential Slope-1 setting shall be configured in accordance with the OEM recommendations.</li> </ol>
7	Request for approval for the relay settings of 220kV Line Bay - 350MW Wind Project at Alur	AYANA POWER	15.05.2026	<p><b>PSSG in the meeting held on 15.05.2026 has analysed the proposed settings furnished by Ayana Power and concluded that the settings may be implemented in compliance with the SR Protection Protocol, with following recommendations:</b></p> <p><b>AYANA Power 220kV ALUR –PGCIL THIMMAPURAM Line</b></p> <p><b>1. 220kV ALUR END</b></p>

				<p><b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Ensure that all zone setting calculations are carried out in accordance with remote end utility, i.e., PGCIL philosophy.</li> <li>2. SOTF shall be enabled with Impedance function and breaker close command with Zone reach limited to Zone-2.</li> <li>3. Time of SOTF function active status after breaker closed in impedance mode may be set to 0.2s. It means, till 0.2s, SOTF function will be active after breaker closed.</li> <li>4. Overvoltage protection shall be kept disabled for 220 kV transmission lines</li> <li>5. Configure PSB such that Zone-1 is allowed to trip, while Zone-2 and higher zones remain unblocked with a time delay of 2 seconds.</li> </ol> <p><b>1. 125MVA 220Kv/33kV ALUR END</b></p> <p><b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Differential and REF relay shall be enabled in two different relays as per CEA Technical Standards</li> <li>2. Overfluxing settings shall be set in accordance with the Manufacturer Overflux curve.</li> <li>3. The actual operating time for DEF shall be coordinated with proper system studies.</li> <li>4. The high-set time delay for earth fault and over current shall be set to 50 ms.</li> </ol> <p><b>3. 220kV Busbar ALUR END</b></p> <p><b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. For LBB protection, the pickup setting shall be kept at 0.2 Ib.</li> </ol>
8	Submission of protection settings of 280 MW Pinnapuram solar plant and	GREENKO	15.05.2026	<p><b><i>PSSG in the meeting held on 15.05.2026 has analysed the proposed settings furnished by M/s Greenko and concluded that the settings may be implemented in</i></b></p>

	associated transmission lines		<p><i>compliance with the SR Protection Protocol, with following recommendations:</i></p> <p><b><i>CPSS – Chennakapalli Line SS</i></b></p> <p><b>1. 400kV CPSS End</b> <b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC approved OVR grading.</li> <li>2. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds</li> </ol> <p><b>2. 400kV Chennakapalli End</b></p> <p><b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC approved OVR grading.</li> <li>2. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds.</li> </ol> <p><b><u>400kV Chennakapalli</u></b> <b><u>- Pinnapuram Line SS</u></b></p> <p><b>1. 400kV Chennakapalli End</b> <b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC approved OVR grading</li> <li>2. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds</li> </ol> <p><b>2. 400kV Pinnapuram End</b> <b><i>PSSG had recommended the following:</i></b></p> <ol style="list-style-type: none"> <li>1. Adopt OVR protection settings in accordance with SRPC approved OVR grading</li> <li>2. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds.</li> </ol>
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				<p><b>3. 160MVA 400/33kV Chennakapalli End</b>  <i>PSSG had concluded that the settings may be implemented in compliance with the SR Protection Protocol.</i></p> <p><b>4. 400kV BUSBAR Chennakapalli End</b>  <i>PSSG had concluded that the settings may be implemented in compliance with the SR Protection Protocol.</i></p>
9	Trivandrum - Pothencode - New Kattakada Rearrangement	KSEBL	15.05.2026	<p><i>PSSG in the meeting held on 15.05.2026 has analysed the proposed settings furnished by KSEBL and concluded that the settings may be implemented in compliance with the SR Protection Protocol for 220kV Trivandrum PG -New Kattakada Line.</i></p> <p><i>PSSG recommended to ensure the coordination of distance as well as backup overcurrent &amp; earth fault protection of all the elements connected at 220kV Trivandrum, Pothencode &amp; New Kattakada SS.</i></p>

Note: For updation of PDMS, the following PRDC personnel may be contacted:

- Mr Varun S, varun.s@prdcinfotech.com
- Mr. Bharath B, bharath.b@prdcinfotech.com

- d) It was noted in the earlier meetings that several entities were not submitting the Relay settings as per the timeline mentioned in the Protection Protocol. It is reiterated that as per the SR Protection Protocol, the proposed settings shall be submitted by the entity two months in advance.
- e) In 118<sup>th</sup> PCSC Meeting (08.05.2024), it was noted that validity of provisional approval is one month only. Hence the entities whose settings were provisionally approved shall get the final approval of those settings within a months' time, else it would be treated as unapproved settings. Responsibility lies with the entity, if any grid occurrence happens due to unapproved settings. Also, the provisional approval of the settings cannot be given henceforth by PSSG, if complete & relevant files/settings are not submitted for the scrutiny and deliberations of PSSG.
- f) SRLDC is requested to ensure the protection settings recommended by PSSG are implemented by the entities during first time energization of the respective elements.

- g) All entities are requested to furnish the relay setting parameters in excel format as per the set values in relay. PSSG will scrutinize the parameters given in excel files only and it is the responsibility of the entity to kindly ensure the parameter to be set as per the relay data given in excel file and to consider the recommendations/ suggestions specified.
- h) During first time energization (FTE) of the respective elements, SRLDC needs to verify the settings implemented by the entities and ensure that the proposed settings as per the excel sheets/computations and the recommendations of PSSG are implemented by the entities.

✚ **PCSC may review & approve the above proposed protection settings and the respective PSSG recommendations.**

✚ **SRLDC to ensure the implementation of proposed protection settings along with the PSSG recommendations, by the entity.**

## 7. Internal Protection Audit of Sub stations

The Clause (5) of Regulation 15 of IEGC Regulations, 2023 stipulates the following:

Quote

*(1) All users shall conduct internal audit of their protection systems annually, and any shortcomings identified shall be rectified and informed to their respective RPC. The audit report along with action plan for rectification of deficiencies detected, if any, shall be shared with respective RPC for users connected at 220 kV and above (132 kV and above in NER).*

*(2) All users shall also conduct third party protection audit of each sub-station at 220 kV and above (132 kV and above in NER) once in five years or earlier as advised by the respective RPC.*

.....

*(5) Annual audit plan for the next financial year shall be submitted by the users to their respective RPC by 31st October. The users shall adhere to the annual audit plan and report compliance of the same to their respective RPC."*

### 7.1 Internal Protection Audit Reports 2025-26

In the 141<sup>st</sup> PCSC meeting SRPC requested all utilities to submit the pending internal audit reports by 15.04.2026.

The Summary of Reports Received for Internal audit for FY 2025-26 is as below:

### Internal Audit reports of STUs & PGCIL

Name of Utility	Total No. of Substations of 220kV & above	No. of Substations Internal Audit Reports Submitted
APTRANSCO	126	126
KPTCL	150	150
KSEBL	44*	41
PED	4	4
PGCIL SR I	21	21
PGCIL SR II	37	37
TANTRANSCO	152	152
TGTRANSCO	135*	111

\*TGTRANSCO informed that internal audits of LIS stations were not conducted in 2025-26.

\* KSEBL informed that 3 stations, yet to conduct internal audit, belongs to embedded entities.

### Internal Audit reports of Gencos

Name of Utility	Total No. of Substations of 220kV & above	No. of Substations Internal Audit Reports Submitted
APGENCO	9	9
BHAVINI	1	0
KPCL	11	11
NLCIL	5	4
NPICL	3	3
NTECL	1	1
NTPC	5	5
NTPL	1	1
STPP-SCCL	1	1
TGGENCO	11	11
TNGECL	5	0
TNPGCL	10	0

**Note:** The list of stations whose internal audit report is yet to be furnished is at **Annexure-7.1**

### Internal Audit reports of Private Gencos, STU & RE-ISTS

Name of Utility	Total No. of Substations of 220kV & above	No. of Substations Internal Audit Reports Submitted
ADANI Power Limited	3	1
Adani Transmission Limited	2	0
APSPCL	7	0
Arcelor Mittal Green Energy Pvt Ltd (AMGEPL)	2	0
AYANA Renewable	2	1
GREENINFRA	1	1
GREENKO	4	0
GRT Jewellers (India) Pvt Ltd	1	0
HNPCL	1	1
Indigrid	1	0
IL&FS	1	0
Jindal Power Limited (Simhapuri Unit)	1	0
JSW-RE	5	5
JSWEL	2	2
KLEIO SOLAR	2	0
KSPDCL	8	8
Meenakshi Energy Limited	1	0
MYTRAH	1	0
NTPC Green	1	0
RENEW	4	0
SAEL Solar	2	0
SEIL-P1	1	0
SEIL-P2	1	0
Sembcorp Green Infra Limited	1	0
Serentica Renewables India Pvt Ltd	4	0
SPRNG Renewable Energy	1	0
TATA POWER (TP Saurya / TP Vardhaman)	2	0
Vena Energy	1	1
Vivid Solaire Energy Pvt Ltd	1	1
Zenataris Renewable Energy	1	0

## 7.2 Internal Audit Plan 2026-27

1. In line with the Clause (5) of Regulation 15 of IEGC Regulations, all entities were requested to submit the annual audit plan for the substations 220 kV and above voltage level for FY 2026-27 to SRPC by 31.10.2025.

2. The following Entities are yet to submit the Internal Audit Plans

Indigridd	NLC TS-1 EXP	WKTL	MEL
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3. All RE ISTS entities are requested to immediately update Internal Audit Plan for FY 2026-27 in the below Zoho form link

[https://forms.zohopublic.in/srpcprotectiondatagm1/form/InternalAuditPlanofREISTS/formperma/B7Vp\\_u0NmGM5CHclKNet7zhoNKkoZWSWlxtvATkR2Jg](https://forms.zohopublic.in/srpcprotectiondatagm1/form/InternalAuditPlanofREISTS/formperma/B7Vp_u0NmGM5CHclKNet7zhoNKkoZWSWlxtvATkR2Jg)

The form can be accessed by the below QR code also for convenience



4. The Following RE ISTS entities are yet to submit the Internal Audit Plan for 2026-27:

S. No	RE Entity	Total Stations (220kV & Above)	Internal Plan Audit Furnishing status
1	KSPDCL	8	Yes ✓
2	JSW - RE	5	Yes ✓
3	GREENKO	4	Yes ✓
4	Serentica Renewables India Pvt Ltd.	4	No ✗
5	RENEW	4	No ✗
6	APSPCL	5	Yes ✓
7	Arcelor Mittal Green Energy Pvt Ltd (AMGEPL)	2	Yes ✓
8	KLEIO SOLAR	2	Yes ✓
9	SAEL Solar	2	Yes ✓
11	AYANA Renewable	2	No ✗
12	Vena Energy	1	Yes ✓
13	Zenataris Renewable Energy	1	No ✗

14	Sembcorp Green Infra Limited	1	Yes ✓
15	Vivid Solaire Energy Pvt Ltd	1	Yes ✓
16	GRT Jewellers (India) Pvt Ltd	1	Yes ✓
17	GREENINFRA	1	No X
18	SPRNG Renewable Energy	1	Yes ✓
19	TATA POWER (TP Saurya / TP Vardhaman)	2	Yes ✓
20	MYTRAH	1	Yes ✓
21	NTPC Green	1	Yes ✓
22	APSPCL	7	Yes ✓

- ⚡ **All RE-ISTS entities are requested to furnish the Internal Audit Plans for 2026-27 Immediately**
- ⚡ **SRLDC is also requested to kindly coordinate with all RE-ISTS connected at 220kV & above voltage level) in furnishing the audit plans.**

### 7.3 Internal Audit Report 2026-27

The Summary of Reports Received for Internal audit for FY 2026-27 is as below:

#### Internal Audit reports of STUs & PGCIL

Name of Utility	Total No. of Substations of 220kV & above	No. of Substations Internal Audit is proposed as per Plan for April-2026	No. of Substations Internal Audit Report Submitted for April-2026	No. of Substations Internal Audit is proposed as per Plan for May-2026	No. of Substations Internal Audit Report Submitted for May-2026
APTRANSCO	126	12	0	15	0
KPTCL	171	14	0	15	0
KSEBL	42	4	0	4	0
PED	0	0	0	0	0
PGCIL SR I	21	2	0	2	0
PGCIL SR II	37	3	3	2	0
TANTRANSCO	152	18	12	9	2
TGTRANSCO	135	6	0	9	0

### Internal Audit reports of Gencos

Name of Utility	Total No. of Substations of 220kV & above	No. of Substations Internal Audit is proposed as per Plan for April-2026	No. of Substations Internal Audit Report Submitted for April-2026	No. of Substations Internal Audit is proposed as per Plan for May-2026	No. of Substations Internal Audit Report Submitted for May-2026
APGENCO	9	1	0	0	0
APSPCL	7	0	0	0	0
BHAVINI	1	0	0	0	0
KPCL	11	0	0	0	0
KSPDCL	8	1	1	0	0
NLCIL	5	0	0	0	0
NPCIL	3	0	0	0	0
NTECL	1	0	0	0	0
NTPC	6	0	0	0	0
NTPL	1	0	0	0	0
STPP-SCCL	1	1	0	0	0
TGGENCO	12	0	0	0	0
TNGECL	5	0	0	0	0
TNPGCL	10	1	1	0	0

### Internal Audit reports of Private Gencos, STU & RE-ISTS

Name of Utility	Total No. of Substations of 220kV & above	No. of Substations Internal Audit is proposed as per Plan for April-2026	No. of Substations Internal Audit Report Submitted for April-2026	No. of Substations Internal Audit is proposed as per Plan for May-2026	No. of Substations Internal Audit Report Submitted for May-2026
ADANI Power Limited	3	0	0	0	0
Adani Transmission Limited	2	0	0	0	0
APSPCL	5	0	0	0	0
Arcelor Mittal Green Energy Pvt Ltd (AMGEPL)	2	0	0	0	0

AYANA Renewable	2	0	0	0	0
GREENINFRA	1	0	0	0	0
GREENKO	4	0	0	0	0
GRT Jewellers (India) Pvt Ltd.	1	0	0	0	0
HNPCL	1	0	0	0	0
Indigrid	1	0	0	0	0
Jindal Power Limited (Simhapuri Unit)	1	0	0	0	0
JSW	5	0	0	0	0
JSWEL	2	0	0	0	0
KLEIO Solar	2	0	0	0	0
Meenakshi Energy Limited	1	0	0	0	0
MYTRAH	1	0	0	0	0
NTPC Green	1	0	0	0	0
RENEW	4	0	0	0	0
SAEL Solar	2	0	0	0	0
SEIL-P1	1	0	0	0	0
SEIL-P2	1	0	0	0	0
Sembcorp Green Infra Limited	1	0	0	0	0
Serentica Renewables India Pvt Ltd.	4	0	0	0	0
SPRNG Renewable Energy	1	0	0	0	0
TATA Power	2	0	0	0	0
Vena Energy	1	0	0	0	0
Vivid Solaire Energy Pvt Ltd.	1	0	0	0	0
Zenataris Renewable Energy	1	0	0	0	0

## 8. Third-Party Protection Audit

The Clause (5) of Regulation 15 of IEGC Regulations, 2023 specifies the following:  
Quote

*(2) All users shall also conduct third party protection audit of each sub-station at 220 kV and above (132 kV and above in NER) once in five years or earlier as advised by the respective RPC.*

.....

(5) Annual audit plan for the next financial year shall be submitted by the users to their respective RPC by 31<sup>st</sup> October. The users shall adhere to the annual audit plan and report compliance of the same to their respective RPC."

## 8.1 Third Party Protection Audit report 2025-26

1. In FY 2025–26 Third-Party Protection Audit (TPPA) of 125 substations/ switchyards, had been completed from SCTPPA entities.
2. In the 141<sup>st</sup> PCSC meeting NTPC informed the following:
  - **NTECL Vallur:** Third-party audit was carried out by CPRI during 22.09.2025 to 27.09.2025. Report would be furnished by April-26.
  - **NTPC Simhadri:** Third- party audit was conducted from 11<sup>th</sup> – 14<sup>th</sup> November 2025 and report was furnished vide mail dated 12.05.2026.
3. In 140<sup>th</sup> PCSC meeting M/s **Moxie Power** informed that the third-party audit was completed on 03<sup>rd</sup> January 2026 and would furnish the report soon.
4. PGCIL SR-II stated that Third party protection audit of Five stations were completed in 2025-26 and would share the reports by May-26. Subsequently all the 5 reports are received from PGCIL SR-II.
5. RE entities connected to ISTS to furnish the Third-party audit plans for 2025-26.

✚ **Entities (connected at 220 kV & above) have to furnish the internal and Third-party audit plans to SRPC at the earliest.**

✚ **Moxie Power to furnish the report.**

✚ **SRLDC also to take up with RE ISTS entities regarding furnishing of Third party audit plans.**

## 8.2 Third Party Protection Audit Plan for FY 2026-27

1. In line with the Clause (5) of Regulation 15 of IEGC Regulations, all entities were requested to submit the annual audit plan for the substations 220 kV and above voltage level for FY 2026-27 to SRPC by **31.10.2025**.
2. SRPC, vide letter dated 20.03.2026 (**Annexure-9a**), issued the schedule to carry out Third Party Protection Audit through SRPC Coordination for FY 2026-27 (**Annexure-9b**). **121** number of Substations in the Region for the period April 2026 - March 2027 as mentioned in the Annexure-9b are to be audited under SCTPPA by the Audit teams constituted by SRPC.
3. **The scheduled audits have to be taken up strictly as per the SCTPPA schedule to enable proper monitoring. In the event of extreme exigencies, the audit may be rescheduled as soon as possible, in consultation with the respective auditors and intimate to SRPC**
4. The Google sheet link to update the **Third Party Audit plan** for the year 2026-27 was shared earlier, is given again below:

[https://docs.google.com/spreadsheets/d/1tgdo8A8FcXew2-ZRxJpeupzYW6N\\_v4ppAgmsqmtk2JY/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1tgdo8A8FcXew2-ZRxJpeupzYW6N_v4ppAgmsqmtk2JY/edit?usp=sharing)

5. All RE –ISTS entities to submit the Third party Audit plans through the above Google sheet link.

**All Nodal officers and the audit team members are requested to take measures on immediate basis for initiating the process for the audits scheduled for the period of April 2026 to March 2027.**

**All team members of the respective audit team may coordinate with the respective nodal officers of the station and other team members for carrying out the audit.**

## 9. Submission of Internal & Third Party Protection Audit Reports for FY 2026-27

All utilities/entities are requested to submit the Internal Protection Audit Reports and Third-Party Protection Audit Reports for FY 2026–27 onwards through the designated **Zoho Forms**.

The respective links for submission are provided below:

- **Internal Protection Audit Reports:**  
<https://forms.zohopublic.in/srpcprotectiondatagm1/form/InternalProtectionAuditReport1/formperma/geuvqSY48aN9o1nRTZzGnt0MIIDTO6LkvecMXIIRQh0>
- **Third-Party Protection Audit Reports:**  
<https://forms.zohopublic.in/srpcprotectiondatagm1/form/ThirdPartyProtectionAuditReport/formperma/cEiqTI1FRZQz9Kdwm7SpA2LHdxXxOm8tI4S2ucXF1CY>

**(Note:** In case the links do not open directly from the PDF, entities are requested to copy the URL and paste it into a web browser.)

Further, all entities shall ensure that Audit Reports are sent to **srpc.protectiondata@gmail.com**, immediately after successful submission of the respective forms. All entities are requested to adhere strictly to the above procedure for timely and effective data compilation.

## 10. Protection Performance Indices

1. As per the Protection Protocol of SR prepared in compliance with the IEGC Regulations 2023, Users/Entities shall submit the protection performance indices of previous month to SRPC and SRLDC on monthly basis for 220 kV and above by 15<sup>th</sup> of the subsequent month and the same shall be reviewed in the ensuing PCSC meeting of SRPC.
2. Protection performance Indices for the months of **April 2026** are pending from the following entities:

ADANI_ATL	GREENINFRA	KSPDCL	SCCL
AMGEPL	GRT	LKPPL	SEPC
APSPCL	GTL	MYTRAH	SEPL
Ayana Renewable Power Six Pvt Ltd	HIRIYUR_ZREPL	NLC	SERENTICA_RI1PL
BHAVINI	ILFS	RENEW POWER PVT LTD	Spring_Pugalur
INDIGRID	SAEL	TNGECL	TNPGCL
KLEIO_SOLAR	KPTCL	KSEB	

3. The consolidated details of protection performance indices received from the entities for the months of April 2026 are at **Annexure 10a**. The same would be reviewed in the meeting.
4. The non-compliance of IEGC Regulations/Protection Protocol of SR by the entities (who have not furnished the protection performance indices of March 2026) would be deliberated in the meeting.
5. In the 126<sup>th</sup> PCSC meeting, all STUs confirmed that the Protection Performance Indices (PIs) of their Embedded Entities/Independent Power Producers (IPPs) are included in their respective STU/TRANSCOs Monthly PPI reports.
6. In the 135<sup>th</sup> PCSC meeting SRLDC requested all entities to recheck the classification report before clicking the verify button and to contact SRLDC in case of any discrepancies or variations between the user and SRLDC data.
7. SRLDC to modify the Tripping Classification after Discussion in the previous PCSC meetings and furnish the updated Tripping Classification report.
8. In the 140<sup>th</sup> PCSC meeting SRPC requested all entities to ensure that successful Auto Reclosure (A/R) operations are also entered in the PPI portal.
9. As decided in the 139<sup>th</sup> PCSC meeting, one of the SR utilities would make a detailed presentation, in each meeting, on the PPI of its system, including analysis carried out and corrective actions taken.
10. In the 140<sup>th</sup> PCSC meeting SRPC further highlighted that several variations were observed in the tripping classifications furnished by the utilities and SRLDC and requested all entities and SRLDC to coordinate closely and rectify the classification errors, as the errors lead to inaccurate PPI indices.
11. As decided in the 141<sup>st</sup> meeting KPTCL was to present PPI analysis and corrective actions taken in the 142<sup>nd</sup> PCSC meeting. However, KPTCL requested to defer the presentation to 143<sup>rd</sup> PCSC meeting.

## 12. Decisions of the 119<sup>th</sup> PCSC Meeting:

The following actions were agreed upon:

**Submission of Protection Performance Indices:**

- SLDCs/TRANSCOs shall ensure submission of Protection Performance Indices for all State-embedded entities.
- SRLDC shall coordinate with ISTS-connected entities (including RE generators) to ensure submission of Protection Performance Indices.

**Verification of Submitted Data:**

- SRLDC & SLDC shall verify the Protection Performance Indices submitted by entities/users. Any discrepancies observed shall be reported to PCSC forum during meetings.

**13. Submission and Verification of Tripping Data:**

In line with the recommendations of the 119<sup>th</sup> PCSC meeting, SRPC requested SRLDC to verify the tripping of ISTS lines and the respective SLDCs to verify the tripping of intra-state lines. However, SRLDC stated that all ISTS line trippings are automatically logged in the SPOORTHI portal. SRLDC further informed that successful auto-reclosure (A/R) operations cannot be validated through the portal, as such operations are not captured in SPOORTHI.

SRPC highlighted that monitoring of successful A/R operations is essential for accurate calculation of PPI and therefore requested SRLDC to validate and provide the relevant data accordingly.

The summary of trippings, as furnished by various utilities, is provided below.

Utility	Total Trippings	Utility	Total Trippings
APGENCO	43	NTPC_SIMHADRI	1
APTRANSCO	230	PGCIL SR-1	50
GREENKO	1	PGCIL SR-2	43
HINDUJA	2	TANTRANSCO	342
JSW_RE	0	TGGENCO	19
JSW_THERMAL	7	TGTRANSCO	87
KPCL	16	Vena_GadagPS	1
NPCIL_KAIGA	3	ADANI_APL	0
NPCIL_KKNP	3	BETAMWIND	0
NPCIL_MAPS	2	MEPL	0
NTECL	1	NTPC_KUDGI	0
NTPC	1	NTPC_TESTPP	0
NTPC_RSTPS	0	NTPL	0
ORANGE	0	OSTRO_KANNADA	0
PONDICHERRY	0	PVG_IRCON_S	0

SEIL	0	TATA	0
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- ⊕ **SRLDC & SLDC shall verify the tripping details submitted by the entities against real-time SCADA data.**
- ⊕ **Any discrepancies observed during verification shall be reported to PCSC in subsequent meetings.**
- **All entities to furnish the protection performance indices for the month of April 2026.**
- **Non-compliance of the IEGC Regulations/Protection Protocol of SR by some entities to be deliberated. SRLDC to take up with ISTS connected entities (including RE) and ensure the submission of Protection Performance Indices. SLDC/TRANSCOs to ensure submission of the Protection Performance Indices of all State embedded entities.**
- **REMC/SRLDC to take up with ISTS connected entities (including RE) and ensure the submission of Protection Performance Indices.**
- **The protection performance indices received for the month of April 2026 to be reviewed.**

## 11. Status of Islanding Schemes Reviewed during 2023-24

### 1. Monitoring of Islanding Schemes by SLDCs/SRLDC

- (i) In accordance with Standard Operating procedure (SOP) issued by MoP/CEA, SRLDC and SLDCs (Nodal LDCs of the islanding Schemes) need to monitor the Island generation and load on real-time basis. SOP clauses are reproduced below:

#### “2. Monitoring of Vital Parameters

- i. *Since formation of Island can take place at any time, monitoring of the following vital parameters, which have a significant role in on successful Island formation, is of paramount interest:*

- a. *Anticipated/ actual Generation within the electrical boundary of the Island.*
- b. *Anticipated/ actual Load within the electrical boundary of the Island.*
- c. *Voltage, Frequency & Power Flows along the peripheral lines which are required to be tripped to form the Island.*

- ii. *Above parameters are to be monitored in real-time basis in the Control Room/Despatch Centre (i.e., Sub SLDCs/SLDC/RLDC/NLDC) of the area by creating a dedicated page specific to the Islanding Scheme in the SCADA display. To accomplish this, provision should also be made, if required, for installing adequate measuring instruments (like PMU) at suitable locations within the Island.”*

2. As per the earlier PCSC meeting deliberations, SRLDC to act as a Nodal agency for Neyveli & Kudankulam Islanding schemes, since the IS are covered in 2-3 states/UT and monitor the critical parameters including the Load & Generation of the island in real time. Following are the nodal LDCs of the Islanding Schemes of SR:

Islanding Scheme	Nodal LDC
------------------	-----------

Vijayawada & Vishakhapatnam IS	AP SLDC
Bengaluru IS	KAR SLDC
Chennai IS	TN SLDC
Hyderabad IS	TG SLDC
Neyveli IS	TNSLDC, KERSLDC, PUDSLDC, SRLDC
Kudankulam IS	TNSLDC, KERSLDC, SRLDC

3. SCADA monitoring displays are made available in the respective SLDCs & SRLDC. Nodal LDCs need to furnish the Island LGB data for four scenarios for previous month along with their observations & SCADA data on monthly basis by 25<sup>th</sup> of the month in the following format to SRPC:

Peak Load scenario in the Island during the previous month		Off- Peak Load scenario in the Island during the previous month		Maximum Generation scenario in the Island during the previous month		Monthly Average data scenario	
Generation in MW	Load in MW	Generation in MW	Load in MW	Generation in MW	Load in MW	Generation in MW	Load in MW

**Note:**

*Generation in MW: Generation data of all generators participating in the Island scheme only.*

*Net Load in MW: Total surviving load after deducting the AUF<sub>R</sub>+df/dt+ (Island feeders, if any) in the Island.*

4. SRLDC, vide mail dated 26.05.2026, furnished the Monthly Islanding data which is illustrated below. The Islanding Plots furnished by SRLDC is at **Annexure-12:**

Island	Peak Load Generation	Peak Load	Peak Load Time	Off Peak Generation	Off Peak Load	Off Peak Load Time	Maximum Generation	Load at Maximum Generation	Maximum Generation Time	Maximum SR RE time	RE Max Gen	RE Max Load	Average Generation	Average Load	G/L
Bangalore	3909	4588	23-04-2026 16.22	3898	2541	13-04-2026 3.13	4965	3636	02-04-2026 18.08	3845	3760	3940	3466	1.14	3909
Chennai	3339	3652	16-04-2026 21.34	1919	1779	23-04-2026 10.55	3365	3645	16-04-2026 21.37	2440	2557	2581	2784	0.93	3339
Hyderabad	5727	6110	17-04-2026 15.56	4820	3520	19-04-2026 17.48	6101	4506	22-04-2026 4.35	3140	5066	4768	4884	0.98	5727
Kudankulam	4611	7506	30-04-2026 16.18	4538	3089	01-04-2026 14.36	7106	5776	15-04-2026 22.48	4611	3281	5464	5231	1.04	4611
Neyveli	5443	4565	25-04-2026 17.07	4200	2705	06-04-2026 3.42	6334	3969	26-04-2026 23.01	3585	3593	4698	3761	1.25	5443
Vijayawada	1773	2603	30-04-2026 22.41	1137	1251	23-04-2026 16.12	2289	1827	05-04-2026 2.04	1510	2002	1818	1965	0.93	1773
Visakhapatnam	1880	3250	12-04-2026 16.08	2791	1285	28-04-2026 6.36	3547	1895	25-04-2026 23.25	1632	2562	2539	2296	1.11	1880

5. Substantial variations in the LGB, owing to flexing of generation by conventional generating stations participating in the Islanding Schemes and participating load quantum during high RE injection, particularly during high solar generation period, have been observed. To analyse the IS LGB under various scenarios to enable appropriate review and remedial action, SRLDC is requested to present snapshot of SCADA display of the Islanding page during **solar peak hour** of the previous day.
6. **Nodal LDCs were requested**
  - To furnish their observations regarding the LGB data.
  - To provide reasons for Low / High LGB observed.
  - Nodal LDCs should present the following for the Island for the month of **April 2026** during the PCSC meeting:
    - Load Duration Curve
    - Generation Duration Curve
    - G/L Duration Curves
7. **STU/TRANSCOs are requested to coordinate with SLDC and to present the data in the PCSC Meeting**
8. In the earlier meetings, it was emphasized that SLDCs and SRLDC are responsible to monitor new elements being added inside or across the island boundaries of the respective islands of their control area (Nodal LDC for the Islanding scheme), and if any element gets added across the boundary of the Island (Island boundary as per the reviewed island document issued by SRPC), UFR at islanding frequency shall be implemented by respective SLDC/TRANSCO/TSP on those elements with intimation to SRPC and SRLDC. In addition, SRLDC shall also monitor the transmission elements getting added across interstate boundaries affecting the existing islands and intimate the same to respective SLDCs for UFR implementation.
9. SRLDC, vide mail dated 26-05-2026, furnished the list of new elements added in the grid, as per the PSSE case for May 2026. **Entitles are requested to verify and confirm Island crossing feeders, if any, present in the list.**

From Bus	To Bus	From Name	To Name	ID	From Bus Area Name	To Bus Area Name
411078	411546	RENIGUNTA 132.00	THUKIVAKAM 132.00	P2	ANDRAPRADESH	ANDRAPRADESH
411143	411546	CHANDRAGIRI 132.00	THUKIVAKAM 132.00	P2	ANDRAPRADESH	ANDRAPRADESH
411179	411460	NAIDUPETA1 132.00	NAIDUPETA 21132.00	P2	ANDRAPRADESH	ANDRAPRADESH
422055	422167	MANDAMARRI 220.00	SOLAR_MNDRY 220.00	M1	TELANGANA	TELANGANA
432140	432390	KUDGI-PG 220.00	BILAGI 220 220.00	D1	KARNATAKA	KARNATAKA
432140	432390	KUDGI-PG 220.00	BILAGI 220 220.00	D2	KARNATAKA	KARNATAKA
432389	432390	SAVALAGI 220.00	BILAGI 220 220.00	D1	KARNATAKA	KARNATAKA

432389	432390	SAVALAGI 220.00	BILAGI 220 220.00	D2	KARNATAKA	KARNATAKA
444002	444051	ALAMATHY 400.00	GUINDY42 400.00	Q1	TAMILNADU	TAMILNADU
444002	444063	ALAMATHY 400.00	KORATTUR 400.00	Q1	TAMILNADU	TAMILNADU
444018	444051	S V CHATHRAM400.00	GUINDY42 400.00	Q1	TAMILNADU	TAMILNADU

10. In the 134<sup>th</sup> PCSC Meeting SRPC suggested that SRLDC may consider developing a portal for STUs to enter details of monthly additions of new grid elements, which would enable effective monitoring and uniform data availability.
11. Subsequently, in the 63<sup>rd</sup> & 64<sup>th</sup> COMSR meeting SRLDC informed that a provision in the Communication equipment outage portal is provided for entry of any new elements added in the grid.
12. In the 138<sup>th</sup> PCSC meeting forum requested SRLDC to give login credentials to the PCSC forum members for entry in the portal or they can replicate a similar dashboard under SPOORTHI portal. SRLDC stated that they would check and update in this regard.
13. In the 140<sup>th</sup> PCSC meeting SRPC requested SRLDC to take up issues with the respective SLDCs whenever erratic SCADA data is observed, so that the issues can be addressed in real time. SRLDC agreed to inform their SCADA department accordingly.
14. All entities were requested to enter the details in the portal regarding the new elements added in the grid on regular basis.

**✚ STU / TRANSCOs to coordinate with Nodal LDC to present the Island LGB data Analysis for the Month of April-26.**

**✚ Respective SLDCs and SRLDC to monitor the Island Schemes in real time.**

**✚ Respective SLDCs/TRANSCOs and SRLDC to monitor new elements added inside or across the island boundaries of the respective islands, impacting the Island and UFR implementation at islanding frequency to be ensured.**

**15. Furnishing of Monthly Certificate on Healthiness of Islanding Schemes by Generators/ Transmission Utilities / SLDCs/ DISCOMS**

1. All Constituents as listed below were requested to submit certificate on Healthiness of Islanding Schemes on monthly basis –by the first week of every month (i.e. status for a month shall be sent before the 3<sup>rd</sup> day of the succeeding month) to SRPC as per the formats, circulated vide SRPC letter dated 09 August 2021:

Islanding Scheme	Constituents
<b>Hyderabad (Ramagundam) IS</b>	TGTRANSCO, SLDC-TGTRANSCO, TGGENCO, PGCIL (SR-I), NTPC-Ramagundam
<b>Chennai IS</b>	TANTRANSCO, SLDC-TANTRANSCO, PGCIL (SR- II)

<b>Neyveli IS</b>	TANTRANSCO, SLDC-TANTRANSCO, PGCIL (SR- II), PED, NLCIL, NNPTPS, KSEBL
<b>Kudankulam IS</b>	TANTRANSCO, SLDC-TANTRANSCO, PGCIL (SR- II), KSEBL
<b>Visakhapatnam (Simhadri) IS</b>	APTRANSCO, SLDC-APTRANSCO, APGENCO, PGCIL (SR-I), NTPC-Simhadri
<b>Bengaluru IS</b>	KPCL, KPTCL, PGCIL (SR-I), PGCIL (SR-II), UPCL, NTPC-Kudgi, NPCIL-Kaiga
<b>Vijayawada IS</b>	APTRANSCO, SLDC-APTRANSCO, APGENCO, PGCIL (SR-I)

- As decided in 112<sup>th</sup> Meeting of PCSC held on 06<sup>th</sup> November 2023, all Utilities concerned are requested to furnish the certificate in the prescribed format regularly (before 7<sup>th</sup> day of every month) for onward reporting to CEA/ MoP.
- The Certificate of Healthiness of Islanding Schemes for the month of **April 2026** has been received from all the utilities.

## 12. Ensuring Readiness of Islanding Schemes

- In view of the prevailing security concerns across the country and as per the directions issued by the Ministry of Power, it is imperative to ensure the operational reliability and effectiveness of the existing Islanding Schemes. Accordingly, all Nodal Load Despatch Centres (SLDCs), State transmission utilities and ISTS transmission licensees are requested to ensure the following in respect of Southern Region Islanding Schemes (IS) under their jurisdiction:

Sl. No.	Activity	Entity Responsible
1	Testing and verification of all stages of Under Frequency Relays (UFR) and df/dt relays within the Islanding Scheme were requested to be ensured.	Nodal SLDC, STU & ISTS
2	Testing and verification of other relay set points, such as Under Frequency (U/f) and Over Frequency (O/f) settings of the participating generators, PILM feeders, etc., identified within the Islanding Scheme, were advised to be carried out.	Nodal SLDC, STU & ISGS Stations within the Island
3	Confirmation regarding the operational healthiness and readiness of the Islanding Schemes was requested to be provided.	Nodal LDC
4	Continuous monitoring of the Islanding Schemes through SCADA visibility in the LDCs was advised to be ensured.	Nodal LDC

- Following are the nodal LDCs of the Islanding Schemes of SR:

Islanding Scheme	Nodal LDC
Vijayawada & Vishakhapatnam IS	AP SLDC
Bengaluru IS	KAR SLDC
Chennai IS	TN SLDC
Hyderabad IS	TS SLDC
Neyveli IS	TNSLDC, KERSLDC, PUDSLDC, SRLDC
Kudankulam IS	TNSLDC, KERSLDC, SRLDC

- SRPC, vide email dated 14.05.2025, requested that a report of confirmation of the above may please be shared to SRPC at the earliest.
  - APTRANSCO, vide mail dated 02.06.2025, informed that testing and verification of test points was done and found satisfactory.
  - Subsequently, TGTRANSCO, TANTRANSCO, KPTCL & PED had confirmed the testing and verification of UFR relays under their purview.
  - In the 133<sup>rd</sup> PCSC meeting PGCIL SR-I informed that they do not have standalone UFR relays and that actual UFR testing would be carried out during Line Clearance (LC). They further confirmed that the setting of test points in the relay display had been verified and that testing would be completed during LC.
  - In the 134<sup>th</sup> PCSC meeting KSEBL confirmed that AUFR testing verification was completed.
3. SRLDC, vide email dated 15.05.2026, highlighted that during the frequency dip on 13.05.2026, when the system frequency fell below 49.4 Hz, AUFR Stage-I did not operate at many stations.
4. In this regard, all entities are requested to furnish the details of AUFR Stage-I operations within their respective islands to SRPC by **01.06.2026**.

Islanding Scheme	Average AUFR Stage -I load (MW)
Bangalore	284
Chennai	195
Hyderabad	127
Vijayawada	108
Visakhapatanam	0
Nyveli	408
KudanKulam	227

✚ **All SLDCs to ensure monthly verification of set points.**

✚ **All Nodal Load Despatch Centres (SLDCs), State transmission utilities and ISTS transmission licensees to furnish confirmation report on Island Readiness to SRPC immediately.**

### 13. Review of SR-Islanding Schemes

1. Due to the variation in generation and load growth in the already implemented Islanding Schemes, the Annual Review of SR Islanding Schemes is being undertaken every year.
2. Accordingly, the review meetings of all SR Islanding Schemes were conducted as per the schedule given below:

Sl. No.	Islanding Scheme	Date of Review Meeting			Date of Issuance of Reviewed IS Document
		Review meetings → 1 <sup>st</sup> Review	2 <sup>nd</sup> Review	3 <sup>rd</sup> Review	
1	Hyderabad	11.06.2025	25.09.2025	17.02.2026	*
2	Bangalore	11.06.2025	09.12.2025	17.02.2026	*
3	Vijayawada	11.07.2025	25.09.2025	----	30.03.2026
4	Visakhapatnam	11.07.2025	25.09.2025	17.02.2026	10.04.2026
5	Chennai	15.07.2025	09.12.2025	17.02.2026	10.04.2026
6	Neyveli	15.07.2025	16.12.2025	-----	*
7	Kudankulam	15.07.2025	16.12.2025	-----	*

Note:

- ❖ In the case of Hyderabad IS, TGS LDC, vide mail dated 05.05.2026, furnished the details regarding modified Hyderabad IS.
- ❖ For Nyveli and Kudankulam IS the validated data is awaited from SRLDC for issuance of Reviewed IS document.
- ❖ For Bangalore IS the validated data is awaited from KPTCL for issuance of Reviewed IS document.

**⚡ APTRANSCO, TANTRANSCO & SRLDC to update the status of implementation of Reviewed Vijayawada, Visakhapatnam & Chennai IS.**

3. With respect to the review of Islanding Schemes, All Transcos/SLDCs to identify some loads, preferably on a priority basis to shed, in order to achieve the load Generation balance of the island before its formation, if LGB is unfavourable at that point. Quantum of such loads may be identified at various LGB scenarios (to shed prior to the islanding), say at frequency 48.4 Hz, and may be worked out depending upon the maximum Load Generation gap +/- some moderation point.
  - The quantum of load reduction shall correspond to the actual Load–Generation gap at that frequency, with some moderation, up to the maximum recommended load quantum limit.
    - If the gap exceeds the maximum limit, only the maximum load quantum will be curtailed.
    - If the gap is less than the maximum limit, only that actual quantum will be curtailed.
4. SRPC highlighted that, considering the highly varying nature of generation, pre-Islanding load reduction is essential and needs to be implemented to improve the survivability of

the Island.

5. It was decided to form a Committee to analyse the feasibility of implementing pre-Islanding load reduction dynamically through SCADA.
6. In the 135<sup>th</sup> PCSC meeting the forum decided that the scope of the Committee would be to recommend feasible method(s) for implementing pre-Islanding load reduction in the Electrical Islands of SR (at 48.4/48.2 Hz - to be decided by the Committee) so as to maintain the Generation-Load ratio of the Islands at a desired level for sustenance, considering the wide variations observed in generation of the participating generators.
7. Further, it was decided that the Committee may consist of members from SLDCs, STUs, SRLDC, and SRPC and the following Terms of Reference (ToR) were agreed:
  - Evaluate and identify feasible method(s) to implement the load reduction of the island through the existing SCADA system.
  - If not feasible with the existing SCADA, identify feasible method(s) to implement after on-going up gradation of the SCADA system.
  - To recommend feasible alternate approaches.
8. It was concluded that that one representative each from STU and SLDC and two representatives each from SRLDC and SRPC may be nominated to the said Committee and sought suggestions regarding the composition. Subsequently, the committee was formed on 31.10.2025 and The First meeting of the committee was held on **26<sup>th</sup> November 2025**. The committee deliberated on the concerns raised by some of the SLDCs, with respect to the capability and limitations of the existing SCADA systems, considering the ADMS implemented through SCADA. One of the OEMs presented about the latest features available in the SCADA systems.
9. In addition to the above, all Transco's/SLDCs are requested to furnish the following:
  - Validated SCADA / Energy meter data pertaining to the Islanding Scheme (IS) for the April 2024 to March 2025 period.
  - Average of SCADA data for every 1- hour intervals (computed for the year 2024-25).

The data shall be provided in the following format (Excel file):

From 01-04-2024 to 31-03-2025 (Time Slot)	Average Island Generation without RE Generation (MW)	Average Island Generation with RE Generation (MW)	Average Island RE Generation (MW)	Average Island Load (MW)
00:00:00 to 01:00:00 Hrs				
01:00:00 to 02:00:00 Hrs				
...				
23:00:00 to 24:00:00 Hrs				

***Status of receipt of the above data:***

S.no	Name of Islanding Scheme	Latest Status
1	Hyderabad IS	✗
2	Chennai IS	✗
3	Kudankulam IS	✗
4	Bengaluru IS	✗
5	Neyveli IS	✗
6	Visakhapatnam IS	✗
7	Vijayawada IS	✗

✓ -- Furnished

✗ -- Not Furnished

## 14. Nodal Officer Details for Islanding Schemes — Role, Responsibility & Coordination Activities

As per the Standard Operating Procedure (SOP) (Annexure-13) for Islanding Schemes,

- Roles and responsibilities of the organizations/officers involved in designing and operating the Islanding Schemes are defined in *Annexure-III* of the SOP.
- A **Nodal Officer** is to be nominated by each utility participating in the Island (owners of generating stations, substations, transmission lines, distribution lines, etc.) along with a **Chief Nodal Officer** from the concerned Despatch/Control Centre.
- The Chief Nodal Officer from the LDC and utility-specific Nodal Officers shall ensure free flow of information regarding operational status of the Islanding Scheme and prompt communication between SCADA Control Centres and stations.
- Further, each RLDC shall designate a **Coordination Officer** for regional level monitoring.

Entity	Required Level of Nodal Officer	Key Role/Responsibility
<b>RPCs (Regional Power Committee)</b>	<i>Superintending Engineer</i> (nominated by Member Secretary, RPC)	Preparation, coordination, and periodic review of Islanding Schemes
<b>RLDCs (Regional Load Despatch Centres)</b>	<i>General Manager &amp; above</i>	Coordinating Nodal Officer for region; monitor vital parameters of schemes at SCADA; recommend PMUs/ communication upgrades; certify healthiness of systems
<b>LDCs (State Load Despatch Centres)</b>	<i>Chief Engineer &amp; above</i>	Chief Nodal Officer at state level; coordinate DISCOM/TRANSCO/ GENCO nodal officers; ensure proper data flow; monitor health of SCADA, relays, communication; certify components monthly; implement schemes at state level.

Entity	Required Level of Nodal Officer	Key Role/Responsibility
<b>GENCOS (Generating Companies)</b>	<i>General Manager / Chief Engineer &amp; above</i>	Implement schemes at generation end; provide data for study/review; ensure healthiness of generating units, relays, communication; submit monthly certification
<b>STUs / PGCIL (Transmission Utilities)</b>	<i>General Manager / Chief Engineer &amp; above</i>	Implement schemes at transmission end; ensure healthiness of substations, lines, relays, communication; provide data for review; monthly certification.
<b>DISCOMs (Distribution Companies)</b>	<i>General Manager / Chief Engineer &amp; above</i>	Identify essential and defence loads; implement schemes at distribution end; ensure feeder/relay/communication health; monthly certification.

- An updated list of contact details of all such Nodal Officers is to be maintained by the LDC.
- **SLDC, STU, SGS, ISGS, ISTS & RLDC were requested to furnish the details in the below format**
- SLDCs to coordinate with respective DISCOMs w.r.t nomination of nodal officer and discharge of IS related responsibilities.

Utility Name & Location	Name	Designation	Organization	Email ID	Mobile No.

**The latest status of nominations received is as below:**

S.No	Name of Islanding	STU	SLDC	Gencos
1	Telangana	✓	✓	✓
2	Andhra Pradesh	✓	✓	✓
3	Tamil Nadu	✓	✓	✗
4	Karnataka	✓	✓	✓
5	Kerala	✓	✓	✓
6	Puducherry	✓	✓	NA
7	PGCIL (SR)	✓	NA	NA
8	NTPC (SR)	NA	NA	✓
9	NPCIL KGS 1&2	NA	NA	✓
10	NPCIL KGS 3&4	NA	NA	✓
11	NPCIL MAPS	NA	NA	✓
12	NPCIL KKNPP	NA	NA	✓
13	ADANI (APL/ATL)	✗	NA	✓
14	HNPCL	NA	NA	✓
15	NLCIL	NA	NA	✓
16	SRLDC		✓	

✚ **Utilities to furnish the details of Nodal Officer as per the SoP.**

## 15. Periodic Inspection / Audit of Essential Components of Islanding Schemes

As per the Standard Operating Procedure (SOP) for Islanding Schemes, periodic inspection / audit of all essential components is required to ensure continued healthiness and operational reliability. The SOP specifies the following frequency and scope:

- **Under Frequency Relays (UFR)** on Island forming elements (Lines & ICTs) – *Quarterly*
- **Associated communication equipment** at all stations within the Island – *Bi-monthly*
- **Associated DC supply** for control panels and communication systems – *Bi-monthly*

The inspection / audit is to be carried out by a **third party** and the reports submitted to the respective RPC

- In the 138<sup>th</sup> PCSC meeting All STUs expressed concern regarding the practical feasibility of implementing the third-party audit frequency of essential components as notified in the SOP.
- SRPC informed that the matter of periodic inspection/audit frequency of essential components in Islanding Schemes had been taken up with the NPC. It was further stated that till any revision of the SOP is notified by NPC, the existing frequency for third-party audit, as specified in the SOP, needs to be complied.

✚ **All Island Participating Utilities to ensure the same.**

## 16. Monitoring of Vital Parameters for Islanding Schemes

As per the Standard Operating Procedure (SOP) for Islanding Schemes:

- Continuous monitoring of critical system parameters is essential since Island formation can occur at any time.
- The following parameters must be monitored on a real-time basis within the electrical boundary of each Island:
  - Anticipated / actual **generation**
  - Anticipated / actual **load**
  - **Voltage, frequency, and power flows** on peripheral lines that are to be tripped to form the Island
- A **dedicated SCADA page** for each Islanding Scheme is to be created in the control rooms / despatch centres (Sub-SLDCs / SLDC / RLDC / NLDC) to display these parameters. If required, **PMUs or other measuring instruments** should be installed at suitable locations.
- **RLDCs/SLDCs are to submit monthly data** in the prescribed format to RPCs certifying the healthiness of the communication system used for monitoring these parameters.

S. No.	Name of Islanding Scheme	Healthiness of Communication Channel

⚡ **SRLDC & SLDC to submit monthly certified report on healthiness of the communication system for Islanding Scheme.**

## 17. Certificate for Healthiness of Batteries

- (i) As per the MoP direction, given in pursuant to recommendations of the Enquiry Committee (NEW grid disturbance on 30<sup>th</sup> & 31<sup>st</sup> July, 2012), *the monthly certificate for healthiness of batteries, installed at 220 KV and above voltage level Substations (for power supply to Relays, RTUs and PLCC equipment) are required to be obtained by RPCs, from their respective Constituents and furnish the same to CEA/ MoP.*
- (ii) With reference to above, the Constituents have been requested to submit the certificate on healthiness of batteries on monthly basis (i.e. status for a month shall be sent by the 7<sup>th</sup> day of the following month) to SRPC Secretariat.
- (iii) The Certificate of Healthiness of Batteries has been received from all the entities for the month of **April 2026**.

## 18. Compliance by the Users of the Grid

### a) Submission of Annual Audit Plans by the State embedded Users/IPPs

- (i) Clause (5) of Regulation 15 of IEGC Regulations, 2023 envisages as below:

Quote

*(1) All users shall conduct internal audit of their protection systems annually, and any shortcomings identified shall be rectified and informed to their respective RPC. The audit report along with action plan for rectification of deficiencies detected, if any, shall be shared with respective RPC for users connected at 220 kV and above (132 kV and above in NER).*

*(2) All users shall also conduct third party protection audit of each sub-station at 220 kV and above (132 kV and above in NER) once in five years or earlier as advised by the respective RPC*

. . . . .

*(5) Annual audit plan for the next financial year shall be submitted by the users to their respective RPC by 31st October. The users shall adhere to the annual audit plan and report compliance of the same to their respective RPC."*

Unquote

As per the above Regulations, Users (Entities/Embedded entities/IPPs connected at 220kV & above voltage level) shall furnish the annual audit plans (Internal & third party) for the next financial year to SRPC by 31<sup>st</sup> October of every year.

- (ii) In the PCSC meetings, it was observed that some users especially State embedded entities/IPPs (including RE) connected at 220kV & above voltage level) have not submitted the Annual Audit Plans.
- (iii) In various meetings, it was requested to SLDCs/TRANSCOs to take up with the Users (Entities/Embedded entities/IPPs connected at 220kV & above voltage level) to furnish the **Audit Plan, both Internal as well as Third party audit plan.**
- (iv) Similarly, SRLDC was requested to take up with ISTS connected entities/Users (including RE) and ensure the submission of Protection Performance Indices and both audit plan.
- (v) State SLDCs/TRANSCOs had been requested to take up with the respective entities to furnish the audit plan both Internal as well as Third Party audit plan for FY **2025-26.**

✚ ***SLDCs/TRANSCOs to ensure submission of the internal & third-party audit plans by all Users (Entities/Embedded entities/IPPs connected at 220kV & above voltage level).***

✚ ***SRLDC to take up with ISTS connected entities/Users (including RE) and ensure the submission of Protection Performance Indices as well as internal & third-party audit plans.***

✚ ***SLDCs/SRLDC to issue non-compliance letters to the Users (Entities/Embedded entities/IPPs connected at 220kV & above voltage level), who are not complying with the Regulations.***

**b) Submission of the Flash Report/ DR / EL / Detailed Report of the Grid Events**

- (i) Regulations 37(2) of IEGC 2023 envisages below:

***37(2) System Security Aspects***

*Regulation 37(2) of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023, all the Regional Entities of Southern Region subsequent to the incident, including the intimation, flash report, data from Disturbance Recorder (DR), Station Event Logger (EL), Data Acquisition System (DAS) and Detailed Reports are to be submitted, allowing for comprehensive analysis within defined time frames.*

Sr. No.	Grid Event <sup>^</sup> (Classification)	Flash report submission deadline (users/ SLDC)	Disturbance record and station event log submission deadline (users/ SLDC)	Detailed report and data submission deadline (users/ SLDC)	Draft report submission deadline (RLDC/ NLDC)	Discussion in protection committee meeting and final report submission deadline (RPC)
1	GI-1/GI-2	8 hours	24 hours	+7 days	+7 days	+60 days
2	Near miss event	8 hours	24 hours	+7 days	+7 days	+60 days
3	GD-1	8 hours	24 hours	+7 days	+7 days	+60 days
4	GD-2/GD-3	8 hours	24 hours	+7 days	+21 days	+60 days
5	GD-4/GD-5	8 hours	24 hours	+7 days	+30 days	+60 days

<sup>^</sup>The classification of Grid Disturbance (GD)/Grid Incident (GI) shall be as per the CEA Grid Standards.

- (ii) In the earlier PCSC Meetings, it was decided that SRLDC to issue non-compliance notices to entities that do not follow the timelines stipulated in the IEGC Regulations. SRLDC to sensitize the entities & SLDCs on the above Regulations and SRLDC to take up with the entities that have not furnished the required details/information in the specified formats and ensure that all the details of the grid event are available in the portal.

**All the Users shall adhere to the above Regulatory Provisions and the Time lines.**

**SRLDC to take up with the entities that have not furnished the required details/information in the specified formats and ensure that all the details of the grid event are available in the portal.**

## 19. Implementation of OVR gradings for 400 kV and 765 kV Transmission Lines of Southern Region (SR)

1. A comprehensive exercise for OVR grading of 400 kV and 765 kV transmission lines of the Southern Region (existing/known elements as on March 2026) has been carried out.
2. SRPC, vide mail dated 10.03.2026, circulated the draft OVR gradings for 400 kV and 765 kV Transmission Lines of Southern Region (SR).
3. After incorporating the received comments appropriately, the OVR, Stage-I gradings to be adopted for 400 kV and 765 kV lines in the Southern Region was finalized and circulated vide SRPC letter dated 17.04.2026(**Annexure-19**) for implementation.
4. The OVR gradings as applicable to the respective system shall be implemented by the Constituent/ Utility concerned **with immediate effect**. Utilities concerned were requested to confirm implementation of new OVR gradings by filling the below form, latest by **30.04.2026**.

<https://nicforms.nic.in/enRhYmxINjllMWVIZTUxODYzZjIwMjYwNDE3Mw==>

The form can be accessed by the below QR code also for convenience



5. In this regard, it may be noted that the utility concerned shall update the implementation status in the above form only after successful implementation of OVR gradings for all lines under its jurisdiction.
6. **The confirmation of Revised OVR gradings is received from KSEBL, APTRANSCO, TGTRANSCO, JSWEL & NLCIL till date.**

**⚡ All Constituents to confirm the implementation of revised OVR gradings.**

**⚡ SRLDC is also requested to take up with RE-ISTS entities for Implementation of OVR gradings.**

## **20. Submission of Static IPv4 Addresses for Whitelisting – Access to SRLDC Web Applications**

In line with the deliberations held during the 138<sup>th</sup> PCSC Meeting dated 07-01-2026, and as communicated vide the letter issued by the Chief Information Security Officer, SRLDC (CISO-SRLDC) (**Annexure-20**), which was also circulated, vide email dated 12-02-2026, all users/entities are requested to furnish their Static IPv4 address details at the earliest by submitting the information through the prescribed Google Form using the link provided below:

<https://docs.google.com/forms/d/e/1FAIpQLSdhs5HW-CRfsyRcg-ZmsaARC8CbbAwkcpYbqBEC7DGzxrFumA/viewform?usp=preview>

While submitting the details, a **letter of authorization for the IP addresses** may also be uploaded (file upload facility is available in the form). Users who have already submitted the required details need not submit them again; however, in case of any modification, the updated details may be submitted afresh. **Early submission** of the above details is requested to facilitate further necessary action related to **access control and cybersecurity compliance**.

For checking the IPv4 address, users may visit [www.whatismyipaddress.com](http://www.whatismyipaddress.com). In case of any difficulty in the whitelisting process or for any clarification, the matter may be taken up with **SRLDC** through email/official correspondence, or the undersigned may be contacted.

## 21. SRLDC Agenda - Review and Standardization of Synchronization Angle Difference settings during charging

At 19:35 hrs on 17-05-2026, 220 kV Thrissur HVDC–Nallalam feeder tripped on distance protection due to lightning. During the disturbance, owing to the shutdown of Kozhikode ICT-3, support from the Areakode side could not be extended, as ICT-1 & ICT-2 were heavily loaded then.

Under the above conditions, around 350 MW load was being fed from the Thrissur HVDC 220 kV side, through the 220 kV Thrissur HVDC–Kunnamkulam–Malaparamba–Nallalam corridor. During the charging of the 220 kV Thrissur HVDC–Nallalam feeder, synchronization could not be achieved as informed by PGCIL SR-II, owing to the synchronization angle difference. Subsequently, after bypassing the angle measurement in the synchronization check, the line was successfully charged from the Thrissur end at 21:34 hrs.

In view of the above, the issue of synchronization angle difference settings may kindly be reviewed and a standardized methodology may be evolved, so as to facilitate timely restoration of transmission elements during contingency conditions.

 **Agenda Item may be deliberated**

## 25. SRLDC Agenda - Review and Compliance of Under-Frequency and Over-Frequency Protection Settings of Pumped Storage Plants in line with IEGC, CEA Connectivity Standards, and AUFLS Scheme

During a Grid Disturbance (GD) event in the Western Region, involving a sudden generation loss of around 8,600 MW, the system frequency declined to approximately 49.4 Hz at 14:09:53.800 hrs, resulting in operation of the Automatic Under Frequency Relay (UFR) schemes across multiple control areas.

As per Regulation 29(12) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023, pumped storage hydro plants operating in pumping mode or ESS operating in charging mode are required to be automatically disconnected before the first stage of UFR operation. Further, the recommendations of the Task Force on Implementation of AUFLS and df/dt Scheme, as deliberated in the 15<sup>th</sup> NPC meeting and recorded in the 52<sup>nd</sup> TCC and 55<sup>th</sup> SRPC meetings, stipulate that pumped storage hydro plants operating in pumping mode shall be automatically disconnected at 49.5 Hz and ESS in charging mode at 49.6 Hz, prior to UFR operation.

However, during the above disturbance, pumped storage units at GREENKO and Nagarjunasagar reportedly continued to operate in pumping mode even after system frequency declined to around 49.4 Hz. Approximately 1600 MW of pumping load at GREENKO and around 200 MW at Nagarjunasagar continued in service despite operation of UFR schemes and load shedding across regions. It is understood that the under-frequency

protection settings for these units were configured below the stipulated threshold of 49.5 Hz, resulting in non-operation of the protection and failure to disconnect the pumping load during the disturbance.

All pumped storage plants may review their existing protection settings in line with the above provisions, NPC recommendations and AUFLS scheme requirements, and submit compliance status to SRLDC/SRPC.

**✚ M/s Greenko & TGGENCO to update the forum on the UF Settings of PSP.**

## **26. Sending Agenda items for the PCSC meetings**

The entities are requested to furnish the agenda, if any, to deliberate in the ensuing monthly PCSC meeting by 25<sup>th</sup> of the preceding month to SRPC.

## **27. Date & Venue of next PCSC meeting**

Date & Venue of 144<sup>th</sup> PCSC meeting would be informed in due course.

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