

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
29, Race Course Cross Road
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सं/No. SRPC/SE (PC&SS)/145PCSC/2026/3476-3522

दिनांक /Date 29th July 2026

To,

संलग्न सूची के अनुसार

As per attached List

विषय/ Sub: संरक्षण समन्वय उपसमिति की 145 वी बैठक की कार्यसूची/

Agenda – The 145th Meeting of Protection Co-ordination Sub-Committee – reg.

महोदय/महोदया/ Sir/ Madam,

आपको सूचित किया जाता है कि दिनांक **07 अगस्त 2025 के प्रातः 10.00 बजे**, वीडियो सम्मेलन से होनेवाली संरक्षण समन्वय उपसमिति की 145 वी बैठक की कार्य सूची को द.क्षे.वि.स. के वेबसाइट (<https://srpc.gov.in/>) में अपलोड कर दिया गया है।

It is informed that the Agenda for the 145th Meeting of Protection Coordination Sub Committee (PCSC) scheduled to be held on 07th August, 2025 at 10:00hrs through VC, is uploaded on the SRPC Website (<https://srpc.gov.in/>).

संरक्षण समन्वय उपसमिति के सभी सदस्य/ नामित व्यक्ति से अनुरोध है कि बैठक में भाग लें।

The Protection Coordination Sub-Committee Members / Nominees are requested to kindly make it convenient to attend the PCSC-145 meeting.

धन्यवाद / Thanking You,

भवदीय/Yours faithfully,

malini 29/07/2026

(एन एस मालिनी / N S MALINI)

अधीक्षक अभियंता (पी&सी)/ Superintending Engineer (P & C)

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(आईपीसीवविद्युतप्रणाली), 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. डिजाइन), 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 पैन्ने/ Chief Engineer (MTS), TANGEDCO, Chennai (Fax No: 044-28585804)
8. मुख्य अभियंता (जलविद्युत) टैनजोडको चैन्नै/ Chief Engineer (Hydro), TANGEDCO, Chennai (Fax No: 044-28553356)
9. मुख्यअभियंता (संरक्षणएवंसंचार), टीएनईबी, चेन्नै/ 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, चेन्नै- 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 वाविस्कर, सह महाप्रबंधकयूपीसीएल, 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 बालमुरगन, 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, BhuvanagiriTaluk, Cuddalore Dist, Tamilnadu- 608502
31. श्री सी रामकृष्ण, एजीएम (ऑपरेशन), हिंदुजाएनपीसीएल, पेटांटयडमंडल, 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 कं. लि. / Head Regulatory, Adhani Energy Solutions Ltd., Ahmedabad
39. वररष्ठिनिदेशक , एमपीआईए एंजि माकटसइषडया प्राइवेटलवमटेड/ 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 केचौल्लहान राजू ., मुख्य अभियंता -संचालन)II), टीजीएनपीडीसीएल /Sri K. Raju Chowhan, Chief Engineer (Operation-II), TGPNDCL
43. श्री एल .पांड्या, मुख्य अभियंता / आरआर ज़ोन / 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 145th Meeting of Protection Coordination Sub- Committee of SRPC scheduled on 07.08.2026 through VC.

1. Introduction

The 145th Meeting of the Protection Coordination Sub-Committee of SRPC is scheduled to be held on 07th August 2026 at 10:00 AM through VC.

2. Confirmation of Minutes of last PCSC meeting

Minutes of 144th Protection Coordination Sub-Committee meeting held on 08th July 2026 was issued vide letter No: SRPC/SE (P, C & SS)/144 PCSC/2026/ 3427-73 dated 29th July 2026.

Minutes of the Meeting may be confirmed.

3. Grid Occurrences

Grid Occurrences which took place during the period **June 2026 – July 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	SN of the GD as per Annexure-3a
SEPC	I.1
INDIGRID / RENEW POWER PVT LTD	I.2
TANTRANSCO	I.3, I.4
TANTRANSCO / TNPGL	I.5
OSTRO_KANNADA	I.6
RENEW POWER PVT LTD	I.7

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	SN of the GI as per Annexure-3a
APTRANSCO	II.1, II.5, II.9
APGENCO	II.2, II.3
TANTRANSCO	II.4
KPTCL	II.6
KSEB	II.7
NLC	II.8

III. Single/ Multiple Element tripping:

Name of the Utility who would present the GI in all its details	SN of the Single /Multiple tripping as per Annexure-3a
GREENKO	III.1
LKPPL	III.2
NTECL	III.3, III.4
TGTRANSCO	III.5, III.9, III.19
TANTRANSCO	III.6, III.7, III.13, III.16, III.18
TGGENCO	III.8
PVG_IRCON_S	III.10
APTRANSCO	III.11, III.12
KPTCL	III.14, III.15, III.20
KSEB	III.17
SEPL	III.21

- 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 **02.08.2026** (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 **02.08.2026** 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	SN as per Annexure-3a
APTRANSCO	IV.1
TANTRANSCO	IV.2
APGENCO	IV.3
TGTRANSCO	IV.4, IV.5
PGCIL SR-1 / SEIL	IV.6
PGCIL SR-2 / TANTRANSCO	IV.7

PLCC related Events:

Name of the Utility who would present the PLCC Event in all its details, if not furnished beforehand	SN as per Annexure-3a
APTRANSCO	V.1, V.3
TANTRANSCO	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	SN as per Annexure-3a
APTRANSCO	VI.1, VI.9, VI.27
KPTCL	VI.2, VI.15, VI.19, VI.25, VI.29
WKTL	VI.3, VI.6
TGTRANSCO	VI.4
PGCIL SR-2	VI.5, VI.10, VI.23
TANTRANSCO	VI.7, VI.8, VI.12, VI.13, VI.14, VI.21
NPCIL-Kaiga	VI.11
KSEBL	VI.16
APGENCO	VI.17, VI.30
KPCL	VI.18, VI.20, VI.22, VI.28
SEIL-P2	VI.24
LKPPL	VI.26

- V. *SRLDC to furnish the PMU plots for all the above Grid Occurrences (GDs, GIs, Single/Multiple Element Trippings, A/R, PLCC Events) with delayed fault clearance to SRPC Secretariat by **02.08.2026**.*

4. Status of Implementation of Pending Recommendations of PCSC

- a) The status of implementation of PCSC recommendations (up to 144th 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 **02.08.2026**, 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 **142nd to 144th** 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 142nd to 144th 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 114th 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 10.08.2026 to 09.09.2026 for approval of PCSC:

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

✚ **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 112th PCSC Meeting held on 06.11.2023, a Protection Setting Sub-Group (PSSG) was constituted with the members from APTRANSCO, KPTCL, KSEBL, TANTRANSCO, TGTRANSCO, 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:

PSSG Meeting / Group deliberations			
S No.	Proposal	Proposed Entity	Meeting Date
1	PSSG Request for approval of relay settings of revised settings for Hebbanahally end for LILO of 400,kV UPCL Hebbanahally line at new Kadandale substation	KPTCL	14.07.2026
Observations/Views Received: <i>PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by KPTCL and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations</i> Observations on 400kV HEBBANAHALLY – KADANDALE Line <i>PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.</i> ➤ <u>400kV HEBBANAHALLY END</u> <i>PSSG had recommended the following:</i> 1. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds 2. STUB protection to be enabled with 50ms time delay. 3. Adopt OVR protection settings in accordance with SRPC Approved OVR grading. 4. The primary path for tele-protection shall be on point-to-point Optical Ground Wire and alternative path shall be either on Power Line Carrier Communication or predefined physically diversified Optical Ground Wire paths.			
2	Consent for relay settings of Kurnool-III-Hero PSS lines at Kurnool-III Pooling station	PGCIL SR-I	14.07.2026
Observations/Views Received:			

PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by PGCIL SR-I and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations

Observations on 220kV KURNOOL III -HERO PSS Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ 220kV KUNOOL III END

PSSG had recommended the following:

1. Time of SOTF function active status after breaker closed in impedance mode may be set to 0.2 sec.

3	Consent for Protection Settings of New 765kV Substation at Koppal, Karnataka	PGCIL SR-II	14.07.2026
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Observations/Views Received:

PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by PGCIL SR-II and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations

Observations on NEW 765kV KOPPAL

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

1. 765kV BUSBAR KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

2. 330MVAR 765kV BUSREACTOR-1 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

3. 330MVAR 765kV BUSREACTOR-2 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

4. 330MVAR 765kV RAICHUR LINE REACTOR-1 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

5. 330MVAR 765kV RAICHUR LINE REACTOR-2 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

6. 240MVAR 765kV NARENDRA LINE REACTOR-1 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

7. 240MVAR 765kV NARENDRA LINE REACTOR-2 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

8. 1500MVA ICT-1 765kV/400kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

9. 1500MVA ICT-2 765kV/400kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

10. 1500MVA ICT-3 765kV/400kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

11. 1500MVA ICT-4 765kV/400kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

12. 400kV BUSBAR KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

13. 125MVAR 400kV BUSREACTOR-1 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

14. 125MVAR 400kV BUSREACTOR-2 KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

15. 500MVA ICT-1 400kV/220kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

16. 500MVA ICT-2 400kV/220kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

17. 500MVA ICT-3 400kV/220kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

18. 500MVA ICT-4 400kV/220kV KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

19. 220kV BUSBAR KOPPAL END

PSSG had concluded that it may implement in compliance with the SR Protection Protocol

Observations on 765kV KOPPAL – RAICHUR Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ **765kV KOPPAL END**

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.
2. SOTF protection shall be enabled using breaker close command input and impedance function, with the reach limited up to Zone-2 reach.

Observations on 765kV KOPPAL – RAICHUR Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ **765kV RAICHUR END**

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.
2. SOTF protection shall be enabled using breaker close command input and impedance function, with the reach limited up to Zone-2 reach
3. The primary path for tele-protection shall be on point-to-point Optical Ground Wire and alternative path shall be either on Power Line Carrier Communication or predefined physically diversified Optical Ground Wire paths.

PSSG had suggested:

1. To review the short circuit level impact on 765 /400 kV Raichur SS due to the interconnection and take necessary remedial action and the furnish the action taken to SRPC and SRLDC.

Observations on 765kV KOPPAL – NEW NARENDRA (KUDGI) Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ **765kV KOPPAL END**

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.

Observations on 400kV KOPPAL – GADAG Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ **400kV KOPPAL END**

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.

4	SRPC approval for commissioning of at Madurai-Udumalpet CT Ratio & Neelamangala- Mysore LILO	PGCIL SR-II	14.07.2026
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Observations/Views Received:

PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by PGCIL SR-II and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations

1a. Observations on 400kV MYSORE - HULIYADURGA Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ **400kV MYSORE END**

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading

1b. Observations on 400kV NELAMANGALA - HULIYADYRGA Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

➤ **400kV NELAMANGALA END**

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.

2a. Observations on 400kV MADURAI–UDUMALPET Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

1. 400kV MADURAI END

PSSG had recommended the following:

1. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.

2. 400kV UDUMALPET END

PSSG had recommended the following:

1. **Adopt** OVR protection settings in accordance with SRPC Approved OVR grading.

5	Hero Solar Energy: Kurnool: Request for Relay setting approval	Hero Solar Energy	14.07.2026
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Observations/Views Received:

PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by Hero Solar Energy and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations

Observations on 220kV HPSS – SPSS Line

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

1. 220kV HPSS END

PSSG had recommended the following:

1. Ensure that all zone setting calculations are carried out in accordance with remote end utility i.e PGCIL philosophy.
2. Time of SOTF function active status after breaker closed in impedance mode may be set to 0.2s.
3. For DEF protection, the operating time shall be coordinated with Zone-3 timing for a remote-end bus fault, considering fault current contribution from station end based on system studies.
4. OVR stage-1 shall be disabled for 220Kv transmission line
5. Load encroachment protection shall be enabled with appropriate load angle settings, and the load impedance shall be calculated as per the RK Committee recommendations.
6. Enable the Pole discrepancy time setting for Circuit breaker.
7. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds
8. 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.
9. During VT fuse failure, non-directional overcurrent and Earth Fault protection shall be enabled.

2. 220kV SPSS END

PSSG had recommended the following:

1. Time of SOTF function active status after breaker closed in impedance mode may be set to 0.2s.
2. Ensure that all zone setting calculations are carried out in accordance with remote end utility i.e PGCIL philosophy.
3. For DEF protection, the operating time shall be coordinated with Zone-3 timing for a remote-end bus fault, considering fault current contribution from station end based on system studies.
4. OVR stage-1 shall be disabled for 220Kv transmission line
5. Load encroachment protection shall be enabled with appropriate load angle settings, and the load impedance shall be calculated as per the RK Committee recommendations.
6. Enable the Pole discrepancy time setting for Circuit breaker.
7. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds
8. 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.
9. During VT fuse failure, non-directional overcurrent and Earth Fault protection shall be enabled.

3. 192MVA PTR-1 220kV/33kV AT SPSS END

PSSG had recommended the following:

1. The 2nd and 5th harmonic restraint settings in differential protection shall be set at 15% and 25%, respectively in consultation with OEM.
2. Differential and REF relay shall be enabled in two different relays as per CEA technical standards
3. The time delay for High set overcurrent and earth fault shall be set to 50ms.
4. HV Standby Earth fault non directional overcurrent Protection shall be disabled.
5. LV Standby Earth fault non directional overcurrent Protection shall be disabled.
6. Thermal overload protection shall be enabled with alarm.
7. Under frequency and under voltage shall be disabled

4. 192MVA PTR-2 220kV/33kV AT SPSS END

PSSG had recommended the following:

1. The 2nd and 5th harmonic restraint settings in differential protection shall be set at 15% and 25%, respectively in consultation with OEM.
2. Differential and REF relay shall be enabled in two different relays as per CEA technical standards
3. The time delay for High set overcurrent and earth fault shall be set to 50ms.
4. HV Standby Earth fault non directional overcurrent Protection shall be disabled.
5. LV Standby Earth fault non directional overcurrent Protection shall be disabled.
6. Thermal overload protection shall be enabled with alarm.
7. Under frequency and under voltage shall be disabled

5. 220kV BUSBAR AT SPSS END

PSSG had recommended the following:

1. The re-trip and back trip settings shall be kept at 100ms and 200ms, respectively.

6. 220kV BUS COUPLER SPSS END

PSSG had recommended the following:

1. Disable the Overcurrent earth fault protection.

7. 192MVA PTR-1 220kV/33kV HPSS END

PSSG had recommended the following:

1. The 2nd and 5th harmonic restraint settings in differential protection shall be set at 15% and 25%, respectively in consultation with OEM.
2. Differential and REF relay shall be enabled in two different relays as per CEA technical standards
3. The time delay for High set overcurrent and earth fault shall be set to 50ms.
4. HV Standby Earth fault non directional overcurrent Protection shall be disabled.
5. LV Standby Earth fault non directional overcurrent Protection shall be disabled.
6. Thermal overload protection shall be enabled with alarm.
7. Under frequency and under voltage shall be disabled

8. 192MVA PTR-2 220kV/33kV HPSS END

PSSG had recommended the following:

1. The 2nd and 5th harmonic restraint settings in differential protection shall be set at 15% and 25%, respectively in consultation with OEM.
2. Differential and REF relay shall be enabled in two different relays as per CEA technical standards
3. The time delay for High set overcurrent and earth fault shall be set to 50ms.
4. HV Standby Earth fault non directional overcurrent Protection shall be disabled.
5. LV Standby Earth fault non directional overcurrent Protection shall be disabled.
6. Thermal overload protection shall be enabled with alarm.
7. Under frequency and under voltage shall be disabled

9. 220kV BUSBAR HPSS END

PSSG had recommended the following:

1. The re-trip and back trip settings shall be kept at 100ms and 200ms, respectively.

10. 220kV BUS COUPLER HPSS END

PSSG had recommended the following:

1. Disable the Overcurrent earth fault protection.

Observations on 220kV HPSS –KURNOOL GSS Line SS

PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.

1. 220kV HPSS End

PSSG had recommended the following:

1. Ensure that all zone setting calculations are carried out in accordance with remote end utility i.e PGCIL philosophy.
2. Time of SOTF function active status after breaker closed in impedance mode may be set to 0.2s.
3. For DEF protection, the operating time shall be coordinated with Zone-3 timing for a remote-end bus fault, considering fault current contribution from station end based on system studies.
4. OVR stage-1 shall be disabled for 220Kv transmission line
5. Load encroachment protection shall be enabled with appropriate load angle settings, and the load impedance shall be calculated as per the RK Committee recommendations.
6. Enable the Pole discrepancy time setting for Circuit breaker.
7. Broken conductor protection shall be enabled for alarm only, with a time delay of 20 seconds

	8. 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. 9. During VT fuse failure, non-directional overcurrent and Earth Fault protection shall be enabled.		
6	TANTRANSCO-400 kV Kanarpatty - 400 kV Madurai (PGCIL) & 400 kV Kanarpatty substation - 400 kV Abishegapatty (PGCIL) Line Settings_ submitted for review and approval	TANTRANSCO	14.07.2026
Observations/Views Received: <i>PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by TANTRANSCO and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations</i> Observations on 400kV KANARPATTY – MADURAI (PGCIL) Line SS <i>PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.</i> 1. <u>400kV KANARPATTY END</u> <i>PSSG had recommended the following:</i> 1. STUB protection to be enabled with 50ms time delay. 2. Adopt OVR protection settings in accordance with SRPC Approved OVR grading. Observations on 400kV KANARPATTY - ABISHEGAPATTY (PGCIL) Line SS <i>PSSG had concluded that it may implement in compliance with the SR Protection Protocol with following recommendations and suggestions.</i> 1. <u>400kV KANARPATTY END</u> <i>PSSG had recommended the following:</i> 1. STUB protection to be enabled with 50ms time delay. 2. Adopt OVR protection settings in accordance with SRPC Approved OVR grading.			
7	Consent for relay settings of 765KV Raichur- Koppal-II D/C lines at Raichur SS	PGCIL SR-I	14.07.2026
Observations/Views Received: <i>PSSG in the meeting held on 14.07.2026 has analysed the proposed settings furnished by PGCIL SR-I and concluded that it may implement in compliance with the SR Protection Protocol with following recommendations</i> Observations on 765kV KOPPAL – RAICHUR Line <i>PSSG had concluded that it may implement in compliance with the SR Protection Protocol.</i>			

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

- Mr Varun S, varun.s@prdcinfotech.com
- Mr Preetham, preetham.gowda@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 118th 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 the 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. On analysis, it was observed that the excel file data were not matching with the downloaded relay data. 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 & the recommendations of PSSG are implemented by the entities.

✚ **PCSC forum 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 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.

Indigrid	NLC TS-1 EXP	WCTL
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3. All RE ISTS entities are requested to immediately update Internal Audit Plan for FY 2026-27 through Zoho Forms as sent by mail

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 ✗
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.

7.2 Internal Audit Report 2026-27

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

Internal Audit reports of STU's & PGCIL

Name of utility	Q1		Q2	
	No of stations scheduled	Reports received	No of stations scheduled	Reports received
TGTRANSCO	22	0	19	0
TANTRANSCO	43	27	41	3
KPTCL	46	32	45	0
APTRANSCO	42	1	41	1
KSEBL	12	0	12	0
PED	0	0	1	0
PGCIL SR I	6	5	6	0
PGCIL SR II	8	8	9	1
TOTAL	179	73	174	5

Internal Audit reports of Genco's

Name of utility	Q1		Q2	
	No of stations scheduled	Reports received	No of stations scheduled	Reports received
APGENCO	1	0	7	3
TGGENCO	0	0	1	0
KPCL	0	0	0	0
TNPGCL	2	2	1	0
TNGECL	0	0	0	0
NLCIL	0	0	2	0
STPP	1	0	0	0
NTECL	0	0	0	0

NTPL	0	0	0	0
APSPCL	0	0	0	0
BHAVINI	0	0	1	0
KSPDCL	0	0	0	0
NTPC	0	0	0	0
NPCIL	0	0	0	0
TOTAL	4	2	12	3

Internal Audit reports of Private Genco's, STU & RE-ISTS

Name of utility	Q1		Q2	
	No of stations scheduled	Reports received	No of stations scheduled	Reports received
SPRNG	0	0	0	0
AKSHAYA UJRA	0	0	0	0
APSPCL	0	0	0	0
HNPCL	0	0	0	0
SEL	0	0	1	0
IC&FS	1	0	0	0
CEPL	0	0	1	0
AMGEPL	0	0	0	0
JSWEL	0	0	0	0
GEENKO	0	0	1	0
RENEW	0	0	0	0
STPP	1	0	0	0
SEIL - 1	0	0	0	0
UPCL	0	0	1	0
VENA GADAG	0	0	0	0
GREENKO AP01	0	0	1	0
NTPC GREEN	0	0	0	0
VILATHIKULAM 300kV	0	0	0	0
VILATHIKULAM 230kV	0	0	0	0
SAVALAPER	0	0	0	0
KARUR PS-1	0	0	0	0
KARUR PS -2	0	0	0	0
GREEN INFRA RENEWABLE ENERGY LTD	0	0	0	0
ATHIKINARU	0	0	0	0
MYTRAH	0	0	0	0
NNTPS	0	0	0	0
KARUR (KTL)	0	0	0	0
WCTL	0	0	0	0
KLEIO SOLAR PVT LTD	1	1	1	1
SERENTICA	4	4	0	0
MEL	2	1	0	0
TP SOURYA KOPPAL LTD	1	1	0	0

NLC - TPS -2 EXP	0	0	2	0
NLC TPS - 1	0	0	0	0
NLC TPS - 2	0	0	2	0
TP VARDHAMAN SURYA LTD	1	1	0	0
TOTAL	9	6	6	1

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 31st 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 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. All RE –ISTS entities to submit the Third party Audit plans in 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 of the Station may coordinate with the respective nodal officers of the station and other team members for carrying out the audit.**

9. 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 15th 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 **June 2026 are pending from the following entities:**

ADANI_ATL	AMGEPL	APSPCL	Ayana Renewable Power Six Pvt Ltd
BHAVINI	GREENINFRA	HIRIYUR_ZREPL	ILFS
INDIGRID	KLEIO_SOLAR	KPTCL	KSEB
KSPDCL	LKPPL	MYTRAH	NLC
NPCIL_MAPS	NTECL	NTPC	NTPC_RSTPS
ORANGE	PGCIL SR-1	PGCIL SR-2	PONDICHERRY
PVG_JSWRenewTwenty Ltd	RENEW POWER PVT LTD	Renew Vyoman PPL	SAEL
SCCL	SEPC	SEPL	SERENTICA_RI1PL
TNGECL	TNPGCL		

3. The consolidated details of protection performance indices received from the entities for the months of June 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 June 2026) would be deliberated in the meeting.
5. In the 126th 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 135th 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 140th 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 139th PCSC meeting, one of the SR utilities would make a detailed presentation, in each meeting, on the PPI performance of its system, including**

analysis carried out and corrective actions taken. TGTRANSCO to present on the PPI findings in the 145th PCSC Meeting.

10. In the 140th 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.

- ✚ **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 June 2026.**
- ✚ **TGTRANSCO to present on the PPI findings in the 145th PCSC Meeting.**
- ✚ **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 June 2026 to be reviewed.**

10. Status of Islanding Schemes Reviewed during 2025-26

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.”

- 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

- 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 25th 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 AUFR+df/dt+ (Island feeders, if any) in the Island.

- SRLDC, vide mail dated 25.07.2026, furnished the Monthly Islanding data which is illustrated below. The Islanding Plots furnished by SRLDC is at **Annexure-12:**

Island	Bangalore	Chennai	Hyderabad	Kudankulam	Neyveli	Vijayawada	Visakhapatnam
Peak Load (Generation)	3046	2826	4456	4253	4919	2146	2794
Peak Load	3859	2783	5281	7860	4356	2668	2354
Peak Load Time	16-06-2026 15.17	16-06-2026 22.50	03-06-2026 16.07	08-06-2026 13.51	16-06-2026 18.57	06-06-2026 22.31	04-06-2026 21.56
Off Peak Generation	1051	2274	4948	5109	4071	907	1979
Off Peak Load	2077	1498	3279	3814	1844	1186	1249
Off Peak Load Time	15-06-2026 3.03	28-06-2026 9.11	14-06-2026 4.31	20-06-2026 4.06	14-06-2026 12.16	13-06-2026 10.31	17-06-2026 16.14

Maximum Generation	4896	3245	6075	7164	5856	2267	3499
Load at Maximum Generation	2809	1927	4220	5788	3649	2455	2054
Maximum Generation Time	01-06-2026 23.02	06-06-2026 4.37	04-06-2026 3.09	17-06-2026 22.21	16-06-2026 21.59	20-06-2026 21.59	02-06-2026 21.46
Average Generation	3180	2518	4532	4857	4347	1667	2545
Average Load	3017	2078	4292	5336	3245	1902	1742
Maximum SR RE time	30-06-2026 10.00	30-06-2026 10.00	30-06-2026 10.00	30-06-2026 10.00	30-06-2026 10.00	30-06-2026 10.00	30-06-2026 10.00
RE Max Gen	2694	2071	3174	4335	3687	1349	1330
RE Max Load	3495	2058	4242	6456	2619	1616	1611
G/L	1.05	1.21	1.06	0.91	1.34	0.88	1.46

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 **June** 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 25-07-2026 furnished the New elements added in the grid, as per the PSSE case for July 2026. **Entitles are requested to verify and confirm any Island crossing feeders are present in the list.**

From Bus	To Bus	From Name	To Name	ID	From Bus Area Name	To Bus Area Name
411009	411148	BHIMAVARAM 132.00	NARSAPURAM 132.00	P2	ANDRAPRADESH	ANDRAPRADESH
411027	411560	GUNTUR 132.00	ANU(KAZA) 132.00	D1	ANDRAPRADESH	ANDRAPRADESH
411085	411560	TADEPALI 132.00	ANU(KAZA) 132.00	D1	ANDRAPRADESH	ANDRAPRADESH
411148	411155	NARSAPURAM 132.00	RAZOLE 132.00	P2	ANDRAPRADESH	ANDRAPRADESH
411254	411548	PODILI21 132.00	EST_GANGVRM 132.00	P1	ANDRAPRADESH	ANDRAPRADESH
411254	411548	PODILI21 132.00	EST_GANGVRM 132.00	P2	ANDRAPRADESH	ANDRAPRADESH
412013	412205	GOOTY-SWS 220.00	DARMAVARAM21220.00	Z1	ANDRAPRADESH	ANDRAPRADESH
412089	412205	SHAPURAM 220.00	DARMAVARAM21220.00	Z1	ANDRAPRADESH	ANDRAPRADESH
414060	414068	GREENCO_CPSS400.00	GRNCO_PN 400.00	L1	KURNOOL2_S	KURNOOL2_S
414060	414069	GREENCO_CPSS400.00	GRNCO_CH 400.00	L1	KURNOOL2_S	KURNOOL2_S
414067	414071	ANANTHAPUR 400.00	RVSP_L_ANP 400.00	L1	SR_ISTS_AP	ANP_W
414067	414071	ANANTHAPUR 400.00	RVSP_L_ANP 400.00	L2	SR_ISTS_AP	ANP_W
414068	414069	GRNCO_PN 400.00	GRNCO_CH 400.00	L1	KURNOOL2_S	KURNOOL2_S
414071	414072	RVSP_L_ANP 400.00	RVSP684_ATP 400.00	L1	ANP_W	ANP_S
422025	422111	NIRMAL 220.00	NIRMAL_NEW 220.00	M3	TELANGANA	TELANGANA
422036	422111	JAGTYALA 220.00	NIRMAL_NEW 220.00	M1	TELANGANA	TELANGANA
441905	446214	VELLORE 110.00	SATHAMADURAI110.00	1	TAMILNADU	TAMILNADU
441908	446214	ANAICUT 110.00	SATHAMADURAI110.00	1	TAMILNADU	TAMILNADU
441912	446214	KILPALLI 110.00	SATHAMADURAI110.00	1	TAMILNADU	TAMILNADU
441913	446214	SATHAMADURAI110.00	SATHAMADURAI110.00	1	TAMILNADU	TAMILNADU
446214	446215	SATHAMADURAI110.00	TECHNOEHT 110.00	1	TAMILNADU	TAMILNADU

10. In the 134th 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 63rd & 64th COMSR meeting SRLDC informed that a provision in the Communication outage equipment portal is provided for entry of any new elements added in the grid. It was informed that data for the substation and elements are being taken from SPOORTHI Portal.
12. In the 138th 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 140th 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 June-26.**

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

✚ **Respective SLDCs/TRANSCOs and SRLDC to monitor any 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 3rd day of the succeeding month) to SRPC as per the formats, circulated vide SRPC letter dated 09 August 2021:

Islanding Scheme	Constituents
Hyderabad (Ramagundam) IS	TGTRANSCO, SLDC-TGTRANSCO, TGGENCO, PGCIL (SR-I), NTPC-Ramagundam
Chennai IS	TANTRANSCO, SLDC-TANTRANSCO, PGCIL (SR- II)
Neyveli IS	TANTRANSCO, SLDC-TANTRANSCO, PGCIL (SR- II), PED, NLCIL, NNPTPS, KSEBL
Kudankulam IS	TANTRANSCO, SLDC-TANTRANSCO, PGCIL (SR- II), KSEBL
Visakhapatnam (Simhadri) IS	APTRANSCO, SLDC-APTRANSCO, APGENCO, PGCIL (SR-I), NTPC-Simhadri
Bengaluru IS	KPCL, KPTCL, PGCIL (SR-I), PGCIL (SR-II), UPCL, NTPC-Kudgi, NPCIL-Kaiga
Vijayawada IS	APTRANSCO, SLDC-APTRANSCO, APGENCO, PGCIL (SR-I)

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

11. Ensuring Readiness of Islanding Schemes

1. 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

2. 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 133rd 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 physical setting of test points in the relay display had been verified and that testing would be completed during LC.

- In the 134th PCSC meeting KSEBL confirmed that AUFR testing verification was completed.

✚ 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.

12. Review of SR-Islanding Schemes

1. Due to the variation in generation and load growth in the already designed Islanding Schemes, the Annual Review of SR Islanding Schemes is being undertaken every year.
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 st Review	2 nd Review	3 rd Review	
1	Hyderabad	11.06.2025	25.09.2025	17.02.2026	27.07.2026
2	Bangalore	11.06.2025	09.12.2025	17.02.2026	27.07.2026
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	-----	27.07.2026
7	Kudankulam	15.07.2025	16.12.2025	-----	29.07.2026

✚ APTRANSCO, TANTRANSCO, TGTRANSCO, KSEBL, KPTCL, PED & SRLDC to update the status of implementation of Reviewed IS.

13. 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
RPCs (Regional Power Committee)	<i>Superintending Engineer</i> (nominated by Member Secretary, RPC)	Preparation, coordination, and periodic review of Islanding Schemes
RLDCs (Regional Load Despatch Centres)	<i>General Manager & above</i>	Coordinating Nodal Officer for region; monitor vital parameters of schemes at SCADA; recommend PMUs/ communication upgrades; certify healthiness of systems
LDCs (State Load Despatch Centres)	<i>Chief Engineer & 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.
GENCOs (Generating Companies)	<i>General Manager / Chief Engineer & above</i>	Implement schemes at generation end; provide data for study/review; ensure healthiness of generating units, relays, communication; submit monthly certification
STUs / PGCIL (Transmission Utilities)	<i>General Manager / Chief Engineer & above</i>	Implement schemes at transmission end; ensure healthiness of substations, lines, relays, communication; provide data for review; monthly certification.
DISCOMs (Distribution Companies)	<i>General Manager / Chief Engineer & 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 Scheme	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	✓		

✓ -- Furnished

✗ -- Not Furnished

NA- Not Applicable

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

14. 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 138th 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.**

15. 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.**

16. Certificate for Healthiness of Batteries

- (i) As per the MoP direction, given in pursuant to recommendations of the Enquiry Committee (NEW grid disturbance on 30th & 31st 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 7th 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 **June 2026**.

17. 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 31st 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* (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

^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.**

18. 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 is finalized and circulated vide SRPC Letter dated 17.04.2026 enclosed at **Annexure-19** for kind implementation.
4. The OVR gradings as applicable to the respective system shall be implemented by the Constituent/ Utility concerned **with immediate effect**. Utilities concerned are requested to confirm implementation of new OVR gradings by filling the below form, latest by **30.04.2026**.
5. In this regard, it may be noted that the concerned utility 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 grading's is received from KSEBL, APTRANSCO, TGTRANSCO, JSWEL, KPCL, PGCIL SR-II & NLCIL only 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

19. Submission of Static IPv4 Addresses for Whitelisting – Access to SRLDC Web Applications

In line with the deliberations held during the 138th 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

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. 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.

20. Third Party Protection Audit of Stations due to severe Grid Occurrences

As per the clause 15(3) of IEGC regulations 2023

Quote

“After analysis of any event, each RPC shall identify a list of substations / and generating stations where third-party protection audit is required to be carried out and accordingly advise the respective users to complete third party audit within three months.”

Accordingly In line with the IEGC regulations considering severe Grid occurrences affecting the stability of Grid the following stations are recommended for Third party Protection Audit of substations through External agency and are requested to submit the Report within **90 days**.

Proposed for third party protection audit

S.No	Name of station	Voltage Level	Utility	Remarks
1	Renigunta Sub Station	220 kV	APTRANSCO	Grid occurrences with Protection Issues observed in 144 th PCSC Meeting which

				lead to Equipment failure, Relay failures, Relay Maloperations in the downstream network.
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✚ PCSC may recommend the above station for Third Party Protection Audit

As per the deliberations of 144th PCSC Meeting the Following stations need to complete their Third Party Protection Audit and Submit report to SRPC by 90 days (**i.e. by October-26**)

S.No	Name of station	Voltage Level	Utility	Remarks
1	Koppal Pooling Station	400kV	Indigrid	Frequent Grid occurrences with Protection Issues observed in 141 st , 142 nd & 143 rd PCSC Meeting
2	Kalpakka	400kV	APTRANSCO	Frequent Trippings of NTPC-Simhadri, Kalpakka lines affecting Generation and Protection related issues of AR operation etc observed.
3	Kemar	220kV	KPTCL	Frequent Tripping with unwanted protection operations leading to Generation loss of 400kV UPCL. In 143 rd PCSC meeting due to incorrect operation of Kemar 600 MW Generation loss is seen.

21. High Short Circuit Levels in 220kV & above substations in SR -region

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

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

Bus Number	Name	Utility	Unit	Current	Angle	Remarks
412021	[TALLAPLLI 220.00]	APTRANSCO	AMP	40884.3	-133.36	
412025	[VTS 220.00]	APGENCO	AMP	47420.2	-130.4	
412038	[NUNNA 220.00]	APTRANSCO	AMP	40187.5	-130.2	
414010	[KURNOOL4 400.00]	APTRANSCO	AMP	54271.1	-130.82	
414013	[VTS-IV 400.00]	APGENCO	AMP	40649.2	-128.62	
414021	[SATENAPALI4 400.00]	APTRANSCO	AMP	40440.5	-128.74	
414029	[NELLORE-AP4 400.00]	APTRANSCO	AMP	59663	-128.39	
414030	[SDSTPS 400.00]	APGENCO	AMP	45455.2	-128.15	Equipment Rating 40kA

414058	[SEIL-P2_AP 400.00]	SEIL	AMP	41888	-128.1	
414060	[GREENCO_CPSS400.00]	GREENKO	AMP	48684.1	-132.56	Equipment Rating 63kA
414064	[GREENCO_PSP 400.00]	GREENKO	AMP	44470.6	-133.47	Equipment Rating 63kA
422003	[GHANAPUR 220.00]	TGTRANSCO	AMP	41750.4	-132.08	Bus-split operation at Moulali is being planned to reduce the short-circuit levels at 220 kV Ghanapur and 220 kV Malkaram substations
422023	[BPD 220KV SS220.00]	TGTRANSCO	AMP	42323.5	-129.94	
422024	[MALKARAM 220.00]	TGTRANSCO	AMP	49612.7	-130.91	
422031	[MMP 220 BUS 220.00]	TGTRANSCO	AMP	46976.1	-131.47	
422037	[HIAL 220.00]	TGTRANSCO	AMP	42270.9	-131.58	
422144	[RAIDURG 220.00]	TGTRANSCO	AMP	40562.3	-131.36	
424006	[MAMIDIPALLI 400.00]	TGTRANSCO	AMP	47107.4	-129.26	
424019	[DINDI 400.00]	TGTRANSCO	AMP	44445.5	-130.42	
424022	[MAHES-TS 400.00]	TGTRANSCO	AMP	66567.5	-127.77	bus sectionalization at the 400 kV Maheshwaram substation has been planned and approved with a view to reducing the fault levels at the station
860090	[ZSWSH_860090400.00]	TGTRANSCO	AMP	44445.5	-130.42	
424002	[RSTPS NTPC 400.00]	NTPC	AMP	41549.8	-128.26	
424043	[RSPTS_FSP 400.00]	NTPC	AMP	41549.8	-128.26	
434006	[RAICHUR TPS 400.00]	KPCL	AMP	42740.9	-127.58	Equipment Rating 63kA
442015	[BASINBRIDGE 230.00]	TANTRANSCO	AMP	43886.8	-134.97	Equipment Rating 40kA
442016	[CHECKN42 230.00]	TANTRANSCO	AMP	40400.7	-126.22	Out of 11 bays, 6 bays having 50 kA and 5 bays having 40 kA
442038	[KOYAMBEDU 230.00]	TANTRANSCO	AMP	41290.9	-134.65	Out of 7 bays, 5 bays having 50 kA and 2 bays having 40 kA
442076	[SPBUDUR2 230.00]	TANTRANSCO	AMP	46918.9	-136.14	All bays having 50 kA
442082	[TARAMANI 230.00]	TANTRANSCO	AMP	42229.5	-134.79	All bays having 50 kA
442083	[TONDIARPET 230.00]	TANTRANSCO	AMP	41807.6	-134.96	All bays having 50 kA
442119	[KOYCMRL 230.00]	TANTRANSCO	AMP	40095.6	-134.62	Out of 8 bays, 1 bay having 50 kA and the

						remaining bays having 40 kA
442128	[ALDRCMRL 230.00]	TANTRANSCO	AMP	40926.1	-134.47	All bays having 50 kA
442129	[GUINDY 230.00]	TANTRANSCO	AMP	42229.6	-134.52	All bays having 50 kA
442151	[RAPURAM 230.00]	TANTRANSCO	AMP	41250.3	-134.59	All bays having 50 kA
442216	[PULIYANTHOP 230.00]	TANTRANSCO	AMP	44001.7	-134.98	All bays having 50 kA
414001	[GOOTY 400.00]	APTRANSCO	AMP	41885.5	-131.18	
414003	[NELLORE-PG 400.00]	PGCIL SR-I	AMP	59663	-128.39	
414004	[CHINAKMPALLI400.00]	PGCIL SR-I	AMP	45138.7	-131.89	
414006	[CNP-FSC2 400.00]	PGCIL SR-I	AMP	45138.7	-131.89	
414023	[NELLORE-PS 400.00]	PGCIL SR-I	AMP	58106.5	-128.22	
414031	[KURNOOL-PG 400.00]	PGCIL SR-I	AMP	58351.4	-131.2	
414032	[GTYNLM-FSC 400.00]	PGCIL SR-I	AMP	41885.5	-131.18	
414033	[GTYSMN-FSC 400.00]	PGCIL SR-I	AMP	41885.5	-131.18	
414052	[CUDDAPA GIS 400.00]	PGCIL SR-I	AMP	45138.7	-131.89	
424003	[GHANAPUR 400.00]	PGCIL SR-I	AMP	40253.6	-130.05	
424004	[KHAMMAM 400.00]	PGCIL SR-I	AMP	41958.6	-129.24	
424021	[MHSWRM-PG 400.00]	PGCIL SR-I	AMP	66960.5	-127.73	
434008	[TUMKUR 400.00]	PGCIL SR-II	AMP	41218.7	-132.67	
434009	[RAICHUR-PG 400.00]	PGCIL SR-II	AMP	44929.3	-128.03	
444005	[TIRUNELVELLI400.00]	PGCIL SR-II	AMP	45245.2	-126.43	
414012	[SIMHADRI400.00]	NTPC	AMP	38197.1	-124.24	

Updates:

S.No.	Utility	Update
1.	APTRANSCO	Detailed short-circuit studies to be carried out for these substations and the findings, along with the proposed mitigation measures, to be submitted to SRPC.
2.	APGENCO	APGENCO to discuss with the Power System Wing of APTRANSCO and to furnish mitigation measures.
3.	TGTRANSCO	<i>As updated above</i>
4.	KPCL	<i>At 400 kV Raichur SS the equipment rating has been upgraded from 43 kA to 63 kA.</i>
5.	TANTRANSCO	<i>As updated above</i>
6.	NTPC, RSTPS	NTPC, RSTPS to furnish the details of the proposed mitigation measures.

7.	PGCIL-SR-I	PGCIL SR-I informed that the necessary measures would be implemented in accordance with the recommendations of CTUIL.
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- ✚ ***SRLDC is requested to furnish the details of short-circuit levels at any other stations, apart from those listed above, where the short-circuit levels are exceeding the station fault level capability, and submit the updated list by 02.08.2026.***
- ✚ ***The utilities of the above-mentioned stations are requested to verify the station connectivity details as indicated in the case file furnished by SRLDC in Annexure-21 and furnish the remedial actions taken/planned for mitigating the short-circuit levels at their respective stations.***

22. Repeated through-faults leading to failure of ICT in SR -Review/Study

The 500 MVA, 400/220 kV ICT-I at PGCIL Somanahalli Substation failed on 31.05.2026 following repeated downstream faults in the 220 kV KPTCL network. During the OCC deliberations, it was observed that the ICT had experienced multiple downstream fault incidents, including prolonged fault-current feeding and repeated through-fault stresses. The failure highlighted the need to examine the protection coordination, fault-clearing times, bus-section operating practices, test-charging procedures and the adequacy of protection arrangements for ICTs directly connected to downstream networks owned by other utilities.

The OCC Forum decided that the matter may be placed before the **Protection Sub-Committee (PSC) of SRPC** for detailed technical examination and deliberation. The Committee may examine the occurrence of similar incidents across the Southern Region, including the Somanahalli ICT failure, Madurai ICT Failure, Nunna ICT Failure.

PGCIL, other transmission utilities were advised to present similar cases involving ICTs directly connected to downstream networks owned by other utilities before the Protection Sub-Committee (PSC) of SRPC for detailed technical deliberation and to identify suitable protection coordination and system improvement measures to avoid recurrence of such incidents.

- ✚ ***PGCIL and other transmission utilities to furnish details of similar incidents involving ICTs directly connected to downstream networks owned by other utilities to SRPC by 02.08.2026.***
- ✚ ***PGCIL SR-I &II are requested to furnish the complete details of ICT Failure including the DR's , EL's and Testing reports of ICT to the PCSC Forum by 02.08.2026***

23. SRLDC Agenda item - Non-Compliance of Under-Frequency Protection Settings of GREENKO PSP Generating Units

Reference is invited to the deliberations held during the 143rd Protection Coordination Sub-Committee (PCSC) Meeting held on 08-06-2026 regarding the review and compliance of under-frequency and over-frequency protection settings of Pumped Storage Plants (PSPs) in line with the IEGC Regulations, CEA (Technical Standards for Connectivity to the Grid) Regulations, and the AUFLS Scheme.

During the 143rd PCSC meeting, GREENKO informed the forum that the under-frequency protection setting for units operating in generation mode was 48.0 Hz and the over-frequency protection setting was 52.0 Hz with a time delay of 1 second, while confirming that the under-frequency protection setting for units operating in pumping mode had been revised to 49.5 Hz for 5sec. Based on the information furnished by GREENKO, the Committee deliberated that the revised under-frequency setting of 49.5 Hz with a near-instantaneous time delay of 50–75 ms was applicable only to pumping mode, whereas the protection settings for units operating in generation mode should comply with the provisions of the CEA (Technical Standards for Connectivity to the Grid) Regulations, which require generating units to remain connected to the grid for system frequencies down to 47.5 Hz and necessary protection modification is to be done in consultation with their OEM. Accordingly, GREENKO informed the forum that the generation-mode protection settings would be reviewed with the OEM and modified to ensure compliance with the applicable regulations.

However, during the subsequent event on 25.07.2026 at 19:20 hrs, when the system frequency declined to approximately 49.5 Hz, all five generating units of GREENKO PSP operating in generation mode tripped simultaneously on under-frequency protection, resulting in a sudden generation loss of approximately 1200 MW. The loss of generation further aggravated the disturbance, causing the system frequency to decline to around 49.42 Hz.

The above event indicates that the actual under-frequency protection setting implemented for units operating in generation mode was around 49.5 Hz, which appears to be inconsistent with the protection settings informed by GREENKO during the 143rd PCSC meeting. Hence, GREENKO is requested to confirm the implemented under-frequency protection settings in compliance with the CEA connectivity standards.

 ***M/s GREENKO to update the status of U/f and O/f settings***

24. 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 25th of the preceding month to SRPC.

25. Date & Venue of next PCSC meeting

Date & Venue of 144th PCSC meeting would be informed in due course.
