सत्यमेव जयते
भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति
Eastern Regional Power Committee
14, गोल्फ क्लब रोड, टालीगंज, कोलकाता-700033
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सं /NO. ERPC/EE/OPERATION/2025/ 2164 **दिनांक/DATE: 28.03.2025**

सेवा में /To
संलग्न सूची के अनुसार /As per list enclosed.

विषय :18 मार्च 2025 (मंगलवार) वस्तुतः माइक्रोसॉफ्ट टीम्स प्लेटफॉर्म पर आयोजित 225वीं OCC बैठक का कार्यवृत्त - संबंध में।

Sub: Minutes of 225th OCC Meeting held on 18.03.2025 (Tuesday) virtually on Microsoft Teams platform – reg

महोदय/महोदया,
Sir(s)/Madam,

कृपया अपनी जानकारी और आवश्यक कार्रवाई के लिए **18 मार्च 2025 (मंगलवार)** को **वस्तुतः माइक्रोसॉफ्ट टीम्स प्लेटफॉर्म पर** 10:30 बजे आयोजित **225वीं ओसीसी बैठक** के **संलग्न कार्यवृत्त** देखें। यह ईआरपीसी वेबसाइट (**www.erpc.gov.in**) पर भी उपलब्ध है।
Please find enclosed **Minutes of 225th OCC Meeting** held on **18.03.2025 (Tuesday) virtually** on **Microsoft Teams platform** at 10:30 hrs for your **kind information** and **necessary action**. The same is also available at ERPC website (**www.erpc.gov.in**).

टिप्पणियाँ, यदि कोई हों, कृपया यथाशीघ्र इस कार्यालय को अग्रेषित करें।
Observations, if any, may please be forwarded to this office at the earliest.

इसे सदस्य सचिव के अनुमोदन से जारी किया जाता है।
This issues with the approval of Member Secretary.

भवदीय /Yours faithfully

28/03/2025

(S.Kejriwal)
SE(Operation)
एसई (ऑपरेशन)

LIST OF ADDRESSES:

1. CHIEF ENGINEER (TRANS., O&M), BSPTCL, PATNA, (FAX NO. 0612-2504557/2504937)
2. CHIEF ENGINEER (System Operation), BSPTCL, PATNA, (FAX NO. 0612-2504557/2504937)
3. CHIEF ENGINEER, TRANSMISSION (O&M), JUSNL, RANCHI (FAX NO.-0651-2490486/2490863)
4. CHIEF ENGINEER, TVNL, DORANDA, RANCHI - 834102 (FAX NO. 06544-225414)
5. CHIEF LOAD DISPATCHER, SLDC, OPTCL, BHUBANESWAR (FAX NO.0674-2748509)
6. CHIEF GENERAL MANAGER (O&M), OPTCL, BHUBANESWAR
7. SR. GENERAL MANAGER (PP), GRIDCO, JANPATH, BHUBANESWAR (0674-2547180)
8. DIRECTOR (OPERATION), IB TPS, AT/PO BANHARPALI, JHARSUGUDA, (FAX NO. 06645-222225/222230)
9. GENERAL MANAGER, TTPS, TALCHER, (FAX NO. 06760-243212)
10. SR. GENERAL MANAGER (ELECTRICAL), OHPC LTD., BHUBANESWAR, (FAX NO.0674-2542102)
11. CHIEF ENGINEER, CLD, WBSETCL, HOWRAH, (FAX NO. 033-26886232)
12. CHIEF ENGINEER, CENTRAL PLANNING WING, WBSETCL, SALT LAKE (FAX NO.: 033-23591955)
13. CHIEF ENGINEER (PTR), WBSEDCL, SALT LAKE, KOLKATA (FAX:033-23345862)
14. CHIEF GENERAL MANAGER (OS), WBPDCL, KOLKATA-98 (FAX NO. 033-23393286/2335-0516)
15. GM, KOLAGHAT TPS, WBPDCL, KOLAGHAT (FAX NO.03228231280)
16. DGM (OPERATION), DPL, DURGAPUR, (FAX NO. 0343-2555052)
17. GM (SYS OPERATION), CESC, CHOWRINGHEE SQUARE, KOLKATA (FAX NO.033-22253756/22129871)
18. CHIEF ENGINEER, SLDC, DVC, HOWRAH (FAX NO. 033-2688-5094)
19. ADDL.CHIEF ENGINEER, SLDC, POWER DEPT., GOVT. OF SIKKIM, GANGTOK, (FAX NO. 03592-228186/201148/202284)
20. EXECUTIVE DIRECTOR, ERLDC, POSOCO, KOLKATA, (FAX NO. 033-2423-5809)
21. GENERAL MANAGER, FSTPP, NTPC, FARAKKA, (FAX NO. 03512-224214/226085/226124)
22. GENERAL MANAGER , KhSTPP, NTPC, KAHALGAON (FAX NO.06429-226082)
23. GENERAL MANAGER, TSTPP, NTPC, TALCHER, (FAX NO. 06760-249053)
24. GENERAL MANAGER (OS), POWERGRID, ER-II, KOLKATA(Fax no: 033-23572827)
25. GENERAL MANAGER , POWERGRID, ER-I, PATNA, (FAX NO.0612-2531192)
26. GENERAL MANAGER (O&M), POWERGRID, ODISHA PROJECTS, SAHID NAGAR, BHUBANESWAR – 751 007
27. EXECUTIVE DIRECTOR (O&M), NHPC, FARIDABAD (FAX No.:0129-2272413)

28. GENERAL MANAGER, TEESTA –V POWER STATION, NHPC, SINGTAM, EAST SIKKIM (FAX 03592 - 247377)
29. CHIEF ENGINEER, RANGIT POWER STATION, NHPC, P.O. RANGIT NAGAR, SOUTH SIKKIM (FAX NO.03595-259268)
30. SENIOR VICE PRESIDENT, PTC LTD., NBCC TOWERS, 15-BHIKAJI KAMA PLACE, NEW DELHI- 110066 (FAX NO. 011-41659504)
31. PLANT HEAD, ADHUNIK POWER & NATUARAL RESOURCES, JHARKHAND(FAX NO.: 0657-6628440)
32. AGM (OPERATION), MAITHON POWER LTD, DHANBAD (FAX: 08860004758)
33. VICE PRESIDENT(POWER), VEDANTA LIMITED, BHUBANESWAR- 751023 (FAX NO 0674-2302920)
34. CHIEF ELECTRICAL ENGINEER, EASTERN RAILWAY, KOLKATA-700 001 (FAX NO.: 033-22300446)
35. CHIEF ELECTRICAL ENGINEER, SOUTH EASTERN RAILWAY, KOLKATA-43 (FAX: 033-24391566)
36. DEPUTY DIRECTOR, EASTERN RPSO, SALT LAKE, KOLKATA- (FAX NO:033-23217075)
37. GENERAL MANAGER (O&M), NHPC LTD, FARIDABAD, FAX: 0129-2272413
38. ASSOCIATE VICE PRESIDENT, GMR KEL, BHUBANESWAR-751007. (FAX NO: 0674-2572794)
39. GM (SO & COMML), NTPC VVNL, NEW DELHI-110033. Fax:011-24367021
40. SHRI D. P. BHAGAVA, CHIEF CONSULTANT (O&M), TEESTA URJA LIMITED, NEW DELHI-110 001 (FAX:011-46529744)
41. SHRI BRAJESH KUMAR PANDE, PLANT HEAD, JITPL. (FAX:011-26139256-65)
42. DIRECTOR (NPC), CEA, NRPC BUILDING, KATWARIA SARAI, NEW DELHI- 110016
43. VP (OS), HALDIA ENERGY LIMITED, BARIK BHAWAN, KOKATA-700072, FAX: 033-22360955
44. GENERAL MANAGER(O&M),BRBCL,NABINAGAR,BIHAR-824003,FAX-06332- 233026

CC:

Chief Engineer, OPM, CEA	Chief Engineer, NPC, CEA	ASSISTANT SECRETARY,ERPC

पतों की सूची:

1. मुख्य अभियंता (ट्रांस., ओ एंड एम), बीएसपीटीसीएल, पटना, (फैक्स नं. 0612- 2504557/2504937)।
2. मुख्य अभियंता (सिस्टम ऑपरेशन), बीएसपीटीसीएल, पटना, (फैक्स नं. 0612- 2504557/2504937)।
3. मुख्य अभियंता, ट्रांसमिशन (ओ एंड एम), जेयूएसएनएल, रांची (फैक्स नं.-0651- 2490486/2490863)।
4. मुख्य अभियंता, टीवीएनएल, डोरंडा, रांची - 834102 (फैक्स नंबर 06544-225414)
5. मुख्य लोड डिस्पैचर, एसएलडीसी, ओपीटीसीएल, भुवनेश्वर (फैक्स नंबर 0674-2748509)
6. मुख्य महाप्रबंधक (ओ एंड एम), ओपीटीसीएल, भुवनेश्वर
7. एसआर. महाप्रबंधक (पीपी), ग्रिडको, जनपथ, भुवनेश्वर (0674-2547180)
8. निदेशक (संचालन), आईबी टीपीएस, एटी/पीओ बनहरपाली, झारसुगुड़ा, (फैक्स नंबर 06645-222225/222230)
9. महाप्रबंधक, टीटीपीएस, तालचेर, (फैक्स नंबर 06760-243212)
10. एसआर. महाप्रबंधक (विद्युत), ओएचपीसी लिमिटेड, भुवनेश्वर, (फैक्स नंबर 0674-2542102)
11. मुख्य अभियंता, सीएलडी, डब्ल्यूबीएसईटीसीएल, हावड़ा, (फैक्स नंबर 033-26886232)।
12. मुख्य अभियंता, केंद्रीय योजना विंग, डब्ल्यूबीएसईटीसीएल, साल्ट लेक (फैक्स नंबर: 033-23591955);
13. मुख्य अभियंता (पीटीआर), डब्ल्यूबीएसईडीसीएल, साल्ट लेक, कोलकाता (फैक्स:033-23345862)।
14. मुख्य महाप्रबंधक (ओएस), डब्ल्यूबीपीडीसीएल, कोलकाता-98 (फैक्स नंबर 033- 23393286/2335-0516)।
15. जीएम, कोलाघाट टीपीएस, डब्ल्यूबीपीडीसीएल, कोलाघाट (फैक्स नंबर 03228231280)
16. डीजीएम (ऑपरेशंस), डीपीएल, दुर्गापुर, (फैक्स नंबर 0343-2555052)
17. जीएम (एसवाईएस ऑपरेशन), सीईएससी, चौरंगी स्क्वायर, कोलकाता (फैक्स नंबर 033- 22253756/22129871)।
18. मुख्य अभियंता, एसएलडीसी, डीवीसी, हावड़ा (फैक्स नंबर 033-2688-5094)।
19. अपर मुख्य अभियंता, एसएलडीसी, विद्युत विभाग, शासन। सिक्किम, गंगटोक, (फैक्स नंबर 03592-228186/201148/202284)
20. कार्यकारी निदेशक, ईआरएलडीसी, पोसोको, कोलकाता, (फैक्स नंबर 033-2423-5809)
21. महाप्रबंधक, एफएसटीपीपी, एनटीपीसी, फरक्का, (फैक्स नंबर 03512- 224214/226085/226124)
22. महाप्रबंधक, खएसटीपीपी, एनटीपीसी, कहलगांव (फैक्स नंबर 06429-226082)
23. महाप्रबंधक, टीएसटीपीपी, एनटीपीसी, तालचेर, (फैक्स नंबर 06760-249053)
24. महाप्रबंधक (ओएस), पावरग्रिड, ईआर-II, कोलकाता (फैक्स नंबर: 033-23572827)
25. महाप्रबंधक, पावरग्रिड, ईआर-I, पटना, (फैक्स नं.0612-2531192)
26. महाप्रबंधक (ओ एंड एम), पावरग्रिड, ओडिशा प्रोजेक्ट्स, साहिद नगर, भुवनेश्वर - 751 007
27. कार्यकारी निदेशक (ओ एंड एम), एनएचपीसी, फरीदाबाद (फैक्स नंबर:0129-2272413)
28. महाप्रबंधक, तीस्ता-वी पावर स्टेशन, एनएचपीसी, सिंगतम, पूर्वी सिक्किम (फैक्स 03592 - 247377)।
29. मुख्य अभियंता, रंगीत पावर स्टेशन, एनएचपीसी, पी.ओ. रंगीत नगर, दक्षिण सिक्किम (फैक्स नंबर 03595-259268)
30. वरिष्ठ उपाध्यक्ष, पीटीसी लिमिटेड, एनबीसीसी टावर्स, 15-भीकाजी काम प्लेस, नई दिल्ली-110066 (फैक्स नंबर 011-41659504)।
31. प्लांट हेड, आधुनिक पावर एवं नेचुरल रिसोर्सेज, झारखंड (फैक्स नं.: 0657-6628440)।
32. एजीएम (ऑपरेशंस), मैथन पावर लिमिटेड।

33. उपाध्यक्ष (विद्युत), वेदांता लिमिटेड, भुवनेश्वर- 751023 (फैक्स नंबर 0674-2302920)।

34. मुख्य विद्युत अभियंता, पूर्वी रेलवे, कोलकाता-700 001 (फैक्स नं.: 033-22300446)

35. मुख्य विद्युत अभियंता, दक्षिण पूर्व रेलवे, कोलकाता-43 (फैक्स: 033-24391566)।

36. उप निदेशक, पूर्वी आरपीएसओ, साल्ट लेक, कोलकाता- (फैक्स नं: 033- 23217075)

37. महाप्रबंधक (ओ एंड एम), एनएचपीसी लिमिटेड, फरीदाबाद, फैक्स: 0129-2272413

38. एसोसिएट वाइस प्रेसिडेंट, जीएमआर केईएल, भुवनेश्वर-751007। (फैक्स नंबर: 0674-2572794)

39. जीएम (एसओ एवं सीओएमएल), एनटीपीसी वीवीएनएल, नई दिल्ली-110033। फैक्स:011-24367021

40. श्री डी. पी. भागवा, मुख्य सलाहकार (ओ एंड एम), टेस्टा ऊर्जा लिमिटेड, नई दिल्ली-110 001 (फैक्स:011-46529744)।

41. श्री ब्रजेश कुमार पांडे, प्लांट हेड, जीतपीएल। (फैक्स:011-26139256-65)

42. निदेशक (एनपीसी), सीईए, एनआरपीसी बिल्डिंग, कटवारिया सराय, नई दिल्ली-110016

43. उपाध्यक्ष (ओएस), हल्दिया एनर्जी लिमिटेड, बारीक भवन, कोकाता-700072, फैक्स: 033-22360955

44. महाप्रबंधक (ओ एंड एम), बीआरबीसीएल, नबीनगर, बिहार-824003, फैक्स-06332- 233026

<u>सीसी:</u>

मुख्य अभियंता, ओपीएम, सीईए	मुख्य अभियंता, एनपीसी, सीईए	सहायक सचिव,ईआरपीसी

ईआरपीसी:: कोलकाता

MINUTES
OF
225th OCC MEETING

Date: 18.03.2025

Eastern Regional Power Committee

Contents

EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 225th OCC MEETING HELD ON 18.03.2025 (TUESDAY) AT 10:30 HRS (Virtual Mode)

Member Secretary, ERPC *chaired the* ***225th OCC*** *meeting. On welcoming all the participants, he outlined the performance of ER grid during* ***February -2025*** *and highlighted the following points:*

- *In* ***February-2025****, energy consumption of ER was* ***13357 MU*** *which is* ***2% more than February-2024.***
- *In* ***February-2025****, Peak demand met of ER was* ***24440 MW*** *which is* ***3.3% more*** *than* ***February-2024****.*
- *During* ***February-2025****,* ***75%*** *of time, the grid frequency was in IEGC Band (49.90Hz-50.05Hz).*
- *Thermal* ***PLF*** *of ER during* ***February-2025*** *was* ***85 %.***
- *Some thermal generating units were lauded for maintaining PLF more than* ***90%*** *during* ***February-2025*** *that are listed below:*

Utility	***Generating Stations***	***PLF %***
WBPDCL	*Bakreswar TPS*	*100*
	Santaldih TPS	*101*
	Bandel TPS	*94*
NTPC	*Darlipali STPS*	*100*
	Kahalgaon TPS	*95*
IPP	*Haldia TPP(HEL)*	*98*
	Maithon RB TPP(MPL)	*94*
	Mahadev Prasad STPP(APRNL)	*97*
	Derang TPP(JITPL)	*99*
CESC	*Budge Budge TPS*	*93*

- ***Coal stock position:***

Coal stock position (As on 12.03.2025) is as follows:

SL.	***Name of States/Power Stns.***	***% of Actual Stock vis-à-vis Normative Stock***
1.	*Jharkhand (TVNL)*	*125%*
2.	*Odisha/IBTPS*	*54%*
3.	*WBPDCL*	*33%(Min. Santaldih TPS -19 %, Max. Bandel TPS – 42 %)*

4.	*D.P.L. TPS*	*12%*
5.	*DVC*	*97%(Min. Mejia TPS-65%, Max Bokaro TPS `A-150%)*
6.	*NTPC*	*95% (Max.Farakka TPS-144% & Nabinagar STPP-159% & Min.Talcher STPS - 60%)*

❖ ***Transmission line (220 kV & above) commissioned during February-2025:***

✓ *LILO Portion (10.5 km) of 400KV-BARH-BAKHTIYARPUR(BH)-2 (BSPTCL) and 400KV-PATNA-BAKHTIYARPUR(BH)-2 (BSPTCL) first time charged on 01.02.2025.*

❖ *He further highlighted the following:*

✓ *As mandated in Clause 32.3(b) of IEGC 2023, RPC has been entrusted with finalizing LGBR(Load Generation Balance Report) of Eastern region in consultation with all stake holders. Generation planning has been carried out comprising tentative planned outage schedule and plant-wise generation targets.*
For planning of projected demand and corresponding availability, receipt of data is still awaited from Bihar.

✓ *North Karanpura Unit#3 has been synchronized and presently under trial operation. COD is expected soon.*

❖ ***ED,ERLDC** at the outset expressed concern on the impending challenges of reliable grid operation at the onset of upcoming crunch period.*

✓ *He urged for comprehensive resource adequacy planning by all ER states.*

✓ *He pointed out the key outcomes of Summer preparedness meeting convened last week to mitigate the expected challenges of crunch period in coordination with the states.*

✓ *A separate meeting was convened for ensuring reliable power supply in the intra-state network of West Bengal in presence of WB SLDC and STU(WB).*

✓ *Precautionary measures have also been taken i.r.o Odisha network in coordination with concerned SLDC*

✓ *Investigation of the root cause for grid disturbance at 765 kV Angul S/S should be carried out on priority and such events must be avoided in future.*

✓ *Upcoming Thermal units should declare COD at earliest to support the grid in crunch period.*

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 224th OCC Meeting held on 25th February 2025 physically at Kolkata

The minutes of 224th Operation Coordination Sub-Committee meeting held on 25.02.2025 was circulated vide letter dated 06.03.2025.

Members may confirm the minutes of 224th OCC meeting.

Deliberation in the meeting

Members confirmed the Minutes of 224th OCC meeting.

2. PART-B: ITEMS FOR DISCUSSION

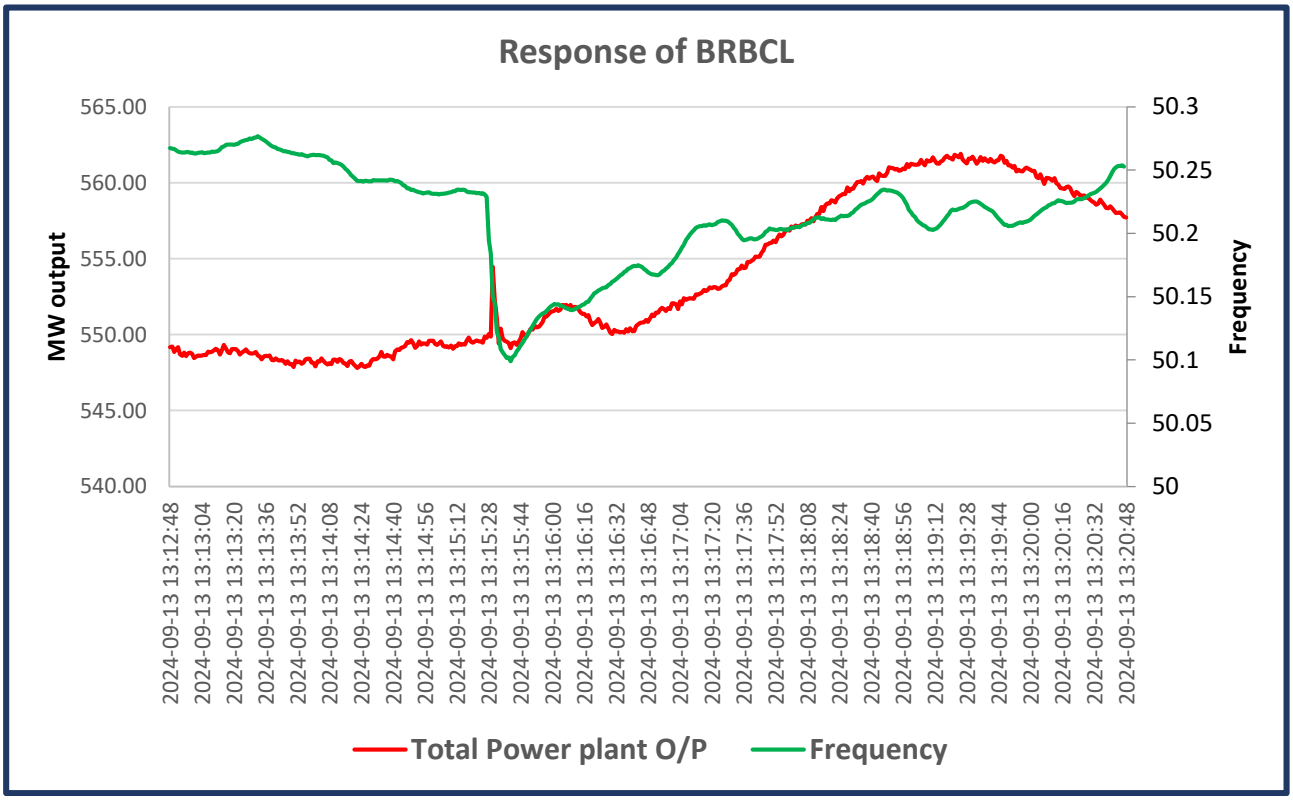
2.1 Review of Beta factor evaluation for FRP response: NTPC

Evaluation of Following cases for FRP response may be reviewed:

- When Unit is running near technical minimum and requirement of reducing load below technical minimum comes due to FRO. Example: BRBCL 13-09-2024 event, during this event the unit was running near technical minimum and as per FRO load had to be reduced, however units could not respond to the requirement and Beta factor was reduced to 0.41.
- Beta factor for month when no FRP event is identified: For providing frequency response the machine is run in throttled mode, which is a loss of energy and hence coal. The Beta factor and incentive concept is introduced to compensate generators for the loss incurred for continuously being ready for providing frequency response. Therefore, Beta factor for months when no FRP event is identified must be taken as average of previous months for calculation of incentive.

- BRBCL: 6th April 2024 and 10th May 2024.

S.No.	Particulars (loss event of around 1200 MW in Tamilnadu , Southern Region control areas on 23rd August 2024 at 12:34 hrs)	Dimension	BRBCL	
			RLDC SCADA Data	Generator High Resolution Data
1	Actual Net Interchange before the Event, PA (Import +ve / Export -ve)	MW	-487	-550
2	Actual Net Interchange after the Event, PB (Import +ve / Export -ve)	MW	-485	-552
3	Change in net interchange, PB-PA (2 - 1)	MW	2.0	-1.6
4	Generation Loss (+) / Load Throw off (-) during the Event, PL	MW	0.0	0.0
5	Control Area Response, ΔP=(PB-PA) – PL (3-4)	MW	2.0	-1.6
6	Frequency before the Event, fA	HZ	50.229	50.229
7	Frequency after the Event, fB	HZ	50.144	50.144
8	Change in Frequency, Δf=(fB-fA) (7-6)	HZ	-0.09	-0.09
9	Frequency Response Characteristic, ΔP/ Δf (5 / 8)	MW/Hz	-23	19
10	Frequency Response Obligation (FRO) of each control area	MW/Hz	46	46
11	Frequency Response Performance (FRP) (9/10)		-0.50	0.41
Consideration of FRP for computation of Average Monthly FRP, Beta 'ß'			0.00	0.41



			BRBCL		
S.No.	Particulars (Event-2: 4870 MW RE Gen Loss and 628 MW Load shedding at 11:24 hrs_06.04.2024)	Dimension	RLDC HDR Data	High Resolution Data (Status as provided by ERLDC)	High res data as per plant
1	Actual Net Interchange before the Event, PA (Import +ve / Export -ve)	MW	-894	DATA NOT RECEIVED	959
2	Actual Net Interchange after the Event, PB (Import +ve / Export -ve)	MW	-900		970
3	Change in net interchange, PB-PA (2 - 1)	MW	-5.8		11.2
4	Generation Loss (+) / Load Throw off (-) during the Event, PL	MW	0.0		0.0
5	Control Area Response, ΔP=(PB-PA) – PL (3-4)	MW	-5.8		11.2
6	Frequency before the Event, fA	HZ	50.033		50.033
7	Frequency after the Event, fB	HZ	49.766		49.766
8	Change in Frequency, Δf=(fB-fA) (7-6)	HZ	-0.27		-0.27
9	Frequency Response Characteristic, ΔP/ Δf (5 / 8)	MW/Hz	22		-42
10	Frequency Response Obligation (FRO) of each control area	MW/Hz	46		46
11	Frequency Response Performance (FRP) (9/10)		0.47		-0.90

S.No.	Particulars (Event-2: 1071 MW Gen Loss in Khedar(RGTPS) at 19:35 hrs_10.05.2024)	Dimension	RLDC SCADA Data	Generator High Resolution Data	Corrected Data
1	Actual Net Interchange before the Event, PA (Import +ve / Export -ve)	MW	-754	-947	-947
2	Actual Net Interchange after the Event, PB (Import +ve / Export -ve)	MW	-754	-939	-953
3	Change in net interchange, PB-PA (2 - 1)	MW	0.0	8	-5.9
4	Generation Loss (+) / Load Throw off (-) during the Event, PL	MW	0.0	0.0	0.0
5	Control Area Response, ΔP=(PB-PA) – PL (3-4)	MW	0.0	7.6	-5.9
6	Frequency before the Event, fA	HZ	49.986	49.986	49.986
7	Frequency after the Event, fB	HZ	49.941	49.941	49.941
8	Change in Frequency, Δf=(fB-fA) (7-6)	HZ	-0.04	-0.04	-0.04
9	Frequency Response Characteristic, ΔP/ Δf (5 / 8)	MW/Hz	0	-169	132
10	Frequency Response Obligation (FRO) of each control area	MW/Hz	30	30	30
11	Frequency Response Performance (FRP) (9/10)		0.00	-5.67	4.43
Consideration of FRP for computation of Average Monthly FRP, Beta 'ß'			0.00	0.00	1.00

NTPC may explain. ERLDC may update. Members may discuss.

Deliberation in the meeting

BRBCL submitted:

- ✓ *When grid frequency is high and schedule of the generating station is already near technical minimum, there is no or little scope for further reduction in load. Hence desired frequency response performance becomes difficult to achieve.*
- ✓ *In other instances, frequency response has been graded as poor due to non-receipt of data on time at ERLDC end.*
- ✓ *In absence of any frequency event in a particular month, the generating stations are being deprived of any incentive despite operating the units in throttle mode to provide desired frequency response.*

- ❖ *ERLDC apprised that the concern of Beta factor computation in the month when no frequency event is reported, has already been taken up by NLDC with Hon'ble CERC and subsequent actions will be in line with CERC's decision. It was submitted that as corrected data has been received from BRBCL long after occurrence of frequency events, SCADA data was considered in grading frequency response performance.*

OCC Decision

- *OCC agreed with the concern of BRBCL regarding further reduction in load near technical minimum*
- *OCC advised BRBCL to submit the requisite details of the event to ERPC for consideration.*
- *OCC advised ERLDC to follow-up with NLDC on the issue of Beta Factor computation in months when no frequency event is reported.*
- *OCC suggested that non-receipt of data against frequency event reported on 06.04.2025 and 10.05.2025 may be sorted mutually between BRBCL and ERLDC.BRBCL was thereby advised to regularly share high resolution data against each reportable frequency event with ERLDC on time (ideally within two days of the event) to facilitate accurate assessment of FRP.*

2.2 Request to furnish the data for preparation of LGBR 2025-26 of Eastern region – ERPC

As per the IEGC Clause **32.3**(**a**) & (**b**) issued by CERC on **29.05.2023**, *"*RPCs shall prepare and finalize the annual outage plan for the next financial year in respect of grid elements of their respective regional grid*", "RPCs shall prepare Load Generation Balance Report (LGBR) for the respective region based on the LGBR submitted by SLDCs for their respective states and the data submitted by the regional entity generating stations, inter-State transmission licensees and other entities directly connected to ISTS in such format as may be stipulated by the RPCs and shall prepare annual outage plan for generating units and transmission elements in their respective region after carrying out necessary system studies in order to ensure system security and resource adequacy."*

In this regard, Load Generation Balance Report (LGBR) for the year 2025-26 in respect of Eastern Region is to be finalized by September, 2024. The approved programme of planned maintenance in respect of Thermal and Hydro stations in the region, along with the estimated monthly generation programme, the estimated monthly energy requirement (MU) and

estimated monthly peak/off-peak demand (MW) for the year 2025-26 of each state / utility shall be the input for preparation of LGBR of Eastern Region for 2025-26.

To prepare the LGBR of Eastern Region, the following data/ information for the financial year 2025-26(April'2025 to March'2026) in respect of the constituents/ generators of Eastern Region is required:

State and Central Sector Generators/IPPs/CPPs/SLDCs/Utilities

i) The Unit-wise and Station-wise monthly energy generation proposed from existing units during 2025-26 (thermal, hydro and RES).
ii) Annual maintenance programme for each of the generating units (thermal, hydro and RES)
iii) Generating units under R&M/ long outage indicating date of outage and reasons of outage and expected date of return (thermal and hydro both).
iv) Partial and forced outage figures (in %) of generating units and auxiliary power consumption for the last 3 years.
v) Month-wise peak/off-peak demand (MW) – restricted and unrestricted.
vi) Month-wise energy requirement (in MU) – restricted and unrestricted.
vii) Month-wise and source-wise power purchase and sale plan (both MU & MW).
viii) Schedule of commissioning of new generating units during 2025-26 and unit-wise monthly generation programme (in MU) upon COD.
ix) Allocation of power from new generating units.

ISTS/STU/Transmission licenses in the states and Central Sector

i) Monthly and annual planned outage of transmission system (Transmission lines 220kV and above / ICTs / Reactors/ other elements (TCSC, SC etc.)).

LGBR data for West Bengal, Bihar and Sikkim have not been received.
It is therefore requested to provide the above information (as applicable), at earliest, for compilation of data and preparation of draft **LGBR of ER** for the year **2025-26.**

Concerned constituents may update. Members may discuss.

Deliberation in the meeting

- *Data for generation target and schedule has been received from all generators and have been furnished to CEA.*
- *LGBR data for demand, power availability, energy requirement and availability have not been submitted by Bihar. Jharkhand has submitted provisional data without the inclusion of Jojobera TPS. Other states of Eastern Region have submitted the data.*
- *Representatives from Bihar and Jharkhand have assured that LGBR data will be shared within 2 days.*
- *Some generators had requested for changes in their submission of generation schedule data. Since the data has already been submitted to CEA, and any discrepancy may be taken up with CEA.*

OCC Decision

- ✓ *OCC advised Bihar to send the complete LGBR data for demand, power availability, energy requirement and availability.*
- ✓ *Jharkhand was advised to send the LGBR data with the inclusion of generation from Jojobera TPS.*
- ✓ *All the states were requested to furnish complete LGBR data along with month wise quantum of bi-lateral tie up / Banking of power.*

2.3 Bus split operationalization at NTPC Kahalgaon: ERPC

As decided in 219th OCC Meeting, a committee comprising of members from ERPC and ERLDC visited NTPC Kahalgaon on 17-10-2024 to assess the status of Bus splitting at 400 kV level and way forward for operationalization of 400 KV Bus sectionalizer.

Following works need to be done to complete the installation of ICT 3 & 4:

1. Determination of underground cable conduit path for 400/132 kV ICT-3, 4 and 5 allocated for stage 2 supply.
2. Excavating the existing cable and relaying from Stage-1 132kV to New Stage-2 132 kV switchyard, where ICT 3 & 4 will be connected.
3. Laying of additional 22.8 ckt. km control cable for STs.
4. Jumpering of ICTs in 132kV & 400kV level.
5. Bay equipment testing.

- NTPC apprised that determination of underground power cables is one of the major challenges to proceed further with laying of cables between two 132kV switchyards. The tentative time to complete the ICT commissioning is **25th May 2025**.
- Meanwhile in view of increased fault level of NTPC Kahalgaon and to facilitate interim arrangement of standby ISTS connectivity to Godda Thermal Power project of M/s Adani Power (Jharkhand) Ltd. (APJL) with Indian grid, Bus splitting at 400KV Kahalgaon needs to be done on priority.

As per **224th OCC Deliberation**

NTPC submitted:

- ✓ A Gantt chart was shared detailing the timeline of activities and completion target by June 2025.
- ✓ Excavation process for laying of 132 kV Power cables has already stated. Laying of Power cables shall commence from First week of March 2025.Presence of CW ducts and Fire Hydrant pipes in the path of the cable has delayed progress.
- ✓ Control cables for ICT charging are being sourced from other NTPC projects.

224th OCC Decision

- OCC urged NTPC to strictly adhere to the committed timeline for bus splitting at Kahalgaon, i.e. June 2025.
- NTPC ER-I Headquarters was advised by OCC to facilitate the availability of control cables at NTPC Kahalgaon.
- NTPC was advised to submit fortnightly progress report to ERPC/ERLDC with timeline of all intermediate activities (target v/s progress achieved).

No update has been received after 224th OCC from NTPC on the progress of work at NTPC Kahalgaon.

NTPC to update current status. Member may discuss.

Deliberation in the meeting

NTPC updated:

- *Laying control cable for ICTs is being undertaken. Long distance control cables from ICT to control room are being mobilised from NTPC Vindhyanchal and NTPC Singrauli. Laying of control cables will be finished in next 15 days.*
- *Shutdown of station transformer for unit 7 will be taken up next followed by laying of 132 kV power cable.*
- *Survey for laying fire hydrant pipes has been done around switchyard area. Any excavation work can be taken up after shutdown of station transformer.*
- *Status of other activities detailed as follows:*

Sl No	***Description***	***Status***	***Remark***
1	*Revival of 400KV isolators of ICT-3 & 4*	*2/4 revived*	*Revived isolators Jumpers will be connected during Bus-4 shutdown. For revival of rest of the isolators, Bus-3 shutdown reqd.*
2	*ICT-3 400KV side and 132KV side LA erection*	*completed*	
3	*ICT-3 Earthing work*	*80% completed*	*Target date- 25.03.2025*
4	*132KV side BPI structure modification work*	*50% completed*	*Target date- 31.03.2025*
5	*132KV relay interpanel wiring work*	*70% completed*	*Target date- 31.03.2025*
6	*400KV relay interpanel wiring work*	*80% completed*	*Target date- 31.03.2025*

OCC Decision

- *OCC urged NTPC to strictly adhere to the committed timeline for bus splitting at Kahalgaon, i.e June 2025.*
- *NTPC was advised to share the update of work done as progress report on fortnightly basis(target v/s progress achieved).*

2.4 Reliability and Healthiness of equipment at 400kV KHSTPP: ERPC

✓ Emanating lines from KHSTPP (NTPC) which are equipped with BHEL-manufactured circuit breakers have exceeded 25 years of service. These aging assets have deteriorated significantly due to hydraulic mechanism issues and increased SF6 leakage.

✓ Furthermore, several isolators located at KHSTPP(NTPC) are stuck-up and inoperable. In addition to these challenges, KHSTPP has been experiencing extended outages of multiple critical elements. The details of these outages are as follows:

Name of the Elements	Remarks
400kV-Kahalgaon- Barh-2	Out of service since 07.12.24
400kV tie bay of FSTPP-1 & Barh-2	Out of service since 18.10.24

400kV Tie Bay of Durgapur-2 & Future	Out of service since 06.07.24
400kV Main Bay of Banka-1	Out of service since 24.02.24
400kV Main Bay of Kahalgaon-Lakhisarai-1	Reliability of the BHEL make CB has significantly deteriorated due to issues with their hydraulic mechanisms and increased SF6 leakage. These CBs are being obsolete models over 25 years old. (**4 nos. of CB**)
400kV Tie Bay of 400/132kV ICT-2 and Kahalgaon-Lakhisarai-1	
400kV Main Bay of Kahalgaon-Lakhisarai-2	
400kV Tie Bay of Kahalgaon-Durgapur-1 and Kahalgaon-Lakhisarai-1	
Bus-3 side Isolator of Bus-1 & 3 sectionaliser	Isolators are in stuck-up condition (**9 nos. of isolators**)
Bus-1 side Isolator of Bus-1 & 3 sectionaliser	
Bus-4 side Isolator of Bus-2 & 4 sectionaliser	
400kV Main Bay of Kahalgaon-Banka-2	
400kV Tie Bay of Kahalgaon-Banka-2	

- ✓ With the approaching summer season, power demand will increase significantly and power flow in this corridor during solar hours will surge due to high solar injection from solar rich Northen region & high space cooling load in West Bengal.
- ✓ Being a critical substation in the high-power flow corridor, the healthiness of all equipment needs to be ensured to maintain a stable electricity supply.

Moreover, it is observed that other NTPC stations also lacking in maintenance activity over past few years.

As updated by ERLDC in **224th OCC**:

	Bus					ICT					Line (For Line Bay)				
Plant Name	**Total Available**	2021	2022	2023	2024	**Total Available**	2021	2022	2023	2024	**Total Available**	2021	2022	2023	2024
BARH	**4**				2	**3**	2	3	3	3	**8**	4	4	4	8
DARLIPALI	**2**				2	**2**				2	**2**				0
FSTPP	**2**				1	**2**		2	1	0	**10**	5	10	4	1
KHSTPP	**4**				0	**2**				0	**12**	8	1	1	3
NABINAGAR(BRBCL)	**2**				0	**3**				0	**2**				0
NABINAGAR(NPGC)	**2**	1	1		0	**3**		1	1	0	**4**				1
TSTPP	**6**				0	**2**	1			0	**10**	2	1	3	0

As per **224th OCC Deliberation**

- ❖ ERLDC presented details of maintenance carried out in NTPC generating stations w.r.t Bus, ICTs and Line Bay over last four years. It was informed that maintenance of Bus & ICTs is irregular at Barh, Darlipalli, Farakka and Nabinagar generating stations while line bay maintenance is regular only at Barh, Farakka and Kahalgaon stations.
- ❖ ERLDC also raised concerns in the forum regarding the multiple circuit breaker (CB) outages and stuck isolators at Kahalgaon STPP. These incidents have not only reduced the reliability of Kahalgaon STPP but have also impacted the reliability of neighbouring

generating stations, including Farakka and Barh, as well as the overall stability of this critical power corridor.

- ❖ NTPC Kahalgaon STPP informed the forum that a design-related issue with Siemens-manufactured isolators is the cause of the stuck isolators. They confirmed that a replacement plan is already in place.
  Kahalgaon STPP was requested by ERLDC to share the detailed work plan and progress updates for these replacements.

224th OCC Decision

- OCC opined that lack of proper maintenance at NTPC generating stations may potentially cause forced outage of switchyard equipment and hence generating unit(s).
- NTPC was advised to be vigilant in ensuring proper and timely maintenance activities at switchyards of all their generating stations.
- NTPC was advised to plan for maintenance activities in coordination with ERLDC.
- OCC advised ERLDC to regularly monitor the status of maintenance in all generating stations of ER and highlight the deficiencies in OCC forum.

ERLDC may explain. NTPC may update. Members may discuss.

Deliberation in the meeting

*NTPC submitted detailed maintenance plan for switchyard elements in various generating stations.(**Annex-B.2.4)***

OCC Decision

- ✓ *OCC opined that lack of proper maintenance at NTPC generating stations may potentially cause forced outage of switchyard equipment and hence generating unit(s).*

- ✓ *OCC instructed NTPC to identify switchyard elements whose maintenance is pending for the last 4 years and submit a detailed plan for their maintenance activities along with the other elements whose maintenance are to be done next year.*

2.5 DSM loss due to lack of update of SG in AGC system for 23rd & 24th Feb 2025 in BRBCL – NTPC

In BRBCL, SG was updated in ABT system after start of block and the same was updated in the WBES system as well. BRBCL is currently having 2 API logins and the number of hits allowed per hour for fetching SG through API is 30. Data fetching through API was being done as per the prescribed limit.

However, during block changeover both APIs were getting blocked and SG was not getting updated. Due to this BRBCL incurred huge DSM loss on 23rd, 24th Feb 2025 in the blocks given in the following table.

A log of number of hits through API could be beneficial for resolve the issue.

Date	Block No.	Block Time (Hrs)	Time of updation in new WBES system (Hrs)
23rd Feb 2025	45	11:00 - 11:15	10:48
24th Feb 2025	59	14:30 - 14:45	14:18

	61	15:00-15:15	14:48

NTPC may explain. ERLDC may update. Members may discuss.

Deliberation in the meeting

- *BRBCL apprised that data from NLDC server could be fetched 30 times in an hour using 2 API logins but during the block changeover the system was getting blocked. So, SG data was not being updated and thus leading to significant DSM loss.*
- *BRBCL had made approx. 12 hits in an hour to fetch data which was observed in ERLDC logs. ERLDC thus requested BRBCL to send log data from their side to analyse this issue, which may be further taken up with concerned vendor who have developed this API.*

OCC Decision

OCC advised BRBCL to share their logs to ERLDC for resolving this issue.

2.6 Inconsistency in the implementation of the amended Regulation 49 of the IEGC 2023: WBSEDCL

The following provision has been inserted under sub-clause b(ii) of Clause (4) of Regulation 49 of the IEGC 2023:

Quote

"Provided that downward revision of schedules by the buyers for 'D' day, after 14:30 hrs on 'D-1' day in the generating station is permissible only for beneficiaries which have scheduled above their respective share of minimum turndown level in the generating station: Provided also that downward revision by such beneficiaries, which have scheduled above their respective share of minimum turndown level in the generating station, shall be permissible limited to a quantum such that overall schedule of the generating station is at least at Minimum turndown level. The downward revision of schedules by such beneficiaries for 'D' day, after 14:30 hrs on 'D-1' day shall be permissible on a pro-rata basis of the power scheduled above the minimum turndown level of their share at 14:30 hrs of 'D-1' day"

Unquote

- It has been noticed that the regulation does not mention anywhere that the downward revision for a beneficiary will be capped at their respective MTDL, even if the generator has a schedule above its Minimum Technical Limit and has scope to revise down its present schedule before reaching its Minimum Technical Limit.
- ✓ For instance, considering 21.02.2025 as the 'D' day, WB State (WBSEDCL) as beneficiary, FSTPP I & II as generator, and Block No. 69, the initial schedule punched up to 14:30 hrs of (D-1) day was "Total Requisition," i.e., 490.34 MW.
- ✓ After 14:30 hrs of the same day, the schedule was revised as "MTDL Restriction," i.e., 269.69 MW.
- ✓ Now, at 14:00 hrs of 'D' day, for the said block, the schedule of FSTPP I & II was 1380.45 MW.
- ✓ In the MTDL page, it was correctly showing that the generator can further reduce its schedule up to an additional quantum of 446.53 MW.

- Since the pre-fixed back-downable percentage of WBSEDCL with respect to FSTPP I & II for Block No. 69 was 32.23%, WBSEDCL could further reduce its schedule by 32.23% of 446.53 MW.
- However, since WBSEDCL had already reached its MTDL level with respect to the FSTPP I & II share allocation (55% of the Share Entitlement), i.e., 269.69 MW, further reduction of the schedule was not allowed in the WBES portal.
- Such restriction is not regulated under the addition of sub-clause b(ii) of Clause (4) of Regulation 49 of the Principal Regulations, where it is mentioned that *"The downward revision of schedules by such beneficiaries for 'D' day, after 14:30 hrs on 'D-1' day, shall be permissible on a pro-rata basis of the power scheduled above the minimum turndown level of their share at 1430 hrs of 'D-1' day."*
- Additionally, such conditions compel WBSEDCL to back down cheaper generating stations (including State Generators) and schedule costlier generating stations, thereby violating its commercial Merit Order-based scheduling.
- Moreover, this condition also violates the Economic Despatch principle, particularly in the context of DISCOM's power purchase portfolio, as stipulated under the Indian Electricity Act, 2003

Under such circumstances, WBSEDCL has requested that beneficiary-based capping be removed in WBES Portal during downward revision of generators when the post-backdown schedule of such generating stations is above MTDL, and downward revision shall be allowed as per the amendment clause as long as the generator is scheduling above its Minimum Technical Limit.

WBSEDCL may explain. ERLDC may update. Members may discuss.

Deliberation in the meeting

WBSEDCL apprised:

- ✓ *At present, there is provision in WBES for furnishing revised requisition after 14:30 Hrs on D-1 by beneficiaries with reduction only upto technical minimum(55%) of their respective shares in a generating station even though the total schedule of the generating station may be well above its technical minimum(55%) and thereby having sufficient margin for further backdown.*
- ✓ *However,at times, to maintain Merit Order-based Scheduling, it may be required by the beneficiaries to further reduce their requisition below technical minimum of their respective share provided the total schedule of the generating station is above its technical minimum.*

ERLDC submitted:

- ✓ *As per First Ammendment to IEGC 2023, reduction in schedule by respective beneficiaries on D-1 is limited to technical minimum of their individual shares in a generating station.*
- ✓ *There are several methods of implementation of new logic and one method has been finalised based on the above discussion.*
- ✓ *However if multiple beneficiaries apply for additional backdown then it may be provided on a pro rata basis.*

OCC Decision

- *OCC opined that the schedule of any generating station should not go below technical minimum after furnishing of requisition by all concerned beneficiaries on D-1.*
- *In case adequate margin is available in a generating station above its technical minimum, beneficiaries should be allowed for reduction in their requisition below technical minimum after 14:30 Hrs on D-1 provided the total schedule of the generating station gets capped at its MTDL.*
- *Keeping in view Merit order dispatch in real time operation, ERLDC was advised to explore all possible options for incorporating above requested provision in WBES portal.*

2.7 Regarding Shifting the location of existing Tower#1 (dead end tower) of the 400 kV D/C Transmission Line at Teesta V Power Station: NHPC

- PGCIL has constructed 400 kV D/C Transmission Line from Teesta–V Power Station Balutar Singtam Sikkim to Binnaguri with the commissioning of Teesta-V Power Station in 2008 which was later on terminated to PGCIL Pooling Substation at Rangpo.
- A devastating flash flood occurred on the intervening night of 3rd and 4th October 2023. The said flood damaged many installations of Teesta-V Power Station. The Tower#1 of PGCIL was also washed away in the flood. Also, Potheadyard Gantry, Lightning Arresters, CVTs, Wave Traps, and GIS to Air Bushing etc. got damaged. The restoration work started after the occurrence of the flood.
- Tower #1 has been re-erected by PGCIL, and the line was made available for power evacuation from Teesta-V Power Station.
- Later on, a massive landslide occurred on 20th August 2024 at TRT area of the Power House resulting in the catastrophic collapse of the entire GIS building and the equipment housed within it. The majority of the GIS building was completely damaged, except for a small portion containing the DG sets, meter room, and 11kV switchgear. As complete impact of the landslide was faced by GIS building itself, therefore Tower #1 was remained protected.
- This land slide area is vulnerable and therefore, location of GIS building needs to be shifted to safe place about 200 meters away from the previous location. NHPC is taking suitable measures to stabilize the vulnerable area. However, in case any boulder/rock mass falls and hits the existing PGCIL Tower#1 it will get damaged affecting transmission line.
- Therefore, NHPC had suggested that Dead End Tower#1 may be relocated beyond the reach of sliding zone. This issue was also communicated to Power Grid, subsequently officials from Power Grid visited the site also. The proposed layout plan is attached as **Annex B.2.8.1.**
- Complete restoration activities are expected to be completed by Nov. 2025.
- Preliminary report is attached as **Annex B.2.8.2.**

NHPC may explain. Members may discuss.

Deliberation in the meeting

❖ *NHPC submitted:*

✓ *A massive landslide occurred on 20th August 2024 at TRT area of the Power House resulting in the catastrophic collapse of the entire GIS building and the equipment housed within it.*

- ✓ *Currently the dead end tower of the Teesta – V power evacuation switchyard is located near a hill which has become prone to landslide.*
- ✓ *So they have decided to shift their GIS switchyard along with the dead end tower to another safe nearby location.*
- ✓ *The PGCIL dead end tower will be relocated along with the GIS switchyard to avoid damage from future landslides.*
- ❖ *Powergrid submitted that the additional tower may be vulnerable due to erosion of river bank and there would be ROW and clearance issues due to close proximity to the nearby Helipad. Howerver, he assured that a joint survey with NHPC would be carried out and appropriate measures shall be taken to address the concern of NHPC.*

OCC Decision

- ✓ *OCC recommended for another joint site visit by NHPC and Powergrid for further planning i.r.o the tower arrangement and thereby evading potential damage from probable landslide.*
- ✓ *OCC also advised the concerned i.e NHPC and Powergrid to make a detailed study about landslide mitigation structures, like boulder nets, and provide a cost estimate for the same. They may approach authorities like NHAI for seeking advice regarding the same.*

2.8 Establishment of new PLCC link for LILO of 400kV Tala - Binaguri line Circuit-4: Powergrid ER - II

- Bhutan Power Corporation (BPC) is constructing a 300MVA, 400/220/66/33kV GIS substation at the National Industrial Park (NIP), Samtse to cater to Industrial power demand. As part of this development, Circuit-4 of the 400kV transmission line from Tala (Bhutan) to New Siliguri / Binnaguri, WB (India) will be looped-in and looped-out (LILO) at this new substation.
- Currently, a Power Line Carrier Communication (PLCC) link exists between Tala and Binaguri. With the introduction of the LILO arrangement at NIP, it is essential to establish a new PLCC system to ensure reliable communication and protection signaling. The reconfiguration will establish new PLCC links as follows:
  1. Link 1 (Tala – NIP), new PLCC panels are planned under the scope of the NIP Project.
  2. Link 2 (NIP – Binaguri), the existing PLCC panels from Tala will be relocated to NIP to maintain compatibility with the existing system and avoid modifications at Binaguri. A proposed network diagram is attached as **Annex B.2.9.**

Powergrid ER-II may explain. Members may discuss.

Deliberation in the meeting

- ❖ *Powergrid submitted that 400kV Tala-Binaguri (circuit 4) is proposed to be LILOed at National Industrial Park, Samtse.*
- ❖ *Representative from Bhutan Power Corporation submitted:*

- ✓ *Currently the LILO section is under construction.*
- ✓ *Internal approval has been sought from the concerned ministry of Bhutan and the same was shared with NLDC(India)for clearance.*
- ✓ *Requested Powergrid to expedite approval for the changes in PLCC due to new LILO configuration*
- ✓ *Agreed to seek necessary approval i.r.o shutdowns for implementation of LILO in 400kV Tala-Binaguri line.*

OCC Decision

- ✓ *OCC opined that 400kV Tala-Binaguri (Ckt-4) is a cross-border line and its LILO, even though within Bhutan, changes the line configuration.*
- ✓ *As per existing guidelines, Office of Member (Power Systems), CEA is the designated authority for all cross-border related issues.*
- ✓ *OCC suggested that the issue should be put up before CEA .*
- ✓ *OCC advised Powergrid to closely examine the modifications in PLCC as proposed by Bhutan and submit their views in subsequent OCC meetings.*

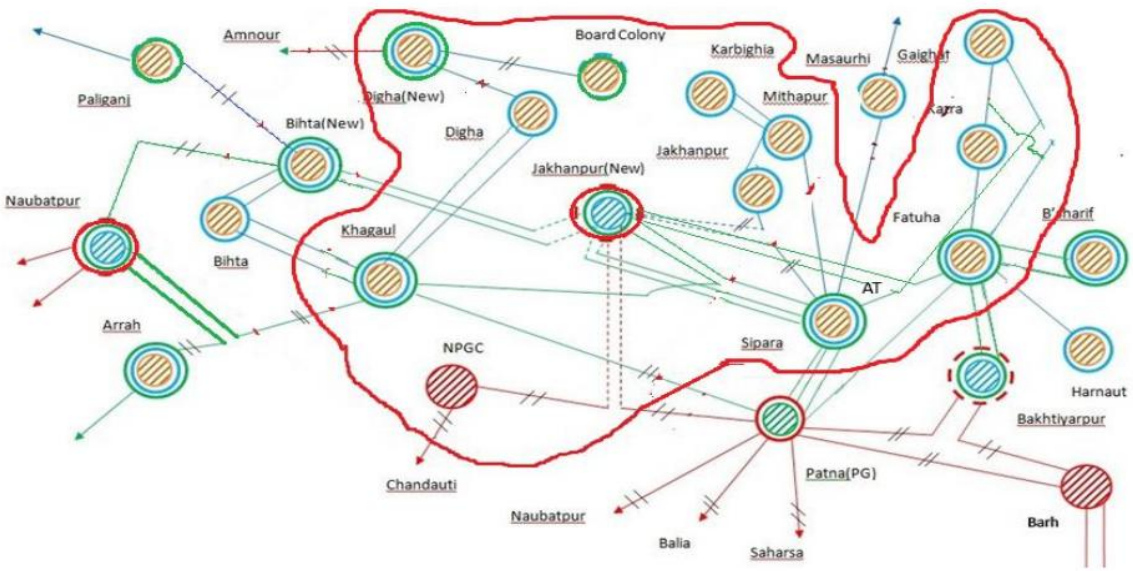
2.9 Update on Patna Islanding scheme: ERPC

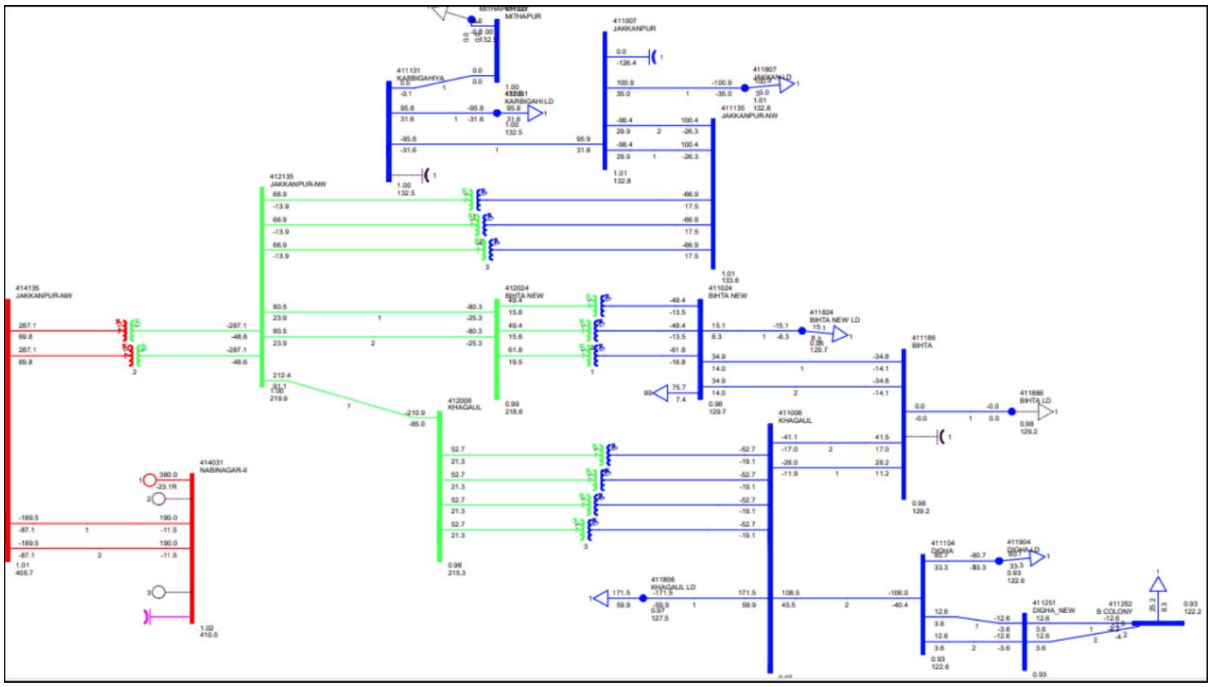
The Patna islanding scheme would be formed with Units of NPGCL along with loads of Patna city.

NTPC was entrusted for carrying out study of NPGC units and M/S Solvinia had submitted report on study of islanding scheme dated 08th May 2024. Thereafter based on comments received from ERLDC, replies were submitted by M/S Solvinia. NTPC had communicated the report to all concerned including SLDC Bihar.

Some further tests needed could not be carried out due to non-receipt of relevant data from Bihar.

- The proposed Patna islanding scheme aims to isolate one running unit of NPGC (660 MW) with pre-identified load of Patna city and nearby areas. After isolation of selected loads and NPGC through the identified network, run the island in islanded mode to cater the city load and to extend start-up supply to generating stations in adjoining area to facilitate early restoration.
- Patna city and nearby loads will be islanded with one of the running units of NPGC (660 MW). NPGC is connected to the grid through 400 kV NPGC-Jakkanpur D/c and 400 kV NPGC Gaya D/c lines. For the islanding 400 kV NPGC-Jakkanpur D/c and at Jakkanpur through 400/220 kV ICTs, pre-deintifed 220 kV feeders will be selected which will be isolated to confirm the islanding of the Patna loads from the rest of the grid with one unit of NPGC.





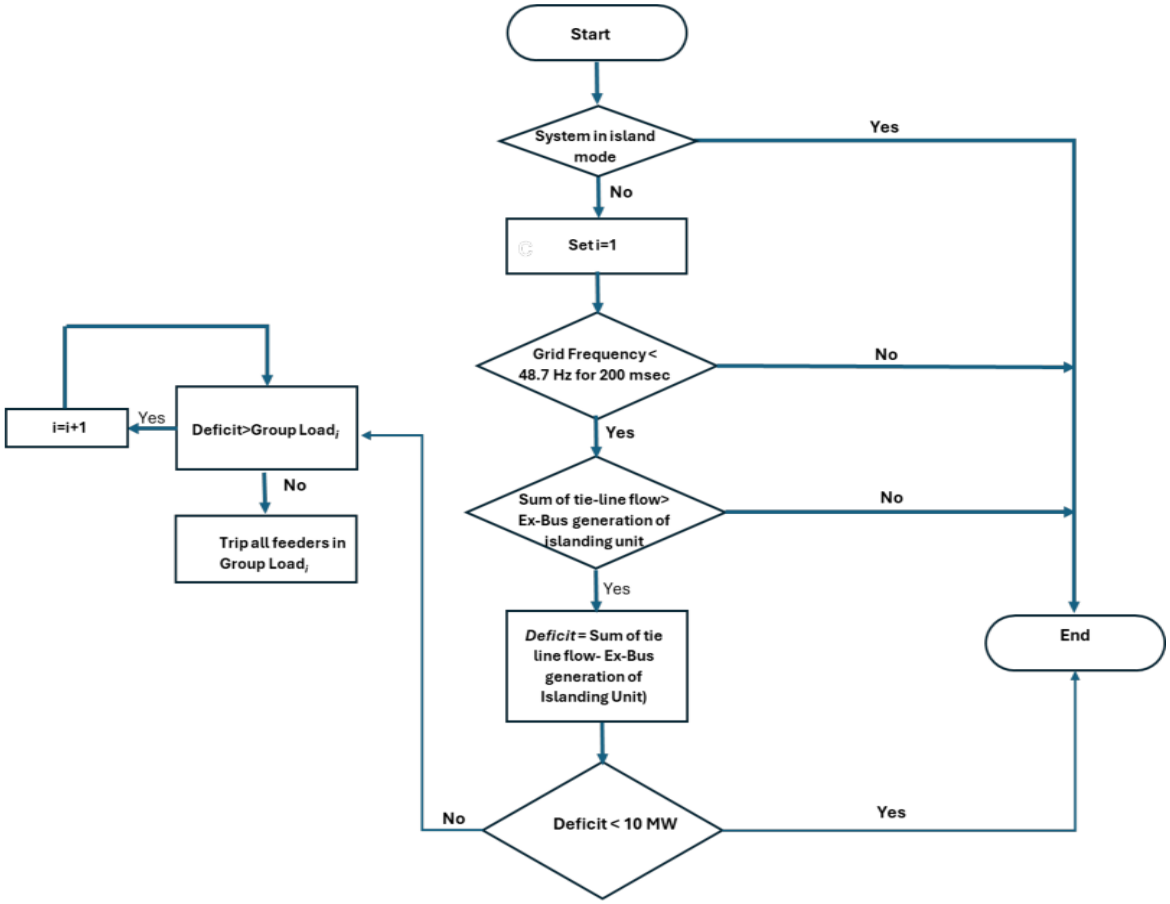
Islanding Logic(proposed by ERLDC):

As demand of identified feeders may increase/decrease with time, to maximize chance of survival, it is necessary to have a central logic system which will monitor load and generation balance and will trip feeders prior to islanding if frequency reaches below a certain point.

- **Pre-islanding (Centralized Island Monitoring Unit):**
  - There will be a Centralized Island monitoring and control unit needs to be incorporated at SLDC Bihar for continuous monitoring of load generation balance in the island. It is necessary to maintain the load generation balance within the island for island stability.
  - The control scheme will continuously monitor load generation imbalance and will trip identified feeders' priority wise if load generation imbalance goes beyond a certain limit and frequency reaches 48.7 Hz for 200 msec.

- **Islanding (2 stages):**
    - When Frequency reaches 48.4 Hz, then with a delay of 500 msec, identified system will be islanded. For islanding, a number of tie lines need to be tripped to isolate the system from the grid. The command to trip the feeders will go from the Central master controller. As a back-up UFR relays may be installed in the identified feeders set at 48.4 Hz and 500 msec time delay.
    - After islanding, another stage of feeder disconnection is also to be done if island frequency decreases. Three sub-stages are set after islanding and UFR relays will be installed on the identified feeders to get the desired load relief.
        - Stage 2A: 80 MW at 48.2 Hz
        - Stage 2B: 40 MW at 48.0 Hz
        - Stage 2C: 50 MW at 47.8 Hz

Feeders selected for pre-islanding disconnection will be identified as per below logic:



As per **224th OCC Deliberation**
SLDC Bihar updated:

- ✓ A letter on estimated cost of the islanding scheme has been shared with the nodal agency for PSDF(NLDC).
- ✓ DPR will be shared with PSDF after rate justification from different agencies.

224th OCC Decision
OCC advised Bihar SLDC to expedite submission of Final DPR of Patna islanding scheme along with detailed cost breakup for PSDF grant.

SLDC Bihar may update. Members may discuss.
Deliberation in the meeting
Bihar updated :
- ✓ *For preparation of estimate, budgetary offers are awaited to be received from the concerned vendors(M/S GE, M/S Schneider and M/S Siemens).*
- ✓ *Approved DPR of the islanding scheme shall be submitted for PSDF funding latest by April 2025.*

OCC Decision
OCC advised Bihar SLDC to expedite submission of Final DPR of Patna islanding scheme along with detailed cost breakup for PSDF grant.

2.10 Update on Grid Disturbance at 765/400kV Angul S/S, 400kV GMR and 400kV JIPL: ERPC

- ✓ A disturbance occurred at 16:20 Hrs on **20.02.2025** at 765/400 kV & 400 kV Angul, GMR, JITPL S/s. 765 kV Bus-1&2, 400 kV Bus-1&2 at Angul S/S tripped and generation loss of around **1750 MW** occurred at **GMR** and **JITPL** due to loss of evacuation path.
- ✓ Inclement weather and cyclonic storm were reported during the event. Multiple CT faults were observed during the event and flashover marks on CT Junction box observed.
- ✓ Total duration of outage:**1 Hr and 37 Minutes**
- ✓ Due to inclement weather with cyclonic storm at 765/400kV Angul Station, 400kV Bus 1 &2, 765 kV Bus 1 & 2 along with all transmission element emanating from Angul station (Except 400kV Bolangir feeder, 765kV Jharsuguda Feeder 2, 765/400kV 1500 MVA ICT 1 & 2) tripped. Tripping of 400kV Angul JIPL D/C line led to loss of evacuation path for JIPL Generating station. Due to this, both the running units (Unit 1 & 2) of JIPL got tripped at 16:20 Hrs. Similarly tripping of 400kV Angul GMR D/C line caused tripping of Unit #1 & 2 at 400kV GMR generating station.

- ❖ Following are the key observations:

•Few CTs where faults occurred are common in both incidents.
•It is gathered that only SF6 filled CTs are getting affected due to lightning. Oil filled CTs are not impacted.
•It is suspected that flashover is occurring at junction box due to overvoltage induced by lightning strike in both the events. After the past incident on 12.10.2023 it was recommended in 130th PCC minutes for earthing audit and DSLP (Direct Stroke Lightning Protection) study, which was carried out and as intimated recommended steps were carried out. However, same nature of incident occurred again.

- ✓ One past incident of same nature also occurred at **765/400 kV Angul S/S** on 12.10.2023 where due to lightning, multiple faults occurred at various CTs which led to bus tripping at 765 kV and 400 kV.

As per **224th OCC Deliberation:**

Powergrid Odisha presented a detailed report on the Grid disturbance at 765 kV Angul S/S, encompassing the sequence of events along with preliminary findings.

Powergrid Odisha further submitted:

- ✓ Internal flashover was observed in the SF_6 filled CTs while oil filled CTs remained intact. The failed CTs were of the same make & type as that observed in the previous incident (12.10.2023).
- ✓ The primary cause of CT failure is that somehow lightning surge is entering the substation and travelling to the CT's, leading to CT failure, insulation breakdown, and flashover of CTs, so DLSP (Direct lightning stroke Protection) to be further reviewed.
- ✓ After the past incident in October 2023 in which 4 Nos of CTs failed, out of which they replaced two no's of CTs with Oil filled and two with SF6 filled CT and in recent event also total 6 Nos of SF6 CTs failed in which 2 Nos of CT which were earlier replaced with SF6 failed.
- ✓ SF6 CTs are more susceptible to failure during lightning surges due to their different capacitance compared to oil-filled CTs. While oil-filled CTs exhibit greater resilience to lightning surges, they present a higher risk of bursting in case of failure and causing significant damage to adjacent equipment.
- ✓ Concerned OEM of the CTs has been called in to carry out Root cause analysis (RCA). Report will be submitted within a month.
- ✓ Previously a third-party earthing audit was carried out following the incident in October 2023 and some findings regarding earthing pointed out by an external agency have been duly addressed. The recommended actions, such as strengthening earth pits and raising riser heights, were subsequently implemented.
- ✓ The disturbance took place despite DSLP (Direct Stroke Lightning Protection) being in place at Angul S/S.
- ✓ As suggested by Powergrid Corporate Engineering team, measures have been taken to strengthen DSLP (Direct Stroke Lightning Protection) with deployment of additional earth wires.
- ✓ Study on proper discharge of lightning impulse to the ground shall be carried out.

ERLDC raised the following observations:

- ✓ Similar incidents involving multiple faults in Current Transformers (CTs) due to lightning occurred at the 765/400 kV Angul Substation (S/S) on October 12, 2023. Where similar faults resulted in bus tripping at both 765 kV and 400 kV levels. Notably, some of the CTs affected in the previous incident were also involved in the current event.
- ✓ It is gathered that only SF6 filled CTs have been affected due to lightning, while oil filled CTs are unaffected.
- ✓ An investigation is required to determine if the problem is confined to a specific batch of CTs. Furthermore, the root cause analysis (RCA) of the failed CTs from the previous incident is still outstanding. This analysis must be completed for the current event as well, and the RCA report should be shared as soon as possible.
- ✓ It is suspected that flashover is occurring at junction box due to overvoltage induced by lightning strike in both the events. After the last event, an Earthing audit was carried out and the Compliance of recommendations to be submitted as the same nature of event occurred again.

✓ As GMR and JITPL are connected to the same Dia, a simultaneous outage of both buses will result in generation loss. To minimize this risk of generation loss in future, possibility of shifting generator bays to a future bay within the Dia connected to the 765/400 kV ICTs or any other lines needs to be explored.

224th OCC Decision

- OCC opined that occurrence of similar nature of fault being repetitive at 765 kV Angul S/S, the same may be attributed to certain design deficiency in the system.
- Powergrid Odisha was advised to carry out root cause analysis, thereby pin-pointing the exact cause for failure of DSLP (Direct Stroke Lightning Protection) at Angul S/S and submit the findings in next OCC.
- Powergrid Odisha was also advised to take up with concerned OEM of the CTs and ascertain the reasons of failure along with RCA report in next OCC. Based on the outcome, Powergrid may take suitable decision.
- Implementation status of previous third-party earthing audit of the entire Angul substation should be furnished by Powergrid Odisha in the next OCC.
- Feasibility of shifting of GMR /JITPL Dia to be explored by Powergrid Odisha at Angul S/S for taking up the issue for further implementation.
- OCC recommended for constitution of a committee by ERLDC comprising members from ERLDC, Powergrid and CPRI for detailed analysis of the causes of CT failure during Grid disturbance at 765 kV Angul (PG) S/S. A comprehensive report delineating the reasons and preventive measures needs to be submitted within 3 months for review in OCC forum.

Powergrid Odisha may update. Members may discuss.

Deliberation in the meeting

PG Odisha updated:

✓ *Risers of Gantry towers have been mended which were not properly earthed leading to poor dissipation of lightning surge.*
✓ *Missing Earth wire jumpers at multiple locations have been restored.*
✓ *No major fault was found in the previously failed 400 kV CTs while the 765 kV failed CTs had been sent to OEM for RCA in Feb'24.*
✓ *As per recommendation of concerned OEM of CTs(M/S Siemens), the frequency of testing involving purity of SF_6 as well as insulation tests has been increased.*
✓ *Additional shielding with earthwire is planned to be provided over the portion between old 765 kV switchyard and newly constructed extension part as suggested by Corporate Engineering team.New lightning mast has been proposed for protection of this area.*
✓ *Additional rod earthing will be provided to strengthen the earthing of gantry towers. This will ensure proper discharge of lightning.*
✓ *All the inputs regarding the disturbance and subsequent analysis at PG end have also been shared with CPRI in a recent meeting convened by ERLDC.*
✓ *Any recommendations/inputs from CPRI is awaited.*

ERLDC presented a detailed report on visit to 765 kV Angul S/S for analysis of this grid disturbance.Some key observations in the report are pointed out as :

✓ *After the previous disturbance of similar nature(Oct 2023),the SF6 CTs were sent for RCA to the factory of OEM but receipt of conclusive RCA report is still awaited from the OEM.*

- ✓ *RCA report of similar failure of CT in Dharamjaygarh(PG) station has been shared by the OEM wherein insulation test has been recommended to be conducted every three months.*
- ✓ *Prior to the grid disturbance of Oct 2023, there was no protection in form of earth wire over the portion between two stages of 765 kV switchyard(stage-I & II)Earthwire protection against lightning strike was deployed in this portion after third party earthing audit.Most CTs have failed in close vicinity of this area.*
- ✓ *JITPL and GMR lines are present in the same dia leading to entire generation loss in outage of both 400 kV buses due to evacuation paths being not present in opposite directions.Thus in case of simulataneous 400 kV bus outage, one spare bay may be utilized for connecting one circuit of JITPL/GMR & power evacuation through 765/400 kV ICT-4.*

OCC Decision

- *OCC advised Powergrid Odisha to address all the deficiencies and implement the recommendations as pointed out in the report of ERLDC as well as in earlier third party earthing audit i.r.o 765 kV Angul S/S.*
- *OCC opined that a detailed report with recommendations from the joint Committee(comprising ERLDC,Powergrid and CPRI) should be submitted within 3 months for review in OCC forum. Based on Committee recommendations further course of action for preventive measures may be planned at Angul(PG) station.*
- *OCC advised Powergrid Odisha to explore the feasibility of alternate power evacuation from JITPL & GMR units utilizing the available spare bay. A detailed proposal along with cost implications should be submitted in this regard by ERLDC & Powergrid for consideration in OCC forum.*

2.11 Trial of Resource Adequacy Portal: ERLDC

- Resource adequacy is a critical aspect ensuring sufficient generation capacity is available to reliably meet electricity demand. The importance of timely submission of demand estimation and resource adequacy data was reiterated during the meeting between the Central Electricity Regulatory Commission (CERC), chaired by Shri Ramesh Babu Veeravalli, Member (Technical), CERC, and the State Load Dispatch Centers (SLDCs) of the Eastern Region, along with ERLDC and ERPC, held at the ERPC Conference Room on **22nd February 2025**.
- As discussed in the meeting, ERLDC has developed a Resource Adequacy Portal to streamline the submission of demand forecasts and resource adequacy data across different timelines (Daily, Weekly, Monthly, and Yearly). The portal is expected to go live on **1st April 2025.**
- To facilitate familiarization with the portal, a test URL has been made available for trial submissions starting from **10th March 2025**, during the daily time window of 10:00 AM – 3:00 PM. The URL and login credentials have already been sent via email dated **7th March 2025** to all constituents.
- All states are requested to submit their demand forecasts and resource adequacy data on a trial basis using the test URL during this specified period.

Test URL: https://ra.erldc.in/
Members may note.

Deliberation in the meeting

ERLDC presented a live demonstration on working of Resource Adequacy portal and intimated that presently it is being utilized by West Bengal and Odisha only.

OCC Decision

OCC advised other ER states i.e Bihar, Jharkhand, DVC and Sikkim to start utilizing the newly developed Resource Adequacy portal and share feedback with ERLDC before live implementation to ensure seamless functioning of the portal in future.

3. PART-C: ITEMS FOR UPDATE/FOLLOW-UP/INFORMATION

3.1. ER Grid performance during February 2025.

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month February-2025 were as follows:

AVERAGE CONSUMPTION (MU)	MAXIMUM CONSUMPTION(MU)/ DATE	MAXIMUM DEMAND (MW)	MINIMUM DEMAND (MW)	SCHEDULE EXPORT	ACTUAL EXPORT
		DATE / TIME	DATE / TIME	(MU)	(MU)
477 MU	492 MU, 18.02.2025	24440 MW, 04.02.2025 at 18:01 Hrs.	16374 MW, 03.02.2025 at 01:33 Hrs.	4798	4956

ERLDC/ERPC may highlight the performance of the ER grid.

Deliberation in the meeting

The grid performance of ER for the month of February 2025 was highlighted.

3.2. Update on Reconductoring of ISTS lines under Eastern Region Expansion Scheme-44: ERPC

- Several 220 kV transmission lines and substations were implemented in Indian grid along with cross border lines for importing power from Chukha Hydro Electric Plant in Bhutan. The generating station was commissioned in years 1986-88 and the transmission system is now more than 35 years old. Considering the age of conductors and increase in conductor snapping incidences, reconductoring of these transmission lines has become necessary.
- The matter was deliberated in various OCC forums as well as in 52nd TCC meeting of ERPC.
- In a meeting was convened by CEA under the chairpersonship of Member (Power System) on 27-08-2024, it was decided that matter of reconductoring of cross border lines will be separately taken up with Bhutan.
- However, reconductoring of ISTS portion of 220 kV corridor viz. Alipurduar (POWERGRID) – Falakata (WBSETCL) – Birpara (POWERGRID) – Binaguri (POWERGRID) – Siliguri (POWERGRID) – Kishanganj (POWERGRID) – Dalkhola (POWERGRID) – Gazole (WBSETCL) – Malda (POWERGRID), may be taken up under ISTS. Further, reconductoring of intra-state LILO portion of Birpara (POWERGRID) – Alipurduar (POWERGRID) 220 kV D/c line at Falakata (WBSETCL) and Dalkhola – Malda 220 kV D/c line at Gazol (WBSETCL) shall be carried out by WBSETCL matching with HTLS conductor of the main ISTS line in the matching timframe.

Name of the scheme	Implementation timeframe	Implementation mode	Implementing agency	Estimated Cost (Rs. in Cr)
ERES-44	18 months (15 months on best effort basis) from the date of allocation	RTM	Powergrid	385.77

WBSETCL works associated with reconductoring of ISTS lines

- In the NCT (National Committee on Transmission) meeting dated 23.10.2024, the following were decided:
- WBSETCL shall reconductor their following lines sections under intra-state scheme matching with completion of ISTS scheme namely ERES-44:
  - ✓ About 4 km intra-state portion of Alipurduar (POWERGRID) Falakata (WBSETCL) 220 kV D/C line at Falakata end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Falakata (WBSETCL) end commensurate with rating of HTLS (1250 A).
  - ✓ About 4 km intra-state portion of Birpara (POWERGRID) - Falakata (WBSETCL) 220 kV D/C line at Falakata end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Falakata (WBSETCL) end commensurate with rating of HTLS (1250 A).
  - ✓ About 2 km intra-state portion of Dalkhola (POWERGRID) - Gazole (WBSETCL) 220 kV D/C line at Gazole end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Gazole (WBSETCL) end commensurate with rating of HTLS (1250 A).
  - ✓ About 2km intra-state portion of Gazole (WBSETCL) - Malda (POWERGRID) 220 kV D/C line at Gazole end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Gazole (WBSETCL) end commensurate with rating of HTLS (1250 A).
- WBSETCL will LILO the Dhalkola - Gazole 220 kV D/C line with 1250 A HTLS under their intra-state scheme for establishment of 220 kV level at their existing 132/33kV Raiganj (WBSETCL) S/S.
- ISTS licensee and WBSETCL shall coordinate for reconductoring of their respective portion of the lines matching with completion schedule of this scheme.
- ➢ It is kindly requested that WBSETCL may note the scope of works (as provided in the minutes of NCT) and coordinate with POWERGRID for matching implementation of their works.
- ➢ The **progress report** may be shared on **monthly** basis to **CEA**, **ERPC** and **CTU**.

As per **224th OCC Deliberation**
Powergrid apprised:

- ✓ NIT for reconductoring under ERES-44 scheme shall be floated on 04.3.2025.
- ✓ Modalities of reconductoring in Bhutan portion could not be finalized yet due absence of response from Bhutan end after bilateral meeting being held.

✓ MOU has already been done with WBSETCL for reconductoring in intra-state portions of West Bengal network.

224th OCC Decision

- Powergrid was urged to expedite the tendering process of reconductoring works under ERES-44.
- Powergrid was advised to write a letter to Bhutan Power system operator with copy to CEA and MOP for expediting finalization of modalities of reconductoring with Bhutan.

Powergrid may respond. Members may discuss.

Deliberation in the meeting

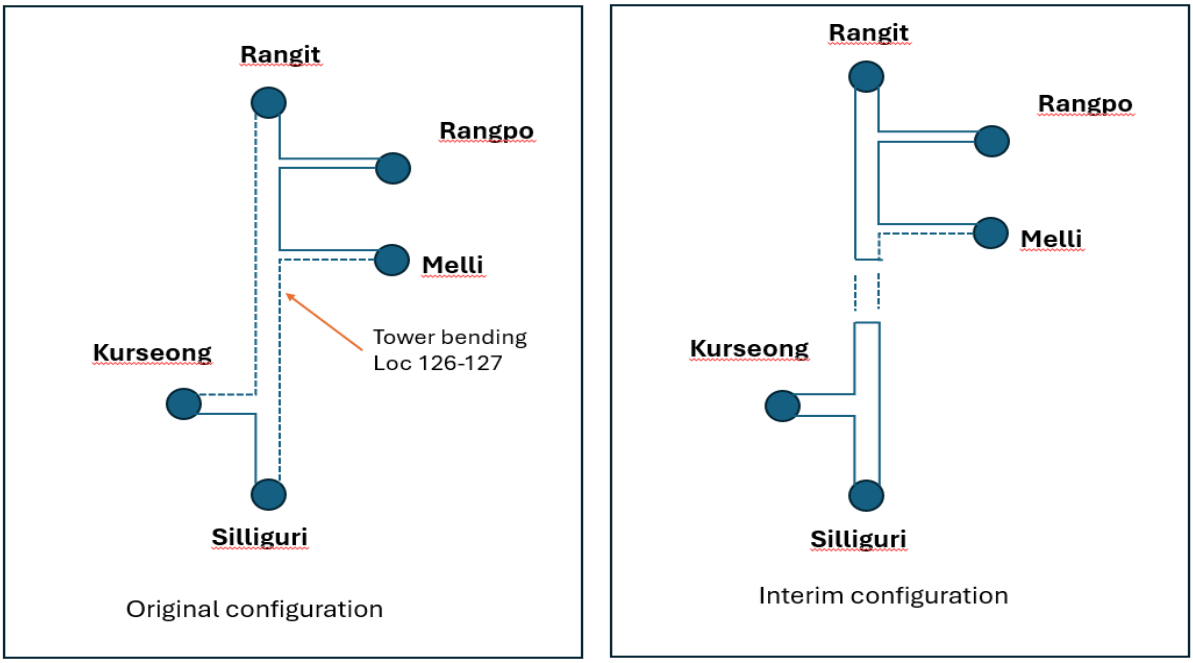
No further update was received from Powergrid ER-II.

OCC Decision

- *OCC noted.*

3.3. Update on Restoration of 132kV Rangit-Kurseong & 132kV Siliguri-Melli-Rangpo lines: ERLDC

- Due to incessant rain and several landslides, towers at loc. 125-128 of **132 kV Rangit-Kurseong** and **132 kV Siliguri-Melli** got badly affected. Out of which tower at loc. 126,127 got severely damaged. Both the lines were switched on 5th October 2024 on request of PowerGrid.
- Consequently, **Kurseong** and **Melli** (Kalimpong source) are fed through single source of **Siliguri** and **Rangpo** respectively. To ensure reliable power supply at Melli & Kurseong, ERLDC conducted one meeting on **08.10.2024** (online mode) with participants from ERPC, ERLDC, West Bengal SLDC, Sikkim, Powergrid and NHPC Rangit.
- Considering the difficulties & time requirements due to hilly terrain for restoration of the said portion, temporary reconfiguration of these lines was explored to extend additional sources to Melli & Kurseong. It was decided that part of the healthy line of **132 kV Siliguri-Melli** will be reconfigured as **132 kV Siliguri-Kurseong ckt2** as a second source of Kurseong and another healthy portion of **132 kV Siliguri-Melli** will be reconfigured as **132 kV Rangit-Melli** for a second source of Melli.
- After necessary reconfiguration, **132 KV Siliguri-Kurseong-II (interim)** arrangement charged on **9th October** and **132kV-Rangit-Melli (interim)** has been charged tentatively on **22nd October**. POWERGRID intimated that it would take 15-20 Days to restore the original configuration after rectifying damaged towers.



As per **224th OCC Deliberation**
Powergrid ER-II updated:

- ✓ Persistent ROW issues have been resolved to a larger extent in the area of Soom Tea Garden.
- ✓ Confirmation from District collector is pending for commencing works in that area.A meeting has been scheduled in this regard with District collector on 26.02.2025.

224th OCC Decision
OCC noted the proceedings and urged Powergrid to expedite for adhering to the completion target i.e. End of April, 2025.

Powergrid may update. Members may discuss.

Deliberation in the meeting
Powergrid ER-II updated:

- ✓ *For resolving ROW issues, a special meeting was held on 20.03.2025 with SDM(Darjeeling) and after discussion with Soom Tea Garden,they have assured to settle the problem within 07.04.2025 as compensation amount need to be approved/settled after concurrence of owner and presently, the owner is out of India.*
- ✓ *In view of above, ROW issues expected to be resolved by 10.04.2025 and the restoration work may be considered for completion by July-2025.*

OCC Decision

- *OCC expressed serious concern on the delay in restoration of the original configuration of 132 kV which may adversely impact reliable power supply to hilly regions of West Bengal amid upcoming peak demand period.*
- *Powergrid was urged to expedite and submit revised plan of restoration in the next OCC.*

3.4. Regarding Non-Submission of Forecasting Data from States: ERLDC

The **Clause 2** of **Regulation 31** of **IEGC 2023** has mandated all the SLDCs to timely submit the demand estimate data to the respective RLDC and RPC.

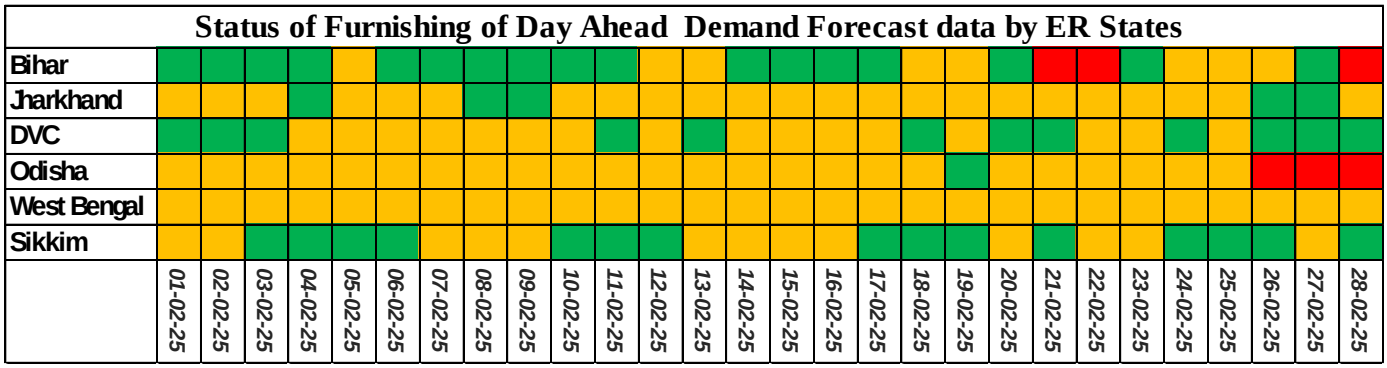
The demand estimation data provided by SLDCs will be required in resource adequacy planning and regional load forecasts conducted by the RLDC.

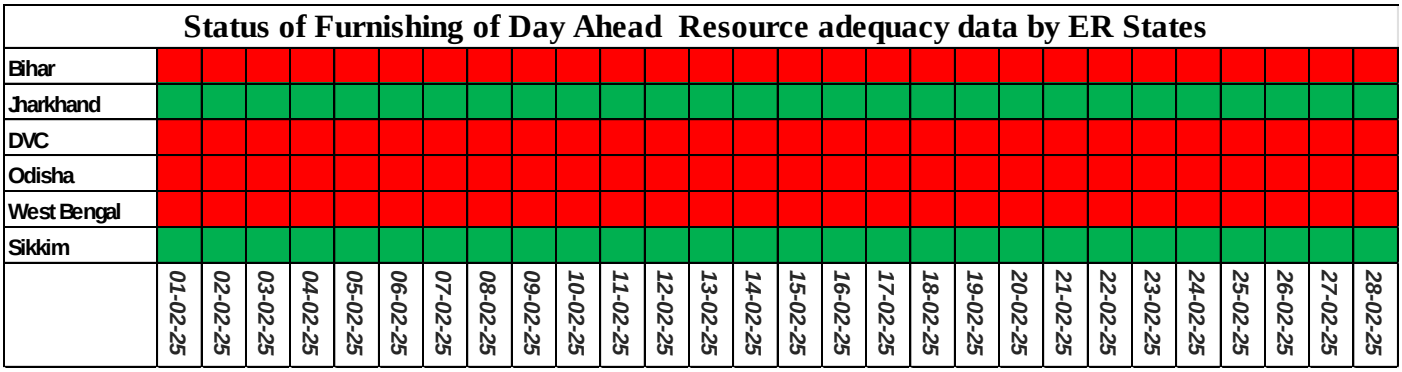
Currently, the day ahead data is regularly received from all the states except Sikkim.

224th OCC Decision

- OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC in specified format as well as uploading of forecasting error on their respective websites.
- SLDCs who are submitting day ahead forecast was advised to also share the forecasting data for their respective control areas on weekly as well as monthly basis with ERLDC.
- All SLDCs were urged to regularly furnish resource adequacy data besides demand forecast.

Latest Forecast receipt status is shown below:





Status of Furnishing of Week Ahead Forecast data by ER States				
	03.02.25 to 09.02.25	10.02.25-16.02.25	17.02.25-23.02.25	24.02.25-02.03.25
Bihar				
Jharkhand				
DVC				
Odisha				
West Bengal				
Sikkim				

Status of Furnishing of Week Ahead Resource Adequacy data by ER States				
	03.02.25 to 09.02.25	10.02.25-16.02.25	17.02.25-23.02.25	24.02.25-02.03.25
Bihar				
Jharkhand				
DVC				
Odisha				
West Bengal				
Sikkim				

Status of Furnishing of Month Ahead Forecast data by ER States		
	February	March
Bihar		
Jharkhand		
DVC		
Odisha		
West Bengal		
Sikkim		

Status of Furnishing of Intra Day Forecast data by ER States																										
	01-02-25	02-02-25	03-02-25	04-02-25	05-02-25	06-02-25	07-02-25	08-02-25	09-02-25	10-02-25	11-02-25	12-02-25	13-02-25	14-02-25	15-02-25	16-02-25	17-02-25	18-02-25	19-02-25	20-02-25	21-02-25	22-02-25	23-02-25	24-02-25	25-02-25	26-02-25	27-02-25	28-02-25
Bihar																												
Jharkhand																												
DVC																												
Odisha																												
West Bengal																												
Sikkim																												

Status of Furnishing of Intra Day Resource adequacy data by ER States																												
	01-02-25	02-02-25	03-02-25	04-02-25	05-02-25	06-02-25	07-02-25	08-02-25	09-02-25	10-02-25	11-02-25	12-02-25	13-02-25	14-02-25	15-02-25	16-02-25	17-02-25	18-02-25	19-02-25	20-02-25	21-02-25	22-02-25	23-02-25	24-02-25	25-02-25	26-02-25	27-02-25	28-02-25
Bihar																												
Jharkhand																												
DVC																												
Odisha																												
West Bengal																												
Sikkim																												

ERLDC may explain and all SLDCs may update. Members may discuss.

Deliberation in the meeting

OCC Decision

- *OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC in specified format as well as uploading of forecasting error on their respective websites.*
- *SLDCs who are submitting day ahead forecast were advised to also share the forecasting data for their respective control areas on weekly as well as monthly basis with ERLDC.*

- *All SLDCs were urged to regularly furnish resource adequacy data besides demand forecast.*

3.5. Non-Submission of FRC data in stipulated timeframe: ERLDC

Adhering to IEGC clauses **30.8** and **30.10.(a)** to **30.10.(q),** generating stations within the Eastern region are required to submit essential data to ERLDC within two days of receiving a notification regarding a reportable frequency event. Additionally, according to clause 30.10.(n), all control areas within the eastern region must assess their frequency response characteristics and share the evaluation, along with high-resolution data, with the ERLDC. Therefore, timely submission of primary response data is crucial for compliance with the IEGC.

224th OCC decision:

- ✓ All generators were advised to regularly share high resolution data against each reportable frequency event with ERLDC on time to facilitate accurate assessment of FRP for respective control areas.
- ✓ All generating utilities were also urged to update the google sheet (link mentioned above) with email address where notifications of reportable events will be shared.

The latest data receipt status is given below: (as on **19.02.2025):**

STATIONS	Event Date	20.02.2025
	Event Time	16:20
FSTPP #STG 1 & 2	ISGS	
FSTPP # STG 3	ISGS	
KhSTPP #STG 1	ISGS	
KhSTPP #STG 2	ISGS	
TSTPP #STG 1	ISGS	
Barh stage-1	ISGS	
Barh stage-2	ISGS	
BRBCL	ISGS	
Darlipalli	ISGS	
North Karanpura	ISGS	
NPGC	ISGS	
TEESTA V	ISGS	
GMR	CPP	
MPL	CPP	
ADHUNIK	CPP	
JITPL	CPP	
TEESTA III	CPP	
Bihar	STATE	
Jharkhand	STATE	

DVC	STATE	
OPTCL	STATE	
WB	STATE	
Updated as on	**11.03.2024**	

	Received
	Not Received
	Plant Out
	Data freeze at plant

Hence all are again requested to follow the stipulated timeline and submit the data to ERLDC and also fill the google sheet below to include the email address where notifications of reportable events should be sent.

https://docs.google.com/spreadsheets/d/1slvAOmQIEQVlMn0LnB78eKMa2sz2QYICZ-sPEpeV_jk/edit?usp=sharing

ERLDC may explain. Members may discuss.

Deliberation in the meeting

OCC Decision

- ✓ *All generators were advised to regularly share high resolution data against each reportable frequency event with ERLDC on time to facilitate accurate assessment of FRP for respective control areas.*
- ✓ *All generating utilities were also urged to update the google sheet (link mentioned above) with email address where notifications of reportable events will be shared.*

3.6. Commissioning Status of ADMS: ERLDC

The automatic demand management scheme (ADMS) has been already commissioned in West Bengal, DVC, Odisha, and Jharkhand and partially implemented by Bihar.
In the 216th OCC meeting the forum advised Bihar to share detailed action plan for implementation of additional 400 MW load under ADMS.
DVC has shared revised list of feeders under ADMS after exclusion of feeders present in CTPS islanding scheme.
BSPTCL yet to update the status.
Bihar may update. Members may discuss.

Deliberation in the meeting

OCC Decision

OCC advised BSPTCL to share the feeder list of ADMS with ERLDC positively within a week.ERLDC was advised to take up with BSPTCL through a formal communication.

4. PART-D: OPERATIONAL PLANNING

4.1. Anticipated power supply position during April-2025

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of April 2025 is prepared by ERPC Secretariat on the basis of LGBR for 2025-26 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc.

Members may update.

Deliberation in the meeting

The updated anticipated power supply position for April 2025 is provided at ***Annexure D.1.***

4.2. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on as on 06-03-2025)

a) Thermal Generating Stations outage report:

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	TENUGHAT	JHARKHAND	TVNL	2	210	Low vacuum	05-Mar-2025
2	MEJIA TPS	DVC	DVC	7	500	Boiler Tube Leakage	05-Mar-2025
3	IB.TPS	ODISHA	OPGC	2	210	Boiler Tube Leakage	04-Mar-2025
4	HEL HIRANMAYEE	WEST BENGAL	HEL	2	150	ESP conveying hampered	04-Mar-2025
5	KOLAGHAT	WEST BENGAL	WBPDCL	3	210	Boiler Tube Leakage	03-Mar-2025
6	JSWEUL	ODISHA	JSWEUL	1	350	Previously was out due to Circulating water pipeline leak. Currently out due to turbine lube oil system since 00:00 hrs of 21.02.2025.	19-Feb-2025
7	BARAUNI TPS	BIHAR	NTPC	9	250	Annual Overhauling	23-Feb-2025
8	MEJIA TPS	DVC	DVC	3	210	Capital Overhauling	10-Feb-2025
9	FSTPP	WEST BENGAL	NTPC	2	200	Annual Overhauling	06-Mar-2025
10	NORTH KARANPURA	JHARKHAND	NTPC	1	660	Annual Overhauling	23-Feb-2025

All Generating stations are requested to update expected restoration time and reason outage to ERLDC/ERPC on weekly basis in case of any change at their end.

b) Major Generating stations Out on Reserve Shutdown due to low system demand:

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	SOUTHERN	WEST BENGAL	CESC	1	67.5	Low system demand	14-Dec-2024
2	SOUTHERN	WEST BENGAL	CESC	2	67.5	Low system demand	11-Dec -2024

c) Hydro Unit Outage Report:

S. NO	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	TEESTA STG III Hep	SIKKIM	TUL	1	200	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
2	TEESTA STG III Hep	SIKKIM	TUL	2	200		
3	TEESTA STG III Hep	SIKKIM	TUL	3	200		
4	TEESTA STG III Hep	SIKKIM	TUL	4	200		
5	TEESTA STG III Hep	SIKKIM	TUL	5	200		
6	TEESTA STG III Hep	SIKKIM	TUL	6	200		
7	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
8	TEESTA HPS	SIKKIM	NHPC	2	170		
9	TEESTA HPS	SIKKIM	NHPC	3	170		
10	DIKCHU Hep	SIKKIM	SKPPL	2	48	Unit desynchronised after testing for restoration after flash floods	05-Mar-2025
11	RANGIT HPS	SIKKIM	NHPC	2	20	Annual Overhauling	06-Mar-2025
12	TASHIDING	SIKKIM	DANS	2	48.5	Annual maintenance and repair activities.	10-Feb-2025
13	CHIPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15-Dec-2023
14	INDRAVATI	ODISHA	OHPC	3	150	For replacement of Main Inlet Valve (MIV)	17-Dec-2024
15	BALIMELA HPS	ODISHA	OHPC	6	60	Initially unit was out due to Severe water leakage from turbine, later unit was taken under Repair and	06-Jan-2025

						maintenance work from 00:00 hrs of 16.01.25	
16	U. KOLAB	ODISHA	OHPC	1	80	Capital Overhauling	07-Jan-2025
17	BALIMELA HPS	ODISHA	OHPC	5	60	Repair and maintenance work	16-Jan-2025
18	CHUZACHEN	SIKKIM	GATI	2	55	Annual Overhauling	06-Feb-2025
19	RENGALI HPS	ODISHA	OHPC	4	50	Annual Maintenance	10-Feb-2025
20	RONGNICHU	SIKKIM	MBPGCL	1	56.5	Annual maintenance	14-Feb-2025
21	RONGNICHU	SIKKIM	MBPGCL	2	56.5	Annual maintenance	14-Feb-2025
22	BURLA HPS/HIRAKUD I	ODISHA	OHPC	4	32	Annual Maintenance	04-Mar-2025

d) Long outage report of transmission lines (As on 16.01.2025):

Transmission Element / ICT	Outage From	Reasons for Outage
220/132KV 100 MVA ICT II AT LALMATIA	22.01.2019	220/132KV, 100MVA Transformer (NTPC side) is charged on 07.02.2024 from HV side on no load. Now, it is in idle charged condition
220KV-FSTPP-LALMATIA-I	21.04.2021	Two nos. of tower collapsed on 29.05.2024 near to Lalmatia GSS in the Loc. No. 246 & 247. Presently 220 kV Farakka-Lalmatia line is charged (from loc no 241 to loc 84) at 132 kV voltage level for anti-theft purpose by tapping at loc. No. 100-101.
220KV-WARIA-BIDHANNAGAR-1 & 2	08.06.2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
132KV-BARHI-RAJGIR-1	25.03.2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destringing of conductor of both circuits and Earth wire between tension tower no. 218-237 in same line.
132KV-NALANDA-BARHI(DVC)-1	25.03.2023	
400KV-RANGPO-TEESTA-V-1 & 2	04.10.2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-TEESTA-III-RANGPO-1	04.10.2023	Hand tripped from Teesta-III end due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-TEESTA-III-DIKCHU-1	04.10.2023	

132KV-RANGPO-SAMARDONG-1	22-05-2024	Rangpo: Y-N fault with fault distance 0.157 kM 14.562kA Samardong: NA
220KV-RAJARHAT-NEW TOWN(AA-II)-2	10-07-2024	Initially line out due to rectification of gas leakage problem from B-Ph breaker pole. Line declared under breakdown after charging attempt after return of shutdown. After that fault found in b-phase cable.
400KV/220KV 315 MVA ICT 1 AT NORTH KARANPURA	12-09-2024	Tripped on Differential protection
132KV-MADHEPURA (BH)-SAHARSA(PMTL)-1	23.09.2024	To control loading on 132kV Madhepura-Saharsa line
132KV-MELLI-SILIGURI-1	05-10-2024	S/d for inspection of tower of Loc.127 found twisted due to heavy landslide & heavy continuous rainfall in Soom Tea Garden under Darjeeling section. Line charged as 132 KV Siliguri-Melli II (Interim arrangement) at 19:20 hrs on 09-10-2024. This interim arrangement is obtained by horizontal jumpering at Loc-129 after disconnecting main jumper for both Rangit & Melli side.
132KV-RANGIT-KURSEONG-1	05-10-2024	S/d for inspection of tower of Loc.127 found twisted due to heavy landslide & heavy continuous rainfall in Soom Tea Garden under Darjeeling section. Line charged as 132 KV Siliguri-Melli II (Interim arrangement) at 19:20 hrs on 09-10-2024. This interim arrangement is obtained by horizontal jumpering at Loc-129 after disconnecting main jumper for both Rangit & Melli side.
400KV/220KV 315 MVA ICT 1 AT TSTPP	01-11-2024	Tripped on PRD protection
132KV-PATRATU-PATRATU-1 & 2	16-11-2024	Diversion/Heightening of line due to inadequate clearance from under construction railway Line by PVUNL
132KV-CHUZACHEN-RANGPO-1	29-11-2024	Rangpo : B-N ,Z-1, 7.8 KA, 5.61 KM
400KV-ALIPURDUAR (PG)-PUNASANGCHUN-JIGMELING-2	02-12-2024	SD Availed by Bhutan for rectify/Replace the LA for 400kV Jigmeling _Puna_ALI-1.
400KV-KHSTPP-BARH-2	07-12-2024	Uprating of bay & line equipments
400KV-ALIPURDUAR (PG)-PUNASANGCHUN-JIGMELING-1	10-12-2024	Jumper connection and interconnection removal at Kamichu
400KV/220KV 315 MVA ICT 2 AT MEJIA-B	20-01-2025	Tripped during charging of ICT#1 bay with cable from 220 kv GIS side
400KV-BINAGURI-TALA-2	24-01-2025	Binaguri end: R-N, F dist 125.3 kM, F Current Ir-3.26kA
132KV-CHUZACHEN-RANGPO-1	04-02-2025	Maintenance Activities
220KV-DALKHOLA (PG)-GAZOLE-1&2	06-02-2025	To reduce loading of malda gazole after dalkhola pg bus return

132KV-NAGARUNTARI-NABINAGAR-1	07-02-2025	Re-sagging of conductors at various locations on OCB till 25/02/2025
400KV-NEW PURNEA-KISHANGANJ-1 & 2	18-02-2025	Facilitating Erection of New Tower on Pile foundation
220KV-KATAPALLI-BOLANGIR(PG)-1	20-02-2025	To avoid tripping due to overloading
220KV-KISHANGANJ(PG)-DALKHOLA (PG)-2	22-02-2025	Bus Isolator & Bus Conductor Replacement

Transmission licensees/ Utilities are requested to update expected restoration date & work progress regarding restoration regularly to ERLDC/ERPC on monthly basis by 5th of each month so that status of restoration can be reviewed in OCC. Utilities are also requested to update outage of any elements within their substation premises like isolator/breaker to ERLDC/ERPC regularly. (Reported as per Clause 5.2(e) of IEGC).

Deliberation in the meeting

Members noted.

4.3. Commissioning of new units and transmission elements in Eastern Grid in the month of February -2025.

The details of new units/transmission elements commissioned in the month of February 2025 based on the inputs received from beneficiaries:

NEW ELEMENTS COMMISSIONED DURING February, 2025							
उत्पादन इकाइयाँ / GENERATING UNITS							
क्र. Sl. No.	स्थान Location / Pooling Station	मालिक/यूनिट का नाम OWNER/UNIT NAME	यूनिट संख्या/स्रोत Unit No/Source	संकलित क्षमता (मेगावाट) Capacity added (MW)	कुल/स्थापित क्षमता (मेगावाट) Total/Installed Capacity (MW)	दिनांक DATE	टिप्पणी Remarks
NIL							
आई.सी.टी/जी.टी/एस.टी / ICTs/ GTs / STs							
क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	उप-केन्द्र SUB-STATION	आईसीटी संख्या ICT NO	वोल्टेज (केवी) Voltage Level (kV)	क्षमता (एमवीए) CAPACITY (MVA)	दिनांक DATE	टिप्पणी Remarks
NIL							
प्रेषण लाइन / TRANSMISSION LINES							
क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	लाइन का नाम LINE NAME	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks	
1	LILO Portion - 10.3 Km (BSPTCL)	400 केवी-बाढ़-बख्तियारपुर(बी.एच.)-2 400KV-BARH-BAKHTIYARPUR(BH)-2	51.04	QUAD MOOSE	01-02-2025	first time charged	

2	LILO Portion-10.45 Km (BSPTCL)	400 केवी-पटना-बख्तियारपुर(बी.एच)-2 400KV-PATNA-BAKHTIYARPUR(BH)-2	62.204	QUAD MOOSE	01-02-2025	first time charged
लिलो / प्रेषण लाइन की पुनर्व्यवस्था / LILO/RE-ARRANGEMENT OF TRANSMISSION LINES						
क्र. Sl. No.	**एजेंसी/मालिक Agency/Owner**	**लाइन का नाम / लिलो पर Line Name/LILO at**	**लंबाई (किमी) Length (KM)**	**कंडक्टर प्रकार Conductor Type**	**दिनांक DATE**	**टिप्पणी Remarks**
1	पावर ग्रिड PGCIL	220 केवी-दालखोला (पश्चिम बंगाल)-पूर्णिया (पुराना)-1 220KV-DALKHOLA (WB)-PURNEA(OLD)-1	41.4	Single Zebra	04-02-2025	220kV Purnea(PG) - Dalkhola (WB) line -1 &2 (through ERS) on bypassing Dalkhola (PG)
2	पावर ग्रिड PGCIL	220 केवी-दालखोला (पश्चिम बंगाल)-पूर्णिया (पुराना)-2 220KV-DALKHOLA (WB)-PURNEA(OLD)-2	41.4	Single Zebra	03-02-2025	
3	पावर ग्रिड PGCIL	132 केवी-रंगपो-गंगटोक-1 132KV-RANGPO-GANGTOK-1	28	HTLS	24-02-2025	Reconductoring of 132 KV Rangpo-Gangtok-I (Conductor Type-Gapped Type HTLS, 28 KM) along with upgraded line Bay
4	डब्ल्यू.बी. एस.ई.टी.सी.एल. WBSETCL	132 केवी-एनबीयू-पीजीसीआईएल (एस.एल.जी) सीकेटी-2 132KV-NBU-PGCIL(SLG) ckt-2	10.62	Panther	31-01-2025	132 kV Siliguri (PG) -NBU (WB) Ckt-2 (Reconfiguration of Siliguri (PG) – NJP (WB) S/C and NBU (WB)-NJP (WB) S/C)
5	पावर ग्रिड ओडिशा परियोजना PGCIL ODISHA PROJECT	400 केवी-राउरकेला-झारसुगुड़ा-4 400KV-ROURKELA-JHARSUGUDA-4	126.069	HTLS	28-02-2025	Reconductoring of Jharsuguda–Rourkela (PG) 400kV 2xD/c Twin Moose line with Twin HTLS along with bay upgradation at Rourkela S/S.
बस/लाइन रिएक्टर / BUS/LINE REACTOR						
क्र. Sl. No.	**एजेंसी/मालिक Agency/Owner**	**एलेमेंट का नाम Element Name**	**उप-केन्द्र SUB-STATION**	**वोल्टेज (केवी) Voltage Level (kV)**	**दिनांक DATE**	**टिप्पणी Remarks**
1	बी.एस.पी.टी.सी.एल. BSPTCL	125MVAR 400KV B/R-1 AT BAKHTIYARPUR (BH)	बख्तियारपुर (बी.एच)	400	01-02-2025	

			BAKHTIYARPUR (BH)			
2	बी.एस.पी.टी.सी.एल. BSPTCL	125MVAR 400KV B/R-1 AT BAKHTIYARPUR (BH)	बख्तियारपुर (बी.एच) BAKHTIYARPUR (BH)	400	01-02-2025	
बस / BUS						
क्र. Sl. No.	**एजेंसी/मालिक Agency/Owner**	**एलेमेंट का नाम Element Name**	**उप-केन्द्र SUB-STATION**	**वोल्टेज (केवी) Voltage Level (kV)**	**दिनांक DATE**	**टिप्पणी Remarks**
NIL						
एच.वी.डी.सी/ए.सी फिल्टर बैंक/फैक्ट्स डिवाइस संबद्ध प्रणाली / HVDC /AC Filter bank / FACTS DEVICE associated System						
क्र. Sl. No.	**एजेंसी/मालिक Agency/Owner**	**एलेमेंट का नाम Element Name**	**उप-केन्द्र SUB-STATION**	**वोल्टेज (केवी) Voltage Level (kV)**	**दिनांक DATE**	**टिप्पणी Remarks**
NIL						
बे / BAYS						
क्र. Sl. No.	**एजेंसी/मालिक Agency/Owner**	**एलेमेंट का नाम Element Name**	**उप-केन्द्र SUB-STATION**	**वोल्टेज (केवी) Voltage Level (kV)**	**दिनांक DATE**	**टिप्पणी Remarks**
1	बी.एस.पी.टी.सी.एल. BSPTCL	400KV MAIN BUS - 2 AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.) BAKHTIYARPUR (BH)	400	01-02-2025	
2	बी.एस.पी.टी.सी.एल.	400KV TIE BAY OF PATNA-2 AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.)	400	01-02-2025	
3	बी.एस.पी.टी.सी.एल.	400KV TIE BAY OF PATNA-1 AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.)	400	01-02-2025	
4	बी.एस.पी.टी.सी.एल.	400KV TIE BAY OF (BARH -2 AND 125MVAR B/R-2) AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.)	400	01-02-2025	
5	बी.एस.पी.टी.सी.एल.	400KV TIE BAY OF BARH -1 AND 125MVAR B/R-1 AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.)	400	01-02-2025	
6	बी.एस.पी.टी.सी.एल.	400KV MAIN BAY OF 125MVAR B/R-1 AT BAKHTIYARPUR(BH	बख्तियारपुर (बी.एच.)	400	01-02-2025	
7	बी.एस.पी.टी.सी.एल.	400KV MAIN BAY OF 125MVAR B/R-2 AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.)	400	01-02-2025	
8	बी.एस.पी.टी.सी.एल.	400KV MAIN BUS - 2 AT BAKHTIYARPUR(BH)	बख्तियारपुर (बी.एच.)	400	01-02-2025	

Members may note.

Deliberation in the meeting

Members noted.

4.4. UFR operation during the month of February 2025

Frequency profile for the month as follows:

MONTH	MAX (DATE/TIME)	MIN (DATE/TIME)	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
February, 2025	50.33 Hz on 06-02-2025 at 13:02 Hrs and 24-02-2025 at 08:00 Hrs	49.55 Hz on 19-02-2025 at 12:43 Hrs and 20-02-2025 at 19:02 Hrs	6.25	75.35	18.40

Hence, no report of operation of UFR has been received from any of the constituents.

Members may note.

Deliberation in the meeting
Members noted.

****

Annex-A

Participants in the 225th OCC meeting						
Name	**First Join**	**Last Leave**	**In-Meeting Duration**	**Email**	**Participant ID (UPN)**	**Role**
ERPC Kolkata	3/18/25, 10:15:28 AM	3/18/25, 3:19:08 PM	3h 16m 23s	ERPC@KolkataMST.onmicrosoft.com	ERPC@KolkataMST.onmicrosoft.com	Organizer
Pratham Kumar RPM	3/18/25, 10:15:40 AM	3/18/25, 1:31:03 PM	3h 8m 50s			Presenter
Raut Pravin (External)	3/18/25, 10:15:40 AM	3/18/25, 1:31:01 PM	3h 15m 20s	rautpv@tatapower.com	rautpv@tatapower.com	Presenter
Alok Kumar Mahto (Extern	3/18/25, 10:15:41 AM	3/18/25, 1:36:21 PM	3h 20m 40s	ALOKMAHTO@NTPC.CO.IN	ALOKMAHTO@NTPC.CO.IN	Presenter
Birendra Kumar TTPS (Unv	3/18/25, 10:15:42 AM	3/18/25, 1:27:20 PM	3h 4m 33s			Presenter
Soumyadip Baral (Unverif	3/18/25, 10:15:42 AM	3/18/25, 11:19:37 AM	1h 3m 55s			Presenter
SUNIL KUMAR PANDEY (Ex	3/18/25, 10:15:43 AM	3/18/25, 1:30:55 PM	3h 15m 12s	sunil.pandey@dvc.gov.in	sunil.pandey@dvc.gov.in	Presenter
AVINASH SHUKLA (Externa	3/18/25, 10:15:48 AM	3/18/25, 11:19:52 AM	1h 4m 4s	AVINASHSHUKLA@NTPC.CO.IN	AVINASHSHUKLA@NTPC.CO.IN	Presenter
Anurag Gupta (External)	3/18/25, 10:15:50 AM	3/18/25, 11:59:23 AM	1h 43m 32s	ANURAGGUPTA@NTPC.CO.IN	ANURAGGUPTA@NTPC.CO.IN	Presenter
PANKAJ KUSHWAHA (Exte	3/18/25, 10:16:32 AM	3/18/25, 3:19:08 PM	5h 2m 36s	PANKAJKUSHWAHA@NTPC.CO.IN	PANKAJKUSHWAHA@NTPC.CO.IN	Presenter
WBPDCL (Unverified)	3/18/25, 10:18:36 AM	3/18/25, 1:30:57 PM	3h 12m 21s			Presenter
HOP TEESTA-V POWER ST/	3/18/25, 10:18:38 AM	3/18/25, 12:20:39 PM	2h 45s			Presenter
WB SLDC (Unverified)	3/18/25, 10:20:27 AM	3/18/25, 12:25:10 PM	2h 4m 42s			Presenter
Rahul Anand (External)	3/18/25, 10:21:19 AM	3/18/25, 1:30:57 PM	3h 9m 37s	RAHULANAND@NTPC.CO.IN	RAHULANAND@NTPC.CO.IN	Presenter
Kinley Tenzin, CHP, Chhuk	3/18/25, 10:21:38 AM	3/18/25, 10:38:11 AM	16m 32s			Presenter
SLDC ODISHA (Unverified)	3/18/25, 10:21:43 AM	3/18/25, 10:25:44 AM	4m 1s			Presenter
CHOTEN TSHERING	3/18/25, 10:23:14 AM	3/18/25, 2:13:10 PM	3h 49m 55s			Presenter
SLDC ODISHA (Unverified)	3/18/25, 10:26:22 AM	3/18/25, 1:30:55 PM	3h 4m 33s			Presenter
GRIDCO Video Conferenci	3/18/25, 10:26:53 AM	3/18/25, 1:34:56 PM	3h 8m 3s	gridcovc@gridcovc.onmicrosoft.com	gridcovc@gridcovc.onmicrosoft.com	Presenter
S K Sharma, DVC LDC (Unv	3/18/25, 10:27:15 AM	3/18/25, 1:30:56 PM	3h 3m 41s			Presenter
SMS Sahoo, DGM(Elect), C	3/18/25, 10:27:17 AM	3/18/25, 12:27:40 PM	51m 47s			Presenter
R Das, CE, CPD (Unverified	3/18/25, 10:27:17 AM	3/18/25, 1:30:54 PM	3h 3m 36s			Presenter
Shouvik Banerjee	3/18/25, 10:27:59 AM	3/18/25, 10:31:21 AM	3m 21s			Presenter
Sh RajeshKumar (External	3/18/25, 10:28:22 AM	3/18/25, 11:50:25 AM	1h 22m 2s	RAJESHKUMAR15@NTPC.CO.IN	RAJESHKUMAR15@NTPC.CO.IN	Presenter
Jigme Dorji (BPSO) (Unver	3/18/25, 10:28:28 AM	3/18/25, 2:17:49 PM	3h 49m 21s			Presenter
Debarshi De (External)	3/18/25, 10:28:39 AM	3/18/25, 1:30:58 PM	3h 2m 19s	debarshi.de@rpsg.in	debarshi.de@rpsg.in	Presenter
Chandan Mallick (External	3/18/25, 10:29:03 AM	3/18/25, 2:00:39 PM	2h 54m 17s	chandan.mallick@erldc.onmicrosoft.com	chandan.mallick@erldc.onmicrosoft.com	Presenter
NITIN KATIYAR (External)	3/18/25, 10:29:24 AM	3/18/25, 2:40:07 PM	4h 10m 42s	NITINKATIYAR@NTPC.CO.IN	NITINKATIYAR@NTPC.CO.IN	Presenter
Manas Das (External)	3/18/25, 10:29:47 AM	3/18/25, 1:30:59 PM	3h 1m 12s	manasdas@erldc.onmicrosoft.com	manasdas@erldc.onmicrosoft.com	Presenter
Shabari Pramanick (Extern	3/18/25, 10:29:51 AM	3/18/25, 1:31:00 PM	3h 1m 8s	shabari.pramanick@erldc.onmicrosoft.com	shabari.pramanick@erldc.onmicrosoft.com	Presenter
M Prasad DGPC Bhutan (U	3/18/25, 10:30:09 AM	3/18/25, 1:14:49 PM	2h 44m 40s			Presenter
yugandhar N	3/18/25, 10:30:12 AM	3/18/25, 12:49:46 PM	2h 19m 33s			Presenter
Rakesh Kr Pradhan (Extern	3/18/25, 10:30:28 AM	3/18/25, 1:31:50 PM	3h 1m 21s	rkpradhan@erldc.onmicrosoft.com	rkpradhan@erldc.onmicrosoft.com	Presenter
Tashi Choden BPC (Unveri	3/18/25, 10:30:52 AM	3/18/25, 1:16:08 PM	2h 34m 21s			Presenter
Bilash Achari (External)	3/18/25, 10:31:04 AM	3/18/25, 2:04:14 PM	3h 33m 9s	bilash.achari@erldc.onmicrosoft.com	bilash.achari@erldc.onmicrosoft.com	Presenter
Ashutosh Kumar (External	3/18/25, 10:31:26 AM	3/18/25, 12:55:55 PM	2h 24m 28s	AKSRIVASTAVA16@NTPC.CO.IN	AKSRIVASTAVA16@NTPC.CO.IN	Presenter
A Thakur GGM (O&M) NH	3/18/25, 10:32:00 AM	3/18/25, 3:08:00 PM	4h 36m			Presenter
Sajan George (External)	3/18/25, 10:32:21 AM	3/18/25, 1:31:35 PM	2h 59m 13s	sajan@erldc.onmicrosoft.com	sajan@erldc.onmicrosoft.com	Presenter
Chowdhury Abhijit (Extern	3/18/25, 10:32:35 AM	3/18/25, 11:15:32 AM	42m 56s	abhijit.chowdhury@tatapower.com	abhijit.chowdhury@tatapower.com	Presenter
ERLDC (Unverified)	3/18/25, 10:33:05 AM	3/18/25, 1:44:45 PM	3h 11m 39s			Presenter
SAMIM MONDAL ERLDC (U	3/18/25, 10:33:07 AM	3/18/25, 1:30:04 PM	2h 56m 56s			Presenter
Mayank Teotia (External)	3/18/25, 10:33:18 AM	3/18/25, 2:47:36 PM	4h 14m 17s	mayankteotia@erldc.onmicrosoft.com	mayankteotia@erldc.onmicrosoft.com	Presenter
Samten Samten	3/18/25, 10:33:28 AM	3/18/25, 1:30:54 PM	2h 57m 25s			Presenter
Premkant Kumar Singh (Ex	3/18/25, 10:34:53 AM	3/18/25, 2:25:09 PM	3h 50m 15s	premkant@erldc.onmicrosoft.com	premkant@erldc.onmicrosoft.com	Presenter
GMR@Diptikanta Panda (U	3/18/25, 10:35:04 AM	3/18/25, 2:05:21 PM	3h 30m 17s			Presenter
Sakti Narayan Dey (Unveri	3/18/25, 10:35:27 AM	3/18/25, 10:35:35 AM	8s			Presenter

Participants in the 225th OCC meeting						
Name	**First Join**	**Last Leave**	**In-Meeting Duration**	**Email**	**Participant ID (UPN)**	**Role**
SHOUVIK BANERJEE (Unve	3/18/25, 10:35:31 AM	3/18/25, 1:30:54 PM	2h 45m 14s			Presenter
Pinki Debnath (External)	3/18/25, 10:36:19 AM	3/18/25, 1:31:05 PM	2h 54m 45s	pinkidebnath@erldc.onmicrosoft.com	pinkidebnath@erldc.onmicrosoft.com	Presenter
sldc ranchi (Unverified)	3/18/25, 10:37:07 AM	3/18/25, 1:31:05 PM	2h 53m 57s			Presenter
p k de erpc (Unverified)	3/18/25, 10:37:48 AM	3/18/25, 1:31:05 PM	2h 53m 16s			Presenter
loday (Unverified)	3/18/25, 10:38:39 AM	3/18/25, 10:51:28 AM	12m 48s			Presenter
RTAMC Odisha (Unverifie	3/18/25, 10:38:59 AM	3/18/25, 1:03:29 PM	2h 24m 30s			Presenter
Sourav Mandal (External)	3/18/25, 10:39:41 AM	3/18/25, 1:34:31 PM	2h 54m 49s	souravmandal@erldc.onmicrosoft.com	souravmandal@erldc.onmicrosoft.com	Presenter
Srimalya Ghosal (External	3/18/25, 10:39:43 AM	3/18/25, 10:59:31 AM	19m 48s	sghosal@erldc.onmicrosoft.com	sghosal@erldc.onmicrosoft.com	Presenter
Kinley Tenzin, CHP, Chhuk	3/18/25, 10:41:34 AM	3/18/25, 1:31:00 PM	2h 49m 26s			Presenter
R K BISWAL RTAMC ODISH	3/18/25, 10:41:34 AM	3/18/25, 1:10:31 PM	2h 28m 57s			Presenter
SLDC,ODISHA (Unverified)	3/18/25, 10:41:36 AM	3/18/25, 10:50:09 AM	8m 32s			Presenter
BIMAL PRASAD BEHERA (E	3/18/25, 10:41:40 AM	3/18/25, 10:49:23 AM	7m 43s	BPBEHERA@NTPC.CO.IN	BPBEHERA@NTPC.CO.IN	Presenter
Chandrakant Mishra (Exte	3/18/25, 10:41:54 AM	3/18/25, 11:36:11 AM	54m 16s	CHANDRAKANTMISHRA@NTPC.CO.IN	CHANDRAKANTMISHRA@NTPC.CO.IN	Presenter
Vijay Kumar NHPC (Unveri	3/18/25, 10:42:57 AM	3/18/25, 2:02:54 PM	3h 19m 57s			Presenter
L Lepcha (Unverified)	3/18/25, 10:43:03 AM	3/18/25, 10:51:52 AM	8m 48s			Presenter
Gautam Ranjan (External)	3/18/25, 10:43:05 AM	3/18/25, 1:12:12 PM	2h 29m 7s	GAUTAMRANJAN@NTPC.CO.IN	GAUTAMRANJAN@NTPC.CO.IN	Presenter
Saibal Ghosh (External)	3/18/25, 10:43:40 AM	3/18/25, 2:30:06 PM	3h 46m 25s	saibal@erldc.onmicrosoft.com	saibal@erldc.onmicrosoft.com	Presenter
ns mondal (Unverified)	3/18/25, 10:43:50 AM	3/18/25, 1:30:54 PM	2h 47m 3s			Presenter
SMS Sahoo, DGM(Elect), C	3/18/25, 10:43:51 AM	3/18/25, 11:53:17 AM	1h 9m 26s			Presenter
Nishant Kumar Shankwar	3/18/25, 10:44:21 AM	3/18/25, 12:36:51 PM	1h 28m 9s	Nishant.Kumar@energy-sel.com	Nishant.Kumar@energy-sel.com	Presenter
Akash Kumar Modi (Extern	3/18/25, 10:45:51 AM	3/18/25, 1:44:36 PM	2h 58m 45s	akmodi@erldc.onmicrosoft.com	akmodi@erldc.onmicrosoft.com	Presenter
Gitesh Patel (External)	3/18/25, 10:46:42 AM	3/18/25, 2:24:03 PM	3h 37m 21s	giteshpatel@erldc.onmicrosoft.com	giteshpatel@erldc.onmicrosoft.com	Presenter
Preetam Banerjee (Extern	3/18/25, 10:46:49 AM	3/18/25, 1:33:00 PM	2h 46m 11s	Preetam.Banerjee@wbsedcl.in	Preetam.Banerjee@wbsedcl.in	Presenter
Alok Pratap Singh (Externa	3/18/25, 10:47:28 AM	3/18/25, 3:01:45 PM	4h 14m 17s	apsingh@erldc.onmicrosoft.com	apsingh@erldc.onmicrosoft.com	Presenter
Shiv Shambhu kr Suman (E	3/18/25, 10:50:39 AM	3/18/25, 12:04:19 PM	1h 13m 39s	sskumar@erldc.onmicrosoft.com	sskumar@erldc.onmicrosoft.com	Presenter
Kavita Parihar (Unverified)	3/18/25, 10:50:46 AM	3/18/25, 10:54:51 AM	4m 5s			Presenter
Loday (Unverified)	3/18/25, 10:51:08 AM	3/18/25, 1:31:45 PM	2h 40m 36s			Presenter
Ashish Kumar (External)	3/18/25, 10:51:13 AM	3/18/25, 1:12:54 PM	2h 21m 41s	ashish.k@budhilhydro.com	ashish.k@budhilhydro.com	Presenter
Saurav Kr Sahay (External)	3/18/25, 10:52:09 AM	3/18/25, 3:19:08 PM	4h 26m 59s	saurav.sahay@erldc.onmicrosoft.com	saurav.sahay@erldc.onmicrosoft.com	Presenter
Partha Ghosh {पार्थ घोष} (E	3/18/25, 10:52:34 AM	3/18/25, 1:31:04 PM	2h 38m 30s	partha.ghosh@powergrid.in	partha.ghosh@powergrid.in	Presenter
SUMEET NARANG (Externa	3/18/25, 10:55:25 AM	3/18/25, 12:11:34 PM	1h 16m 8s	SUMEETNARANG@NTPC.CO.IN	SUMEETNARANG@NTPC.CO.IN	Presenter
Kavita Parihar (Unverified)	3/18/25, 10:55:31 AM	3/18/25, 11:36:45 AM	41m 14s			Presenter
GAGAN KUMAR	3/18/25, 10:56:02 AM	3/18/25, 1:21:41 PM	1h 53m 40s			Presenter
J.S. (Unverified)	3/18/25, 10:58:27 AM	3/18/25, 1:00:27 PM	2h 2m			Presenter
Apnrl Switchyard (Externa	3/18/25, 10:58:34 AM	3/18/25, 12:18:02 PM	1h 19m 27s	apnrl.switchyard@adhunikpower.co.in	apnrl.switchyard@adhunikpower.co.in	Presenter
Pranav Rathore (External)	3/18/25, 10:59:21 AM	3/18/25, 2:10:48 PM	3h 11m 26s	pranav.rathore@indigrid.com	pranav.rathore@indigrid.com	Presenter
Sukanta Kumar Parida {सु	3/18/25, 10:59:22 AM	3/18/25, 1:00:45 PM	2h 1m 23s	sukantakumar@powergrid.in	sukantakumar@powergrid.in	Presenter
Dey Sanjib (External)	3/18/25, 11:03:26 AM	3/18/25, 1:10:11 PM	2h 6m 44s	skdey@tatapower.com	skdey@tatapower.com	Presenter
Himanshu Kumar Anshu {ह	3/18/25, 11:05:15 AM	3/18/25, 1:30:57 PM	2h 25m 42s	himanshukumar@powergrid.in	himanshukumar@powergrid.in	Presenter
Santosh Kumar Panda,SLD	3/18/25, 11:06:13 AM	3/18/25, 1:32:01 PM	2h 25m 48s			Presenter
guest (Unverified)	3/18/25, 11:10:23 AM	3/18/25, 11:20:57 AM	10m 34s			Presenter
Ankit Jain (External)	3/18/25, 11:11:22 AM	3/18/25, 1:37:45 PM	2h 26m 22s	ankitjain@erldc.onmicrosoft.com	ankitjain@erldc.onmicrosoft.com	Presenter
Sakti Narayan Dey (Unveri	3/18/25, 11:14:31 AM	3/18/25, 11:14:55 AM	24s			Presenter
Prasanna Kumar Sahoo (E	3/18/25, 11:15:55 AM	3/18/25, 1:03:45 PM	1h 47m 49s	PRASANNASAHOO@NTPC.CO.IN	PRASANNASAHOO@NTPC.CO.IN	Presenter
shabari pramanick	3/18/25, 11:19:04 AM	3/18/25, 12:25:16 PM	1h 6m 12s			Presenter
Jaiprakash Verma (Extern	3/18/25, 11:24:20 AM	3/18/25, 1:19:22 PM	1h 55m 1s	JAIPRAKASHVERMA@NTPC.CO.IN	JAIPRAKASHVERMA@NTPC.CO.IN	Presenter

Participants in the 225th OCC meeting						
Name	**First Join**	**Last Leave**	**In-Meeting Duration**	**Email**	**Participant ID (UPN)**	**Role**
Subrat Swain (External)	3/18/25, 11:24:32 AM	3/18/25, 3:04:54 PM	3h 40m 22s	subratswain@erldc.onmicrosoft.com	subratswain@erldc.onmicrosoft.com	Presenter
guest (Unverified)	3/18/25, 11:28:31 AM	3/18/25, 1:26:25 PM	1h 57m 54s			Presenter
Dillip Kumar	3/18/25, 11:30:35 AM	3/18/25, 1:33:19 PM	2h 2m 43s			Presenter
Amalendu Nanda (Externa	3/18/25, 11:33:18 AM	3/18/25, 1:41:27 PM	2h 8m 9s	amalendu.nanda@opgc.co.in	amalendu.nanda@opgc.co.in	Presenter
Kavita Parihar (Unverified)	3/18/25, 11:37:08 AM	3/18/25, 3:19:08 PM	3h 42m			Presenter
Arvind Kumar, ESE, SLDC (	3/18/25, 11:43:20 AM	3/18/25, 1:30:15 PM	1h 46m 55s			Presenter
Sanatan Sarvesh, DD, CEA	3/18/25, 11:43:54 AM	3/18/25, 1:48:24 PM	2h 4m 29s			Presenter
Manish Kumar Yadav (Exte	3/18/25, 11:44:58 AM	3/18/25, 12:02:12 PM	17m 13s	manish.yadav@erldc.onmicrosoft.com	manish.yadav@erldc.onmicrosoft.com	Presenter
OHPC (Unverified)	3/18/25, 11:49:49 AM	3/18/25, 1:33:04 PM	1h 43m 15s			Presenter
NIRAJ KUMAR SINGH	3/18/25, 12:05:56 PM	3/18/25, 12:20:39 PM	14m 43s			Presenter
Ohpc (Unverified)	3/18/25, 12:07:23 PM	3/18/25, 12:08:19 PM	55s			Presenter
TOMS Semtokha (Unverifi	3/18/25, 12:10:06 PM	3/18/25, 1:31:09 PM	1h 21m 2s			Presenter
UTTAM KUMAR (External	3/18/25, 12:10:23 PM	3/18/25, 1:30:18 PM	1h 19m 54s	uttamkumar@dvc.gov.in	uttamkumar@dvc.gov.in	Presenter
Ohpc (Unverified)	3/18/25, 12:25:11 PM	3/18/25, 12:38:04 PM	12m 52s			Presenter
S C De and MO group ERL	3/18/25, 12:29:42 PM	3/18/25, 3:19:08 PM	2h 49m 25s			Presenter
choten Tshering	3/18/25, 1:07:09 PM	3/18/25, 1:14:25 PM	7m 16s			Presenter

Annex-B.2.4

एनटीपीसी लिमिटेड
NTPC Limited
Eastern Region-I Headquarters

Ref: ER-1 HQ/ OS/ 2024-25/01 **Date : 08-03-2025**

To:
CGM SO,
ERLDC, 14, Golf Club Road, Tollygunge, Kolkata-700033

With reference to your letter dated 06.03.2025, following is submitted.
NTPC has prepared well for the expected increased demand in approaching summer of 2025, following is list of Annual maintenance done for the various grid connected elements:

Plant	Bus	Last Maint.	Next plan	ICT	Last Maint.	Next Plan	No of line	Last Maint.	Next plan
Barh	1	29-10-2024	FY 25-26	1	26-10-2024	FY 25-26	8	All line bays done Between 05-06-2024 to 05-10-2024	FY 25-26
	2	21-08-2024	FY 25-26	2	26-11-2024	FY 25-26			
	3	21-11-2024	FY 25-26	3	23-07-2024	FY 25-26			
	4	13-12-2024	FY 25-26						
Farakka	1	15-12-2024	FY 25-26	1	08-04-2024	FY 25-26	10	6-line bay done between Nov 2024 to Feb 2025	4-lines planned in March and April 2025 subject to permission from ERLDC
	2	09-02-2025	FY 25-26	2	25-02-2025	FY 25-26			
Kahalgaon	4	*		2	**		12	5- line bay done between June 2024 to November 2024	7- lines planned in March 2025 subject to permission from ERLDC
BRBCL	1	-	11-03-2025	1	-	21-03-2025	2	Completed between 09 Dec to 21 Dec 24	FY 25-26
	2	17-03-2024	FY 25-26	2	-	27-03-2025			
NPGC	1	-	06-05-2025	1	****	28-03-2025	1	***	10-03-2025
	2	-	13-05-2025	2	****	29-04-2025	2	***	17-03-2025
							3	22-10-2024	
							4	***	19-03-2025

Kahalgaon :
* Due to defective isolators between Bus 1 & 3 Sectionalizer and Bus 2 & 4 Sectionalizer the shutdown could not be taken. The material for same is under procurement and the isolators will be replaced after that, enabling isolation of one bus for maintenance. Tentative date for material receipt 15 May 2025.
** As ICT 3 & 4 are not available and only ICT 1 & 2 are catering to station bus hence taking one ICT out for maintenance poses threat to stability power plant units. Hence maintenance of same could not be carried out.

NPGCL :
*** Line no 1,2, and 4 were applied respectively in August 2024, & November 2024 vide request no RQ71450, RQ71451 and RQ71453 in OCC_219, however same were not approved.

**** ICT 1 & 2 were also applied vide request no RQ71818 & RQ71817 in OCC_219 in November 2024, however same were not approved.
Bus shutdown could not be availed due to non-maintenance of Line and ICTs.

Yours Faithfully,

Mathew Eipe Kovoor

GM(OS) ER1 HQ, NTPC Limited Patna

Copy to :

1. ED, ERLDC , 14, Golf Club Road, Tollygunge, Kolkata-700033
2. RED East-I, NTPC Ltd, Near Urja Auditorium, Shastri Nagar, Patna 800023
3. Member Secretary, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033
4. GM(O&M), Kahalgaon, Farakka, Barh, BRBCL, NSTPS
5. HOP, Kahalgaon, Farakka, Barh, BRBCL, NSTPS.

Annexure D.1

Updated Anticipated Peak Demand (in MW) of ER & its constituents for April 2025

1	**BIHAR**	**Demand (MW)**	**Energy Requirement (MU)**
	NET MAX DEMAND	7263	3844
	NET POWER AVAILABILITY- Own Sources	512	353
	Central Sector+Bi-Lateral	6764	4112
	SURPLUS(+)/DEFICIT(-)	13	622
2	**JHARKHAND**		
	NET MAXIMUM DEMAND	2250	1190
	NET POWER AVAILABILITY- Own Source	355	501
	Central Sector+Bi-Lateral+IPP	1298	883
	SURPLUS(+)/DEFICIT(-)	-206	194
3	**DVC**		
	NET MAXIMUM DEMAND	3500	2485
	NET POWER AVAILABILITY- Own Source	6161	3306
	Central Sector+MPL	275	148
	Bi- lateral export by DVC	2439	1756
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	497	-787
4	**ODISHA**		
	NET MAXIMUM DEMAND (OWN)	6800	3240
	NET MAXIMUM DEMAND (In Case of CPP Drawal of 900 MW(peak) and average drawl of 700 MW)	7700	3744
	NET POWER AVAILABILITY- Own Source	2894	2127
	Central Sector	2376	1289
	SURPLUS(+)/DEFICIT(-) (OWN)	-1530	176
	SURPLUS(+)/DEFICIT(-) (I(In Case of CPP Drawal of 900 MW(peak) and average drawlm of 700 MW)	-1829	255
5	**WEST BENGAL**		
	WBSEDCL		
5.1	NET MAXIMUM DEMAND	11041	7950
	NET MAXIMUM DEMAND (Incl. Sikkim)	11046	7953
	NET POWER AVAILABILITY- Own Source (Incl. DPL)	5531	3982
	Central Sector+Bi-lateral+IPP&CPP+TLDP	2523	1817
	EXPORT (To SIKKIM)	5	4
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	28	20
5.2	**CESC**		
	NET MAXIMUM DEMAND	2820	1300
	NET POWER AVAILABILITY- Own Source	830	573
	IMPORT FROM HEL	541	388
	TOTAL AVAILABILITY OF CESC	1371	961
	SURPLUS(+)/DEFICIT(-)	-1449	-339
	WEST BENGAL (WBSEDCL+CESC+IPCL)		
	(excluding DVC's supply to WBSEDCL's command area)		
	NET MAXIMUM DEMAND	13861	9250
	NET POWER AVAILABILITY- Own Source	6361	4555
	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	3064	2205
	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXPORT	-4436	-2490
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXPORT	-4441	-2493
6	**SIKKIM**		
	NET MAXIMUM DEMAND	125	55
	NET POWER AVAILABILITY- Own Source	87	65
	Central Sector	108	70
	SURPLUS(+)/DEFICIT(-)	69	80
	EASTERN REGION		
	NET MAXIMUM DEMAND	33799	20064
	NET MAXIMUM DEMAND ((In Case of CPP Drawal of 800 MW(peak) and average drawl of 700 MW)	34699	20568
	BILATERAL EXPORT BY DVC (Incl. Bangladesh)	2439	1756
	EXPORT BY WBSEDCL TO SIKKIM	5	4
	EXPORT TO B'DESH & NEPAL OTHER THAN DVC	642	462
	NET TOTAL POWER AVAILABILITY OF ER	27815	17859
	(INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)		
	SURPLUS(+)/DEFICIT(-)	-9070	-4426
	SURPLUS(+)/DEFICIT(-) (In Case of CPP Drawal for Odisha)	-9970	-4930