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
14 Golf Club Road, Tollygunj, Kolkata-700033
Tel. No.:033-24239651,24239658 FAX No.:033-24239652, 24239653 Web: **www.erpc.gov.in**

सं /**NO. ERPC/EE/OPERATION/2024/** 624 **दिनांक/DATE: 05.07.2024**

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

विषय : 21.06.2024 (शुक्रवार) को ईआरपीसी सचिवालय, कोलकाता में भौतिक रूप से आयोजित 216वीं OCC बैठक का कार्यवृत्त - संबंध में।

Sub: Minutes of 216th OCC Meeting held on 21.06.2024(Friday) physically at ERPC Secretariat, Kolkata - reg.

महोदय/महोदया,
Sir(s)/Madam,

कृपया अपनी जानकारी और आवश्यक कार्रवाई के लिए **21.06.2024(शुक्रवार)** को **ईआरपीसी सचिवालय, कोलकाता में 10:30 बजे भौतिक रूप** से आयोजित **216वीं ओसीसी बैठक** के **संलग्न कार्यवृत्त** देखें। यह ईआरपीसी वेबसाइट (**www.erpc.gov.in**) पर भी उपलब्ध है।

Please find enclosed **Minutes of 216th OCC Meeting** held on **21.06.2024 (Friday) physically at ERPC Secretariat, Kolkata** 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,

05/07/2024

(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. MANAGING DIRECTOR, DRUK GREEN POWER CORPORATION, P.O. BOX -1351, THIMPU, BHUTAN —(FAX NO 00975- 2336411)
28. MANAGING DIRECTOR, BHUTAN POWER CORPORATION, P.O.BOX-580, THIMPU, BHUTAN (FAX NO. 00975-2333578)
29. CHIEF ENGINEER (O&M), TALA H.E.PROJECT, BHUTAN (FAX NO. 009752/324803)
30. EXECUTIVE DIRECTOR (O&M), NHPC, FARIDABAD (FAX No.:0129-2272413)

31. GENERAL MANAGER, TEESTA –V POWER STATION, NHPC, SINGTAM, EAST SIKKIM (FAX 03592 - 247377)
32. CHIEF ENGINEER, RANGIT POWER STATION, NHPC, P.O. RANGIT NAGAR, SOUTH SIKKIM (FAX NO.03595-259268)
33. SENIOR VICE PRESIDENT, PTC LTD., NBCC TOWERS, 15-BHIKAJI KAMA PLACE, NEW DELHI- 110066 (FAX NO. 011-41659504)
34. PLANT HEAD, ADHUNIK POWER & NATUARAL RESOURCES, JHARKHAND(FAX NO.: 0657-6628440)
35. AGM (OPERATION), MAITHON POWER LTD, DHANBAD (FAX: 08860004758)
36. VICE PRESIDENT(POWER), VEDANTA LIMITED, BHUBANESWAR- 751023 (FAX NO 0674-2302920)
37. CHIEF ELECTRICAL ENGINEER, EASTERN RAILWAY, KOLKATA-700 001 (FAX NO.: 033-22300446)
38. CHIEF ELECTRICAL ENGINEER, SOUTH EASTERN RAILWAY, KOLKATA-43 (FAX: 033-24391566)
39. DEPUTY DIRECTOR, EASTERN RPSO, SALT LAKE, KOLKATA- (FAX NO:033-23217075)
40. GENERAL MANAGER (O&M), NHPC LTD, FARIDABAD, FAX: 0129-2272413
41. ASSOCIATE VICE PRESIDENT, GMR KEL, BHUBANESWAR-751007. (FAX NO: 0674-2572794)
42. GM (SO & COMML), NTPC VVNL, NEW DELHI-110033. Fax:011-24367021
43. SHRI D. P. BHAGAVA, CHIEF CONSULTANT (O&M), TEESTA URJA LIMITED, NEW DELHI-110 001 (FAX:011-46529744)
44. SHRI BRAJESH KUMAR PANDE, PLANT HEAD, JITPL. (FAX:011-26139256-65)
45. DIRECTOR (NPC), CEA, NRPC BUILDING, KATWARIA SARAI, NEW DELHI- 110016
46. VP (OS), HALDIA ENERGY LIMITED, BARIK BHAWAN, KOKATA-700072, FAX: 033-22360955
47. 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. प्रबंध निदेशक, ड्रुक ग्रीन पावर कॉर्पोरेशन, पी.ओ. बॉक्स -1351, थिम्पस, भूटान - (फैक्स नंबर 00975-2336411)
28. प्रबंध निदेशक, भूटान पावर कॉर्पोरेशन, पी.ओ.
29. मुख्य अभियंता (ओ एंड एम), ताला एच.ई.प्रोजेक्ट, भूटान (फैक्स नंबर 009752/324803)
30. कार्यकारी निदेशक (ओ एंड एम), एनएचपीसी, फरीदाबाद (फैक्स नंबर:0129-2272413)
31. महाप्रबंधक, तीस्ता-वी पावर स्टेशन, एनएचपीसी, सिंगतम, पूर्वी सिक्किम (फैक्स 03592 - 247377)।
32. मुख्य अभियंता, रंगीत पावर स्टेशन, एनएचपीसी, पी.ओ. रंगीत नगर, दक्षिण सिक्किम (फैक्स नंबर 03595-259268)

33. वरिष्ठ उपाध्यक्ष, पीटीसी लिमिटेड, एनबीसीसी टावर्स, 15-भीकाजी काम प्लेस, नई दिल्ली-110066 (फैक्स नंबर 011-41659504)।

34. प्लांट हेड, आधुनिक पावर एवं नेचुरल रिसोर्सेज, झारखंड (फैक्स नं.: 0657-6628440)।

35. एजीएम (ऑपरेशंस), मैथन पावर लिमिटेड।

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

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

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

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

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

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

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

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

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

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

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

47. 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
216TH OCC MEETING

Date : 21.06.2024

Eastern Regional Power Committee

14, Golf Club Road, Tollygunge

Kolkata: 700033

Contents

EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 216TH OCC MEETING TO BE HELD ON 21.06.2024 (FRIDAY) AT 10:30 HRS

Member Secretary, ERPC chaired the 216th OCC meeting. On welcoming all the participants, he outlined the performance of ER grid during May 2024 and highlighted the following points:

- *In May-2024, energy consumption of ER was **18666 MU** which is **9 %** more than May-2023.*
- *In May-2024, Peak demand met of ER was **31643 MW** which is **14%** more than May-2023.*
- *During May-2024, **80.05%** of time, the grid frequency was in IEGC Band (49.90Hz50.05Hz).*
- *Thermal PLF of ER during May-2024 was **78 %.***
- *Generating Stations with PLF more than **90%** during the month of May-2024:*

Utility	***Generating Station***	***PLF (%)***
WBPDCL	*Sagardighi TPS*	*93*
	Bakreswar TPS	*100*
	Santaldih TPS	*99*
	Bandel TPS	*96*
NTPC	*Muzaffarpur TPS*	*93*
	BRBCL	*93*
	Nabinagar STPP	*91*
DVC	*Chandrapura TPS*	*93*
CESC	*Southern*	*94*
IPP	*Derang TPP(JITPL)*	*98*
	Kamalanga TPS (GMR)	*97*

- *All these Thermal generating units were appreciated for maintaining PLF more than 90% stressing that such performance of Thermal GENCOs shall prove pivotal in meeting high demand during the ongoing crunch period.(especially in non-solar hours).*

- ***Coal stock position:***

- *There is a considerable improvement in coal stock position all over India including ER.*
- ***Coal stock position (As on 17.06.2024)** is detailed as follows:*

Sl No	***Name of States/Power Stns.***	***% of Actual Stock vis-à-vis Normative Stock***
1	*Jharkhand (TVNL)*	*51%*
2	*Odisha/IBTPS*	*61%*
3	*WBPDCL*	*52 (Min.Kolaghat TPS-28%, Max.Sagardighi TPS- 71 %)*
4	*DVC*	*87 (Min. Mejia TPS -45 %; Max Bokaro TPS `A` - 185%)*
5	*NTPC*	*89 (Min Talcher STPS –53% & Nabinagar TPP(BRBCL)-55%; Max. Farakka STPS 144%)*
6	*DPL*	*39%*

- *He urged Mejia TPS to transfer coal from its reserves at RTPS in order to increase its normative coal stock position.*

- ❖ *LGBR(2024-25) approved shutdown has slightly increased in July'2024 to allow maintenance activities in generating units that had been denied from April to June 2024 in line with MOP guidelines to keep higher on-bar capacity.*
- ❖ ***Transmission line (132 kV & above) commissioned during May-2024:***

- *400KV-BUXAR-NAUBATPUR (ckt –II) (Twin Moose Conductor) owned by BSPTCL first time charged on 11.05.2024 for drawing of startup power by BUXAR TPP.*
- *132KV-RANGPO-SAMARDONG (ckt –I & II))(Twin Moose ACSR) owned by Power Deptt,Govt. of Sikkim first time charged on 18.05.2024 at NO LOAD Condition.*

- ❖ *ED, ERLDC in his opening remarks highlighted the noteworthy performance by generators of ER in catering the growing demand of the region while maintaining grid frequency in IEGC Band (49.90Hz-50.05Hz) for 80.05% of time in the month of May 2024.*

- ❖ *He also underscored key challenges being faced in ER Grid as follows:*

- *Power transfer constarints in Odisha on the account of outage of 400 kV Lapanga-Meramundali D/C line.,*
- *Power flow restriction(1500MW) in Talcher Kolhar-HVDC Bipole because of outage of R-phase Rectiformer that leads to generation back-down of NTPC TTPS,Kaniha.*
- *He mentioned about the insatallation of 500MVA ICT at Subhasgram in this month which will help in catering the growing demand of WB .Meanwhile there are many other power transmission constraints that need to be dealt with.*
- *He also apprised a major event that occurred on 17th June leading to a severe disturbance in the NR grid for valuable insights of the OCC forum.*

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 215th OCC Meeting held on 22nd May 2024 virtually through Microsoft Teams online meeting platform

The minutes of 215th Operation Coordination Sub-Committee meeting held on 22.05.2024 was circulated vide letter dated 07.06.2024.

Members may confirm the minutes of 215th OCC meeting.

Deliberation in the meeting:

Members confirmed the minutes of 215th Operation Coordination Sub-Committee meeting.

2. PART-B: ITEMS FOR DISCUSSION

2.1 Inviting proposal for periodic revision of the regional unallocated quota of central Sector Generating Stations for optimal utilization of power: CEA

The peak demand of the country has touched 250 GW during the solar hours on 30 May, 2024. It is noteworthy to mention that on June 03, 2024 while the country met a maximum demand of 236.38 GW during the solar hours, the peak demand of around 220 GW during non-solar hours was accompanied by a significant deficit of around 2.8 GW. This Shortage persists despite the

installed capacity of the country being around 443 GW out of which the total thermal based capacity is only 243 GW and the capacity available on bar from this is around 195 GW.

The State/ Union Territories meet their demand by scheduling power from Central Sector Generating Stations (CGS), State GENCOs and Independent Power Producers (IPPs). In addition to the film power, the State/ Union Territories are allocated power from the unallocated pool of Central Sector Generating Stations based on the request submitted by the respective entities and the assessment of RPCs for meeting the demand of the respective beneficiaries.

It is to be mentioned that the Northern Region has the seasonal peculiarity of power requirement and availability. Broadly, there are two seasons which affect the power scenario in different States of Northern Region i.e. summer season (April to September) and winter season (October to March). Consequently, the allocation of power from the unallocated quota in the Northern Region is periodically reassessed based on projected power supply by NRPC for the upcoming seasons to optimize the power allocations from the pool of Central Sector Generating Stations.

In light of the facts presented above, the following is suggested:

I. All the Regional Power Committees (except NRPC) shall evaluate the load profiles of the States/ Union Territories within their respective regions.
II. Based on the thorough assessment of the regional load profile, the high demand seasons and Low demand seasons of the State/ Union Territories can be assessed.
III. RPCs are requested to explore the possible periodic allocation of the regional unallocated Quota of CGSs to meet the power demand of the State/ Union Territories based on the anticipated requirement and the availability of power from various sources. Accordingly, the RPCs shall propose to CEA (GM Division) the allocation from unallocated pool for high and Low demand seasons.

The aim is to optimize power distribution among States/Union Territories and ensure reasonable assistance to all the States/ UTs from the unallocated pool of Central Sector Generating Stations for meeting their power demand.

Members may discuss.

Deliberation in the meeting:

As per GM division of CEA, few measures of adoption shall be taken by RPCs to re-evaluate the regional load profile of all States & UTs i.e. the high demand seasons and Low demand seasons within their respective regions. Based on the respective load profile of all States & UTs, power allocation may be done from regional unallocated quota of central Sector Generating Stations for optimal distribution of power to ensure reasonable assistance to all the States/ UTs from the unallocated pool of Central Sector Generating Stations for meeting their power demand.

***OCC Decision**:*

- *OCC advised all states to furnish month-wise demand along with availability from all sources for three years beginning from July 2024 (as per format circulated by ERPC).*
- *Based on the inputs received from states ERPC shall assess regional load profile of Eastern region for three years beginning from July 2024.*

- *Accordingly, ERPC shall propose to CEA (GM Division) for power allocation from regional unallocated pool for high and Low demand seasons.*

2.2 Near Miss Event in Odisha System: ERLDC

Odisha system, especially Meramundali, Mendhasal, New Duburi, Pandiabilli, and Baripada pockets, were in extreme vulnerable condition from 09:00 Hrs to 19:30 hrs on **29th May 2024** due to tripping of the **400 kV Jamshedpur-TISCO line** while **400 kV Lapanga-Meramundali D/c** line was already under outage since **20th May 2024** due to a **tower collapse**. At that time, post-tripping of 400 kV Jamshedpur-TISCO, the mentioned pockets were hanging on three sources such as NTPC Talcher, Jamshedpur and Kharagpur.
To improve the reliability of the system, many actions were taken by SLDC as well as ERLDC in real-time including addl. backing down of Talcher generation to control line loading as Odisha demand progressively increased (Odisha met a demand of 6855 MW at 14:36 hrs on the same day).
As a last resort, it was suggested to restrict the loading of the relevant areas of the Odisha system to control the situation. But adequate quantum of load restriction could not be implemented due to the extreme heat wave situation and ongoing general election campaigning.
The situation was normalised after the restoration of **400 kV Jamshedpur-TISCO** line at 19:31hrs on the same day.

Deliberation in the meeting

The Representative of ERLDC informed that the Odisha system, particularly Meramundali, Mendhasal, New Duburi, Pandiabilli, and Baripada pockets, were in an extremely vulnerable condition on 29th May 2024 due to the tripping of the 400 kV Jamshedpur-TISCO line. 400 kV Lapanga-Meramundali D/c line had already been out of service since 20th May 2024 due to a tower collapse. At that time, following the tripping of the 400 kV Jamshedpur-TISCO line, the mentioned pockets were reliant on three sources: NTPC Talcher, Jamshedpur, and Kharagpur. This situation led to the overloading of the Baripada-Jamshedpur S/C and Baripada-Kharagpur S/C lines (Annexure B2.2).

It was further highlighted that additional tripping in the aforementioned corridors could have resulted in a widespread blackout in the Odisha system, including the state capital. ERLDC suggested that at least 250-300 MW load trimming is required in and around the Baripada S/S in case of the tripping of any two infeed lines to the Baripada 400 kV S/S.

ERLDC also proposed that a defence mechanism like SPS needs to be implemented in Baripada S/S to avoid cascade tripping. OCC opined that provision of loadshedding of 300MW at 33 kV and below should be incorporated in SPS logic.However, SLDC Odisha informed the forum that 300 MW load shedding is not possible in Baripada without load shedding at the 132 kV level.

*OPTCL also intimated of failed attempt to restore **400 kV Lapanga-Meramundali D/c line** on 26th May with aid of ERS and subsequent lapse of time in probing the reason of failure of ERS.*
*Meanwhile Representative of OPTCL updated that the of **400 kV Lapanga-Meramundali D/c** line shall be permanently restored by 30th June. All the foundation works have been completed, tower erection is in progress & subsequently conductor stringing will be carried out.*

***OCC Decision**:*

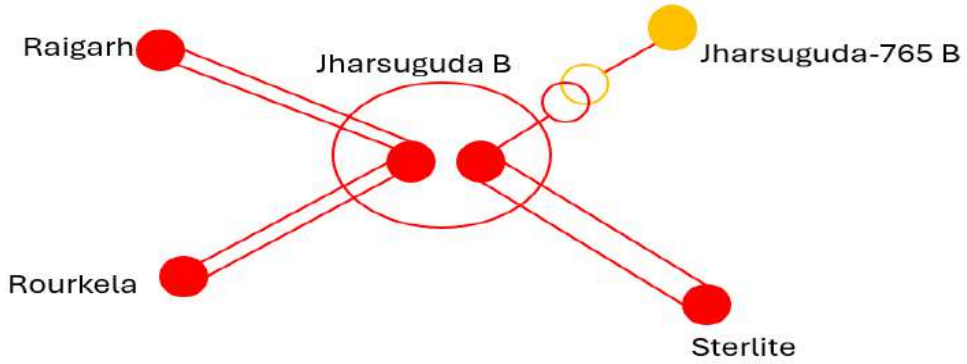
- *OCC took serious view of non-restoration of 400 kV Lapanga-Meramandali D/C line on ERS by OPTCL.OCC observed that ERS are meant for emergency restoration of lines which was not done in this case and this defeats the very purpose of ERS.*
- *OCC advised OPTCL to test all ERS towers at its disposal and take all possible actions to ensure proper functioning of ERS as and when required.*
- *OCC advised OPTCL to expedite the restoration process & also underscored the problems the entire ER Grid is facing because of outage of this line.*
- *OCC opined that in order to prevent overloading of lines load shedding should be the last line of defence & curtailment of critical load should be avoided.*
- *OCC consented for implementation of SPS at Baripada for load trimmimg of 250-300 MW in the event of tripping of any two infeed lines to the Baripada 400 kV S/S.*

2.2.1 Network rearrangement of Rourkela/Jharsuguda to enhance reliability & maximize Talcher generation: ERLDC

Post outage of the **400 kV Lapanga-Meramundali line** on tower collapse (**20th May'24**), heavy loading was observed in 400 kV-Talcher-Meeamundali (shorter circuit). A total of 1000MW (max) generation back down was implemented at the NTPC Talcher Stage 1 & 2 to control the overloading of the said line.
Immediately, to reduce loading of line and to withdraw curtailment of Talcher generation, Rourkela bypass arrangement was done by making 400kV-Jharsuguda-Roukela-Ranchi & 400kV-Jharsuguda-Roukela-Chaibasa link. With the implementation of this scheme, 80MW loading relieved was observed in 400kV-Talcher-Meramundali, and as a result 200MW Talcher generation backing down withdrawn.
Later, it was informed from SLDC Odisha that, 400 kV Lapanga-Meramundali line which was supposed to be restored via ERS by 27th May 2024 couldn't be restored.
On **29th May 2024**, the bypass arrangement at Rourkela was reverted due to the high loading of the **400kV Jamshedpur-Baripada** link. In subsequent days, with high injection from WR, 400 kV Jharsuguda-Rourkela DC (1&2) started overloading and the loading reached beyond 1000MW in solar hours. POWERGRID has shared the thermo-vision scan report indicating hotspots in several locations.

In view of this situation, a bus-split scheme was envisaged at Jharsuguda-B, and the same was implemented on **12th June 2024** with the following configuration:

Elements in 400 kV Jharsuguda – B Bus – 1 after reconfiguration	**Elements in 400 kV Jharsuguda – B Bus – 2 after reconfiguration**
400 kV Jharsuguda – Sterlite D/C 2x1500 MVA, 765/400 kV ICT – 1&2	400 kV Jharsuguda – Rourkela 1 & 2 400 kV Jharsuguda –Raigarh D/C



Post implementation of this scheme, a total **200MW Talcher generation backing down** withdrawn. Parallelly the loading of 400 kV Jharsuguda – Rourkela 1 & 2 was reduced significantly.

Deliberation in the meeting:

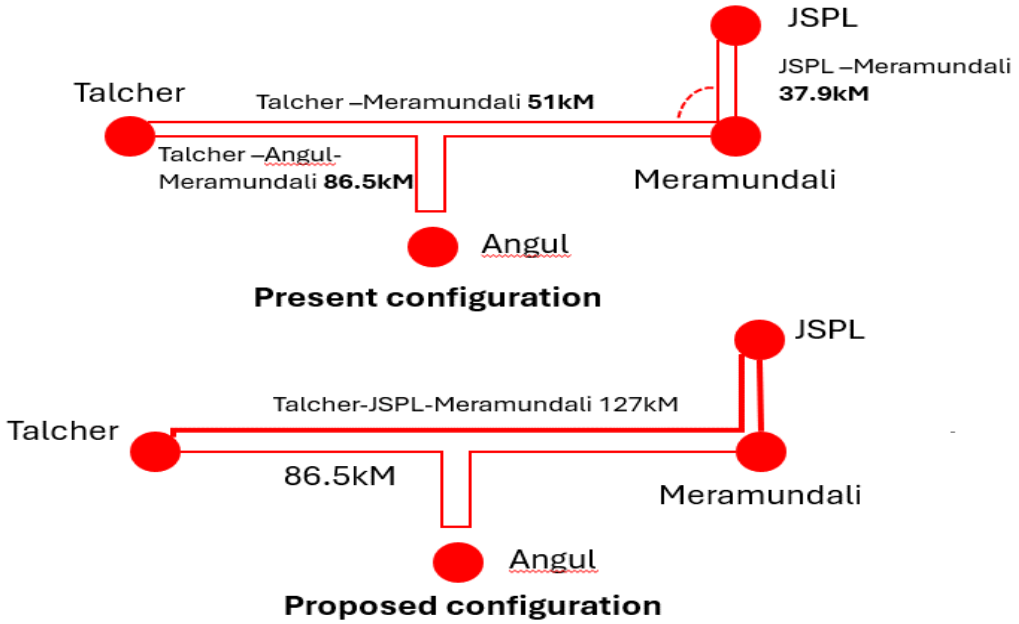
The Representative of ERLDC apprised the forum about heavy loading (677 MW) that was observed in 400 kV-Talcher-Meramundali (shorter circuit) post outage of the ***400 kV Lapanga-Meramundali line*** *on tower collapse (****20th May'24****). Subsequently,network rearrangement of 400kV-Jharsuguda-Roukela-Ranchi & 400kV-Jharsuguda-Roukela-Chaibasa link was undertaken because of which 80MW loading relief was observed in 400kV-Talcher-Meramundali, and as a result 200MW Talcher generation backing down was withdrawn****. (Annexure B.2.2.1)***
He also highlighted the overloading issue of 400 kV Jharsuguda-Rourkela D/C (1&2) (>1000MW whereas thermal limit of the line is around 850MW),caused by high injection from WR in solar hours which resulted in hotspots in several locations. In view of this situation Bus splitting activity at Jharsuguda was carried out by which line loading reduced considerably & also a total 200MW Talcher generation backing down was withdrawn.

TALCHER PRESENT CURTAILMENT

Block	Total curtailment	St. 1	St. 2
1-18	550	183	367
19-40	300	100	200
41-96	800	267	533

2.2.2 Proposal of Bypassing arrangement of 400kV-Talcher-Meramundali-JSPL at Meramundali for withdrawal of Additional Talcher generation backing down: ERLDC

To supplement the Talcher backing down after network re-arrangement at Jharsuguda, another network re-arrangement plan was proposed at Meramundali S/S.
At Meramundali S/S, the bay configuration is Talcher-Meramundali shorter line is in dia with one circuit of 400kV Meramundali- JSPL. It was suggested to open the main bays of both lines at Meramundali S/S to make 400kV Talcher-JSPL-Meramundali line by increasing line length which will help to create a margin in Talcher Meramundali line and to withdraw the Talcher generation backing down.



ERLDC may explain. Members may discuss.

Deliberation in the meeting

The Representative of ERLDC proposed a bypass arrangement of 400kV-Talcher-Meramundali-JSPL at Meramundali for withdrawal of Talcher generation backing down.

- *In present configuration, At Meramundali S/S, the bay configuration is Talcher-Meramundali shorter line(51kms) is in Dia with one circuit of 400kV Meramundali- JSPL (37.9kms) as shown above.*
- *It was suggested to open the main bays of both lines at Meramundali S/S to make 400kV Talcher-JSPL-Meramundali line by increasing line length(127kms) which will help to create a margin in Talcher Meramundali line thereby aiding in withdrawal of generation backing down i.r.o Talcher STPS.*
- *OCC opined that after restoration of 400 kV Lapanga-Meramandali D/C line, such bypass arrangement may not be required to withdraw backing down of Talcher generation.*

2.3 Strengthening of CTU Network: SLDC Odisha

In the recent past, i.e. during summer 2024 in the persisting high demand scenario, it was observed that inter – regional lines were running through high loading condition. In order to maintain system stability, ERLDC has taken several actions at their end. SLDC Odisha has also taken some action as per direction of ERLDC, Kolkata as and when required. Therefore, it is requested to re-visit the adequacy of Inter – regional & inter – state power transfer capability & plan accordingly for enhancement of capacity of CTU Network keeping in view the future Power availability & Demand scenario of the Country / Region / States & power flow capability of transmission lines of CTU.
SLDC Odisha may update. Members may discuss.

Deliberation in the meeting:

The Representative of SLDC, Odisha apprised the forum:

- *Persistent rise in power demand during Summer 2024 caused over-loading of inter-regional lines at many locations in the State.*

- ❖ *In order to cater the increased demand in future, it's imperative to strengthen CTU Network to enhance Inter–regional & inter–state power transfer capability.*
- ❖ *The injection of RE Power during solar Hours from WR creating transmission constraints which further aggravates the issue.*

OCC Decision

- *OCC advised SLDC, Odisha to focus on strengthening the existing intra-state transmission network to reliably transfer power within & outside Odisha boundary.*
- *OCC agreed with the requirement of strengthening ISTS network considering ever-increasing injection of RE power from WR & NR in solar hours.*
- *OCC advised SLDC, Odisha to take up with CTU/CEA for long-term planning.*

2.4 Curtailment in schedule for NTPC Talcher station: ERPC

- TSTPS Station schedules are curtailed to 600 **MW** in Stage-1 (Approx 330-340 MW each unit gross generation) and 1200 MW in Stage-2 since 20" May 2024.This is occurring on consistent basis due to power evacuation constraints in the grid due to collapse of Tower in 400KV Meramunduli-Lepanga double circuit Line. Also, there is power flow evacuation limitation of **1700MW in HVDC Bipolar Line** against design capacity of 2500 MW due to converter transformer problem at PGCIL Kaniha end. It is learnt that the low schedule regime will continue for longer duration due to constraints **in power evacuation.**
- It may be noted that power is being imported to TSTPS switchyard through 400KV Rourkela-1 and 2 and this imported power is being routed to SR region through HVDC and ER region through other transmission lines. Due to this rearrangement in power distribution, the scheduled generation at TSTPS is curtailed up to 1800 MW. In absence of this import power flow to TSTPS switchyard, TSTPS could have got scheduled to the extent of full generation capacity of 3000 MW.
- As the schedules are curtailed in TSTPS Stage-1, to prevent tripping of unit due to furnace disturbance, soot blowing operation is being carried out with oil support. In this process the daily consumption of around 200KL of LDO is used to carry out soot blowing operation which has huge commercial implications and will increase the specific oil consumption much higher than the normative of 0.5ml/kWh.

- In view of the above OCC is requested to consider:

1.Rearrangement of power flow for full evacuation of TSTPS generated power of 3000 MW for both **Stage-1 and Stage-2.**

2. After proper rearrangement if power evacuation constraint still arises then TSTPS **Stage-1** may be considered for **full schedule** with curtailment in Stage**-2** units only.

3. If still curtailment is required, then a minimum schedule of **700-750MW** at least for a period of **9 hours** (**3 hours in each shift**) daily for the operation of wall blowers and long retractable soot blowers without oil support to prevent disturbance in the furnace and improve the reliability of unit & help the grid without any disturbance.

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

Deliberation in the meeting

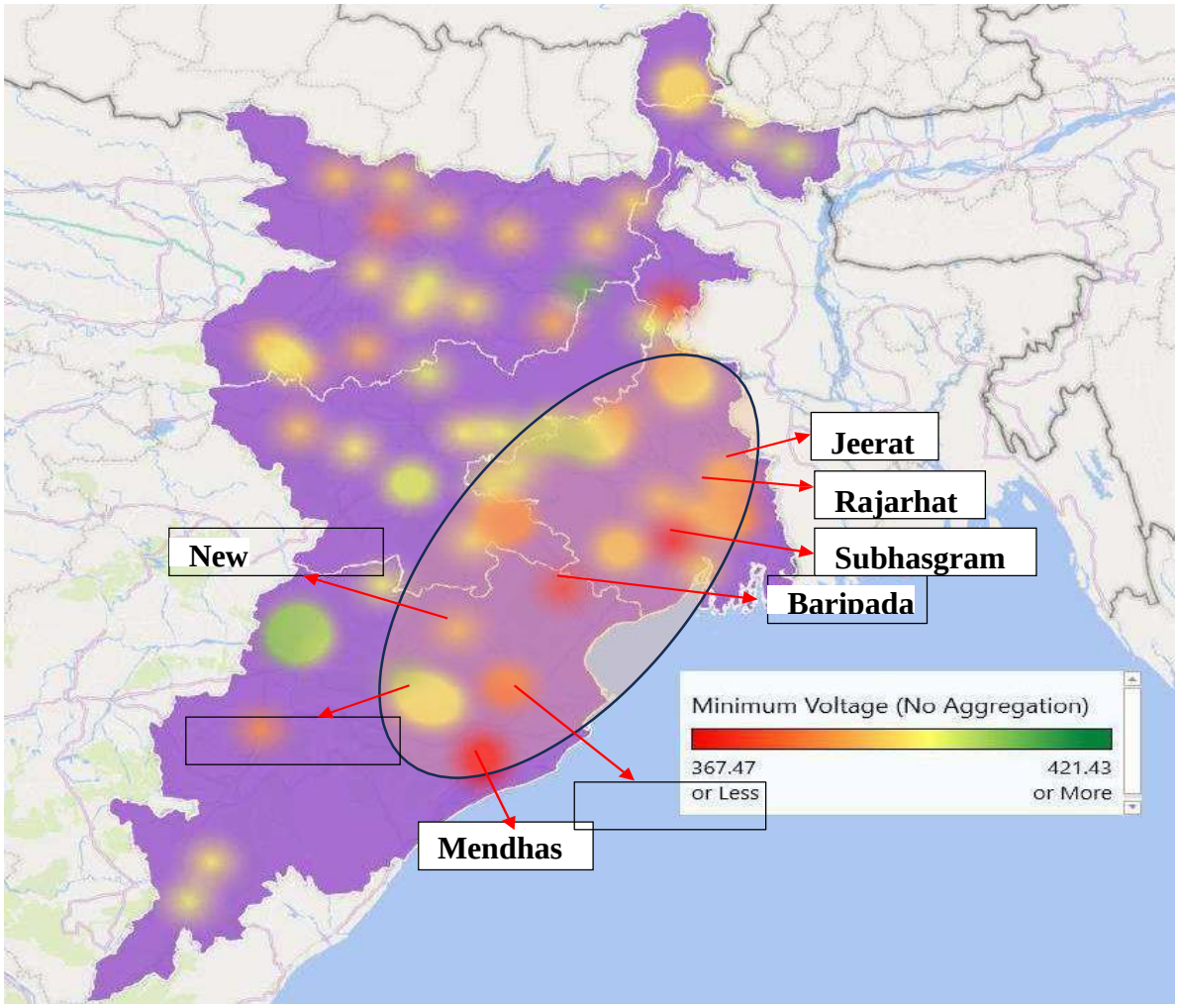
- ❖ *The Representative of NTPC Talcher highlighted the Generation curtailment of around 1800MW in both Stage-I & Stage-II because of:*
- *Power evacuation constraints in the grid due to collapse of Tower in 400KV Meramunduli-Lapanga D/C line.*
- *Power flow evacuation limitation of 1700MW in HVDC Bipolar Line against design capacity of 2500 MW due to converter transformer problem at PGCIL Kaniha end.*
- *High power injection from WR during solar Hours.*
- *The increased specific oil consumption (around 200KL of LDO Daily) to prevent tripping of unit due to furnace disturbance while carrying out LRSB soot-blowing Operation.*
- ❖ *The Representative of ERLDC mentioned that after bus splitting arrangement in Rourkela/Jharsuguda a total 200MW Talcher generation backing down withdrawn.*
- ❖ *Meanwhile SLDC, Odisha submitted the restoration of 400 kV Laphanga-Meramundali D/C line by 30th June.*

OCC Decision

OCC opined that once the 400 kV Laphanga-Meramundali D/C line gets restored by 30th June 2024, the generation backing down issue of Talcher STPS will not be required.Further this concern will be mitigated with SPS implementation at Baripada.

2.5 Voltage issue in Eastern region: ERLDC

Eastern region, as well as Indian Grid, is going through a high demand period, already met a record demand of **32GW** on **11-Jun-24**. This increase in demand is mainly contributed by space cooling load in urban areas, which also draws a considerable amount of reactive power from the Grid. Year-to-year demand growth is **8-10%** for the Eastern grid and it is expected to maintain the same growth pace for the next few years. A few pockets of the eastern region are experiencing low voltage due to increased space cooling load mainly in major urban areas in **West Bengal** & **Odisha.**



From the above heat map of voltage, it is observed low voltage issues observed in the southwestern part of the Eastern region due to mainly increased space cooling load with the increase of urbanization in this area.
Low voltage issues in Meramundali, Mendhasal, New Duburi, Pandiabili & Baripada have been observed since last summer due to considerable growth in demand of Odisha. Voltage condition deteriorated further this year with the outage of 400kV-Lapanga-Meramundali-DC. Voltage reached as low as 375kV in some instances even after all reactors in this region were in open condition.

Whereas, in West Bengal, the voltage scenario voltage of Subhasgram, Rajarhat & Jeerat improved marginally after connectivity with 765kV New Jeerat. However, voltage as low as 375kV has been observed in this summer during solar peak hours. with a further increase in demand in this area, the voltage scenario is expected to deteriorate in the coming years.
A proper planning is needed to tackle the issue.

ERLDC may explain. Members may discuss.

Deliberation in the meeting

The ERLDC Representative apprised the OCC forum: -

a) *Few pockets in ER Grid are experiencing low voltage due to increased space cooling load mainly in major urban areas in West Bengal & Odisha which draw a significant amount of reactive power from the grid. It was shown that high power flow from distant generators to load center results in lower voltage in those pockets (**Annexure B.2.2.1**).*
b) *After the depletion of the network around Meramundali or Baripada, there is a high voltage drop for similar power transfer as compared to all elements in service. Similarly lower voltage was observed around Kolkata area after the outage of One unit of Haldia. WBSLDC representative also acknowledged the same.*
c) *ERLDC further highlighted that high concentration of space cooling not only causes low voltage issues but also leads to a special type of phenomena called "Fault inducted delayed voltage recovery (FIDVR)" in which AC single phase motors gets stalled and worsen the voltage or may even lead to voltage collapse.*
d) *A FIDVR type of event has happened in our region in Odisha and CESC system in recent past. To avoid any such event, it was recommended to implement Under Voltage Load Shedding (UVLS) to restore the system Voltage.*

WBSETCL apprised of their 220 kV network strengthening plan as long term measure to mitigate undervoltage.

OCC Decision

- *OCC opined that a proper system strengthening and reactive power compensation plan in form of STATCOM or capacitor banks is required as a long-term measure.*
- *OCC opined that besides network strengthening in HV corridor, adequate VAR support from generating units is essential to boost system voltage in event of contingency.*
- *OCC also opined in favour of implementing UVLS as last resort.*

2.6 Reliable Power Supply of Tenughat: ERLDC

In recent times, multiple disturbances occurred in Tenughat due to the loss of the evacuation path from Tenughat.

Tenughat was initially connected to Biharsariff & Patratu via 220kV S/C and to Govindpur via 220kV D/C. After reconfiguration of 220kV Patratu-Tenughat for extending start-up power to PVUNL, one evacuation path from Tenughat was reduced, which impacted the reliability of Tenughat. Now, with the outage of 220kV Biharsariff-Tenughat, the evacuation of the entire generation remains with Govindpur only.

Jharkhand needs to explore network strengthening at Tenughat to enhance reliability.

ERLDC may explain. Members may discuss.

Deliberation in the meeting

- *The Representative of ERLDC explained about multiple disturbances that occurred in Tenughat due to loss of the evacuation path of Tenughat generating station. Initially Tenughat was connected to Biharsariff & Patratu via 220kV S/C line and to Govindpur via 220kV D/C line.However for extending start-up power to PVUNL, 220kV Patratu-Tenughat was reconfigured as shown above which reduced one evacuation path from Tenughat. Hence with the outage of 220kV Biharsariff-Tenughat, the evacuation of the entire generation remains with Govindpur only.*
- *Meanwhile it emerged that Tenughat- Biharsariff S/C is a 400KV line(181Km) but charged at 220KV. Charging the line at 400KV would have enhanced system reliability.*
- *The Representative of SLDC, Ranchi updated that Tenughat- Biharsariff S/C is a 400KV which is more than 25years old, so before charging at 400KV level a detailed system study has to be conducted for assessing the healthiness of the conductor and ground clearance.*

OCC Decision

- *OCC advised ERLDC to explore all the possibilities of power evacuation from Tenughat generating station in coordination with SLDC Jharkhand.*
- *SLDC Jharkhand was advised to explore new lines from Tenughat at 220kV level to increase system reliability in this area.*

2.7 Proposal for power evacuation scheme for proposed Rammam Stage-I Hydro Electric Project of WBSEDCL of capacity 48 MW (4x12MW) in Darjeeling Dist. through S/Ckt LILO of 132 kV Kurseong-Rangit S/Ckt transmission line: WBSETCL

- WBSEDCL has envisaged implementation of 48 MW (4x12MW) Rammam Stage-I H.E.P. in Darjeeling Dist. of West Bengal.
- The said project is in the vicinity of existing 51 MW Rammam Stage-II Hydel Power Station.
- The details of the proposed project are as follows:

Name of Project	Rammam Stage-I Hydro Electric Project
Capacity of project	48 MW (4x12MW)
Location Coordinates	Lat : 27.1167 deg N Long : 88.0667 deg E
Generating Voltage	11 KV
Evacuation Voltage	132 KV
Generation Evacuation Connectivity	132 KV D/Ckt Transmission Line

- Initially it was proposed to terminate 132kV D/Ckt line from proposed Rammam Stage-I H.E.P. to Rammam Stage-II Hydel Power Station for evacuation of generated power at proposed Rammam Stage-II H.E.P.
- But the proposed evacuation scheme was not found feasible due to non-availability of space required for construction of 02 nos of 132 kV feeder bays at switchyard of Rammam Stage-II H.P.S.

- In view of above it is proposed to explore the feasibility of evacuation of power from proposed Rammam Stage-I H.E.P. through S/Ckt LILO of 132 kV Kurseong-Rangit S/Ckt line through necessary system study by CTUIL for finalization of evacuation scheme for proposed Rammam Stage-I H.E.P.
- The matter is placed before the OCC Forum for necessary deliberation & consideration.

WBSETCL may explain. Members may discuss.

Deliberation in the meeting

- *The Representative of WBSETCL stated:*
- *Initially it was proposed to terminate 132kV D/C line from proposed Rammam Stage-I H.E.P. to Rammam Stage-II Hydel Power Station for evacuation of generated power from proposed Rammam Stage-II H.E.P.*
- *But the proposed evacuation scheme was not found feasible due to non-availability of space required for construction of 02 nos of 132 kV feeder bays at switchyard of Rammam Stage-II H.P.S.*
- *As per the internal system study conducted, only feasibility of power evacuation from the proposed Rammam Stage-I H.E.P. is through LILO of 132 kV Kurseong-Rangit S/C line.*

OCC Decision:

OCC referred the matter to CTU for further system study to explore all feasible options to evacuate power from Rammam Stage-I H.E.P.

2.8 Shutdown proposal of generating units for the month of July'2024-ERPC

Maintenance Schedule of Thermal Generating Units of ER during 2024-25 in the month July '2024							
System	**Station**	**Unit No.**	**Capacity (MW)**	**Period (as per LGBR 2024-25)**		**No. of Days**	**Reason**
				From	**To**		
CESC	Southern TPS	1	67.5	24-07-2024	02-08-2024	10	PG Test/ Boiler License Renewal
DVC	Mejia TPS	3	210	01-07-2024	25-12-2024	178	ESP upgradation
GMR	GMR	1	350	12-07-2024	20-08-2024	40	COH
JSEB	TENUGHAT TVNL	2	210	01-07-2024	14-08-2024	45	AOH
NTPC	FARAKKA	5	500	01-07-2024	30-07-2024	30	Boiler + LPT +Generator

	KhSTPS-I	2	210	05-07-2024	03-08-2024	30	Boiler + Boiler RLA + Generator
BRBCL	Nabinagar TPS	3	250	01-07-2024	04-08-2024	35	Boiler , LP OH & Generator rotor thread out
OPGC	IBTPS	4	660	15-07-2024	13-08-2024	30	Annual Maintenance
WBPDCL	Bakreswar TPS	5	210	02-07-2024	05-08-2024	35	AOH/BOH
	Kolaghat TPS	6	210	08-07-2024	11-08-2024	35	AOH/BOH

Members may discuss.

Deliberation in the meeting

- *The Representative of DVC apprised the OCC forum for availing shutdown of Meija TPS #2 from 01.07.2024 to 28.07.2024 (28 Days) for APH FG lkg issues, BOH & Generator Rotor Replacement & Meija TPS #1 from 01.08.2024 to 28.08.2024 for BOH & Generator Overhauling.*
- *DVC informed of revival of RTPS Unit#3 by 03.07.2024.OCC advised that the shutdown of Mejia TPS U#3 may be availed from 10.07.2024 subject to revival of RTPS Unit#3 .Shutdown of Mejia TPS Unit#1 may be availed only after synchronization of Mejia TPS U#2.*
- *CESC, TVNL, BRBCL, WBPDCL & NTPC FARAKKA availed the shutdown as per approved LGBR 2024-25.*
- *Representative of NTPC informed about the revival of Darlipali unit #1 by 30th June 2024.*
- *SLDC, Odisha Representative requested for deferment of shutdown of IBTPS#4 from July to 15th of August'2024.OCC advised SLDC Odisha to take consent of OPGC in this regard.*
- *GMR requested for preponement of shutdown of Unit#1 from 06.07.2024 to 15.08.2024 against LGBR approved duration of 35 days from 12.07.2024 to 20.08.2024.OCC agreed subject to revival of NTPC Darlipalli Unit#1 and consent from NRPC.*
- *Detailed shutdown schedule as approved by OCC forum is provided at* ***Annexure B.2.8***

2.9 Shutdown request of Kahalgaon units: NTPC ER-I

As per approved LGBR schedule Unit#2 (210 MW) of Kahalgaon was scheduled from 05-July-2024 to 03-August-2024 for a period of 30 days. Recently major defect has been identified in boiler of Unit#3 (210MW) of Kahalgaon. It is imperative to take Overhauling of Unit#3 at the earliest. As per approved LGBR plan it is scheduled from 10-Feb-2025.
Also as per approved 211th OCC minutes of meeting point no 2.10 (attached): Unit#6 of Kahalgaon overhauling could not be taken due to high power demand in month of September 2023 and March

2024, and it was directed to propose plan for same in OCC of May 2024, as no overhauling was to be taken in June 2024 also, hence agenda is being presented in 216th OCC.
To urgently attend the problem, the overhauling of two units are proposed for interchanging and new date for Unit#6 overhauling. The new schedule will be as follows:

NTPC Kahalgaon Units	Capacity	Date as per Approved LGBR 2024-25	New proposed date	Last Overhauling date	Remarks
Unit # 2	210 MW	05-Jul-24 to 03- Aug- 24	10-Feb-25 to 11-Mar-25	29-Sep-22	Interchanged
Unit # 3	210 MW	10-Feb-25 to 11-Mar-25	05-Jul-24 to 08-Aug-24	10-Mar-23	Interchanged
Unit # 6	500 MW	12-Aug-23 to 25-Sep-23 / rescheduled to 01-Mar-24 to 30-Mar-24 (Not allowed)	20-Aug-24 to 23-Sep-24	08-Apr-22	As per 211th OCC

NTPC ER-I may update. Members may discuss.

Deliberation in the meeting

- *NTPC ER-I apprised about the major defect found in the Boiler of unit#3 of Kahalgaon, thus it is imperative to take overhauling of Unit#3 at the earliest in order to prevent further deterioration. So NTPC representative requested for availing the shutdown of unit#3 on priority basis in place of LGBR approved shutdown of Unit#2.*
- *It was also highlighted that overhauling of unit #6 of Kahalgaon was deferred in past OCC meetings & last overhauling of the unit was done on 08-Apr-2022.*

OCC Decision

- *The shutdown of NTPC Kahalgaon Unit#3 was approved by the OCC forum as per requested schedule.*
- *Since NR beneficiaries have major share in KhSTPP stage-II, the proposed shutdown of Unit#6 was approved by OCC subject to consent from NRPC.*

2.10 Shutdown request of Unit#1: APRNL

It is herewith informed Adhunik Power & Natural Resources Ltd. (APRNL) has now planned for execution of annual overhauling of Unit #1 from **16.08.2024** to **14.09.2024(29 days)** instead for **15.10.2024** to **13.11.2024**(**29 days**) as per earlier approved LGBR of FY 2024-25.
Submitted to OCC forum for approval of the shutdown during the proposed period.
APRNL may update. Members may discuss.

Deliberation in the meeting

The Representative of APRNL submitted that overhauling of AOH/BOH of unit#1 is pending for last two years and thereby requested for availing shutdown from 16.08.2024 to 14.09.2024(29 days) instead of 15.10.2024 to 13.11.2024(29 days) as per earlier approved LGBR of FY 2024-25.

OCC Decision

The shutdown of APRNL(unit#1) was approved by the OCC forum for 29 days as per requested timeline subject to consent from NRPC as NR is a major beneficiary of APRNL unit#1.

2.11 Shutdown request of Unit#2: JITPL

Jindal India Thermal Power Limited (JITPL) has 2x600 MW thermal power plant located in the village of Derang, District Angul, State Odisha.
Annual overhauling of JITPL Unit #2 is already due as the Unit #2 **boiler licensee will expire** on **06th Jul'24**. JITPL has already taken an **extension for the last 2 years** and now JITPL is obligated to take the annual overhauling due to Boiler Licensee expiry and its safety constraint. Also, the deployment of overhauling manpower, spares and other resources has been done accordingly.
All the Utilities have already been informed per the PPA terms and OCC is requested to kindly consider our request as all planning related to overhauling has been done from our end and that cannot be reversed or extended. So, requesting ERPC to consider our Annual Overhauling of Unit #2 from **01st July 2024** to **31st July 2024(31 days).**

JITPL may update. Members may discuss.

Deliberation in the meeting

The Representative of JITPL apprised the forum about the expiry of their boiler license on 06th July & have already taken an extension for the last 2 years.

OCC Decision

- *OCC opined that proposed shutdown of JITPL unit#2 should have been incorporated while finalization of LGBR for FY 2024-25.JITPL assured to comply with the same in future.*
- *Considering exigency of the situation, OCC approved the shutdown of JITPL Unit#2 from 06th July 2024 for 31 days.*

2.12 Scheme for deployment of SDH equipment and amplifier at Alipurduar S/s of Eastern Region

MD, PHPA-II requested CEA to provide necessary communication to the concerned Authority so as to enable purchase and commissioning of OPGW based communication, control and protection system of transmission lines connecting Alipurduar substation and Bhutan, vide their letter reference no. PHPA- IUMD/CEA/2023/206 dated 04.12.2023.
CEA after deliberation with all stakeholders has directed POWERGRID to provide necessary equipments at Alipurduar end vide its file ref no. CEA-PS-12- 17(15)/1/2018-PSPA-II Division dtd. 14.03.2024(**Annexure B.2.11.1)**

CTU vide letter dated 06.06.2024 has sought ERPC views on the proposed scheme so that the same may be put up in NCT for necessary approval.

Objective / Justification of the scheme

a) OPGW has been installed on Alipurduar- Jigmeling and Punatsagnchhu-II/ Punatsagnchhu-I - Alipurduar 400 kV lines.
b) SDH technology-based Fiber Optic Terminal Equipment (FOTE) is deployed in Indian Grid including Alipurduar substation, as it provides a highly reliable and synchronized communication infrastructure. However, Bhutan is implementing MPLS-TP in their whole system including at

Punatsangchhu-II for data and teleprotection.

c) There will be issue in protection and data communication between SDH at one end i.e Alipurduar, India and MPLS-TP at other end i.e. Punatsangchhu-II, Bhutan.

d) Considering the necessary capabilities to ensure the accurate coordination of devices between India and Bhutan as well as to cater to cybersecurity issue of the Indian Grid, the proposed scheme for Alipurdwar S/s end needs to be implemented.

Further at the Alipurduar end, communication between the existing SDH equipment and the newly proposed equipment will occur over the El Interface. This will provide a layer of isolation between interfacing node at landing location and ISTS Communication Network.

Scope of the scheme (Estimated cost: Rs. 65,00000/- (Sixty-Five lacs) only)

- Deployment of FOTE (SDH Equipment) and amplifier solutions at Alipurduar S/s end for OPGW based communication and Teleprotection for 400kV lines from PHEP-II, PHEP-I and Jigmeling of Bhutan to Alipurduar, India:
- a)1 set of STM-4 SDH equipment along with panel supporting minimum five directions with MSP (Multiplex Section Protection 1+1) & equipped with E1 and Ethernet interfaces.
- b)6 sets of 175 km Amplifiers solutions: 2 directed towards Punatsangchhu-II(PHEP-II), 2 directed towards Punatsangchhu-I(PHEP-I) and 2 directed towards Jigmeling.
- POWERGRID to coordinate with Bhutan ends while procuring the equipment to avoid any non-compatibility issues.

POWERGRID (GA&C) vide mail dated **12.06.2024** & **13.06.2024** has confirmed the following:

"Deployment of STM-4 equipment freed on upgradation to STM-16 is feasible, however, the timeline shall be worked out in line with the approval of Upgradation scheme in NCT. Further, life of the equipment shall be taken from the actual date of commissioning of the equipment to be used at Alipurdwar. In this case transportation cost as communicated earlier will be applicable.

Please note that all STM-4 equipment proposed for upgradation to STM-16 in ERPC have been commissioned in year 2015

- The 225 km solution proposed under the scheme shall work with STM-4 equipment freed on upgradation to STM-16.
- The STM-4 equipment freed on upgradation to STM-16 will be compatible with Bhutan end as suggested by CEA."

Communication from CTU and CEA attached at **Annexure B.2.11.1**

Cost estimate for the proposed scheme as shared by PowerGrid attached at **Annexure B.2.11.2**

Members may discuss.

Deliberation in the meeting

PowerGrid representative apprised the forum:

- *At present SDH technology-based Fiber Optic Terminal Equipment (FOTE) is deployed in Indian Grid including Alipurduar substation & Bhutan is implementing MPLS-TP in their system including at Punatsangchhu-II for data and tele protection.*
- *MPLS-TP is a recent technology that is not deployed in Indian ISTS network as on date. Owing to its incompatibility with existing SDH technology, the subject scheme is proposed for enhanced data & tele protection.*

- *Considering the necessary capabilities to ensure accurate coordination of devices between India and Bhutan as well as to cater to cybersecurity issue of the Indian Grid, the proposed scheme for Alipurdwar S/s end needs to be implemented.*

POWERGRID (GA&C) vide mail dated 12.06.2024 & 13.06.2024 has confirmed the following:

"Deployment of STM-4 equipment freed on upgradation to STM-16 is feasible, however, the timeline shall be worked out in line with the approval of Upgradation scheme in NCT. Further, life of the equipment shall be taken from the actual date of commissioning of the equipment to be used at Alipurduar. In this case transportation cost as communicated earlier will be applicable.
Please note that all STM-4 equipment proposed for upgradation to STM-16 in ERPC have been commissioned in year 2015.

- *The 225 km solution proposed under the scheme shall work with STM-4 equipment freed on upgradation to STM-16.*
- *The STM-4 equipment freed on upgradation to STM-16 will be compatible with Bhutan end as suggested by CEA."*

PowerGrid ER-II representative further highlighted that no spare STM-4 is available which is required to update the existing SDH technology at 400KV Allipurduar S/S & it's procurement will take more than one year as it's a time-consuming process.

The Representative of DGPC on behalf of PHEP briefed the forum about the urgency of establishing a communication link as PHEP-II will be going for testing & commissioning of its first two units by mid-August & before the units get synchronized with the grid all the system related to communication & protection shall be made ready both at Punatsangchhu-II (Bhutan End) & Allipurduar (Powergrid End).

OCC Decision

- *OCC advised PowerGrid to explore the following options:*
- *Utilization of the the STM-4 equipment freed on upgradation to STM-16 under the "Scheme on requirement of Additional FOTE at ISTS nodes in ER" for reliable communication with Bhutan from Alipurduar S/S.*
- *The existing SDH equipment (STM-4) (as per specifications of the scheme)may be upgraded at Alipurduar S/S to improve necessary redundancy in addition to the existing PLCC line as an interim measure in view of the synchronization of PHEP-II by Mid-August. In this regard cybersecurity issues must be duly addressed by deployment of additional firewall or other suitable measures.*
- *OCC advised Powergrid to update the status along with revised cost estimate in next CCM meeting.*

2.13 Issuance of Trial Operation Certificate for commissioning of Communication System (Upgradation of SAS at 11 Stations in ER-I & 2 Stations in ER-II)): PowerGrid ER-II

As per approval received in 39th ERPC meeting dated 17.11.2018, replacement & upgradation of SAS & RTUs in Eastern Region was approved under the RTM project "Upgradation of SCADA / RTUs / SAS in the Central sector stations and strengthening of OPGW network" (39th ERPC minutes attached). Accordingly, replacement & upgradation of SAS & RTUs has been carried out at various substations in ER as per approval in ERPC meeting.

ERLDC has been requested for issuance of Trial operation certificate vide letter dated 10.04.2024 (Letter enclosed at **Annexure B.2.8.1**) after successful commissioning of the SAS at 11 nos station in ER-I. ERLDC has been further requested vide letter dated 23.05.2024 for issuance of Trial operation certificate for 02 stations of ER-II. However, the certificate is yet to be received till date even after regular follow up and correspondences. Due to non-issuance of trial operation certificate, DOCO & petition filing is held up.

It is also to note that as per communication regulation 2017 and petition filed by NLDC regarding communication interfaces where SAS/RTU are considered as communication interfaces. In ULDC phase-I (RTM mode), POWERGRID has commissioned the SCADA-EMS Project on Aug-2005 which also includes RTUs at Central Sector & State locations alongwith Control Centers. Also similar trial operation certificates (**Annexure B.2.8.2)** have been issued by various States of Eastern Region upon successful commissioning of RTUs in respective Sector under SCADA-EMS Project (RTM Mode).

In view of the above, it is kindly requested to support regarding issuance of Trial operation certificate for SAS upgradation at 11 nos. station in ER-I & 02 nos. station in ER-II at the earliest.

CERC guidelines on Interfacing requirements attached at **Annexure B.2.8.3.**

ERPC approval for replacement of old RTUs in ER attached at **Annexure B.2.8.4.**

PowerGrid ER-II and ERLDC may update. Members may discuss.

Deliberation in the meeting

PowerGrid ER-II submitted:

- *In 39th ERPC meeting dated 17.11.2018, replacement & upgradation of SAS & RTUs in Eastern Region was approved under the RTM project "Upgradation of SCADA / RTUs / SAS in the Central sector stations and strengthening of OPGW network" (39th ERPC minutes attached at* **Annexure B.2.13.4.***). Accordingly, replacement & upgradation of SAS & RTUs has been carried out by PowerGrid at various substations in ER as per approval in 39th ERPC meeting.*
- *SAS has been upgraded at 11 Stations in ER-1 & 2 Stations in ER-II .*
- *Despite regular follow up & correspondences with ERLDC, Trial operation certificate is not yet issued, thus DOCO as well as petition filing is held up.*

❖ *As per Submission by Representative of ERLDC, IEGC 27.1.d allows for issuance of certificate by ERLDC for Communication System which includes a communication system or an element. In addition, as per CERC (Communication System for inter-State transmission of electricity) Regulations, 2017 and CERC Approved "Guidelines on Availability of Communication System", Communication element has been defined as communication channel which excludes interface equipment like RTU/SAS. Further, RTU/SAS is part of communication interface and as per relevant regulations/standards and guidelines it is considered as part of substation equipment.*

❖ *ERLDC further specified non-availability of physical means to certify that RTU/SAS has been upgraded at substation level except communication received from Powegrid for the same. SCADA data for these substations were already reporting from respective SAS/RTU. ERLDC expressed that it can be mentioned in their reply letter to PGCIL that "Based on received communication from PGCIL on RTU/SAS upgradation, data has been validated and started reporting from IEC101 to IEC 104 protocols". In addition, for RTU/SAS which were already reporting in IEC 104 protocols, it can be mentioned that "Based on new RTU/SAS upgradation at substation level, SCADA data has been validated and is being received at ERLDC from the substation under IEC 104 protocol".*

OCC Decision

OCC advised ERLDC to issue a certificate of data receipt from RTU/SAS to PGCIL on basis of data validation in SCADA.

2.14 SCADA Data Non-availability of 400/220 kV Darbhanga Substation: ERLDC

400/220 kV Darbhanga (DMTCL) substation SCADA data is not available with ERLDC since 7th June 2024. Both main & back up communication channels are down. Due to non-availability of SCADA data, real time grid operation is getting affected as this substation data is used for input for drawl calculation of Bihar and real time decision support.

DMTCL, ATIL and PGCIL(ER-I) may respond.

Deliberation in the meeting

- *The Representative of ERLDC highlighted that from 7th June 2024 up to 20th June 2024 SCADA data from 400/220 kV Darbhanga (DMTCL) substation was not available despite several follow ups. Both main & backup Communication channels were down, thus real time grid operation was getting affected. This calls for root cause analysis to be carried out by the three concerned parties and to be submitted to ERLDC.*
- *The Representative of PowerGrid submitted that after reconfiguration of DMTCL Network, Communication link was restored.*
- *Powergrid mentioned that at some substation and utilities, AMC issue with communication equipment are there which are required to be resolved.*

- *ERLDC proposed that such substations/utilities along with details of communication equipment having AMC issues may be shared in Test meeting so that these can be taken up for resolution.*

OCC Decision

- *OCC advised all concerned with data reporting from 400/220 kV Darbhanga S/S on sharing root cause analysis i.r.o non-availability of SCADA data with ERLDC at the earliest.*
- *OCC referred the matter to next TeST meeting for further deliberation.*

2.15 Updated Operating Procedures (SOP) of Eastern Region, 2024: ERLDC

As per IEGC, 2023 regulation 28(4), A set of detailed operating procedures for each regional grid shall be developed and maintained by the respective RLDC in consultation with the regional entities for the guidance of the staff of RLDC.

Accordingly, ERLDC has updated the Operating Procedure of the Eastern Region. The draft version of the same was uploaded to the ERLDC Website for stakeholders' comments, if any. The same can also be accessed through the following link:

https://app.erldc.in/Content/Upload/System%20Study/Operating%20Procedure/Draft%20ER%20Operation%20Procedure%202024-25%20with%20Annex.pdf

Changes in Operating procedure:

- Frequency response obligation (FRO), as calculated by NLDC for FY 2024-25, added.
- The list of units in ER mandated to provide PRAS updated, the List of Bus reactors /line reactors updated, the UFR feeder list updated, and SPS pertaining to Indbarath has been added
- Chapter 6: Reserve requirement as calculated by NLDC for FY 2024-25 added
- Chapter 11: Final procedure of FTC added.
- Chapter 12: GNA curtailment, DC revision limits (Partial Outage), Real-time GNA Contract creation and scheduling, MDTL restriction, Power Supply obligation in case of USD, and Power supply regulation as per LPS rules.
- Chapter 18: Cyber-Crisis Management Team CCMT team updated

ERLDC may update Members may discuss.

Deliberation in the meeting

The Representative of ERLDC informed:

- *As per IEGC, 2023 regulation 28(4), a set of detailed operating procedures for each regional grid shall be developed and maintained by the respective RLDC in consultation with the regional entities for the guidance of the staff of RLDC. Accordingly, ERLDC has updated the Operating Procedure of the Eastern Region.*
- *The draft version of the same has been uploaded on the ERLDC Website for stakeholders' comments, if any.*

OCC Decision

OCC advised all stakeholders to go through the amendments made in the operating procedure of ER by ERLDC & submit comments, If any.

2.16 API integration of New WBES: ERLDC

The New **Web-Based Scheduling software (WBES**) is under development by Grid-India and is expected to go live soon. A DEMO session for familiarization with the New WBES was conducted on **3rd May 2024** with all the concerned officers engaged in scheduling activities using WBES in your control area and a DEMO session was conducted for API integration on **17th May 2024**.

As per the information gathered, the details of scheduling by regional entities are being fetched through the API from the current WBES to your scheduling portal. To smoothly switch over from the current WBES to the new WBES there is need to make necessary changes at your end for fetching the detail of scheduling data from the **new WBES through API**.

Accordingly, API details of New WBES test server and production server was sent to all the entities. As per the information received from different entities, Present Status of API integration is attached in the **Annexure B.2.15**. Other beneficiaries who are using API in present WBES and yet to integrate are requested to configure New WBES API at the earliest.

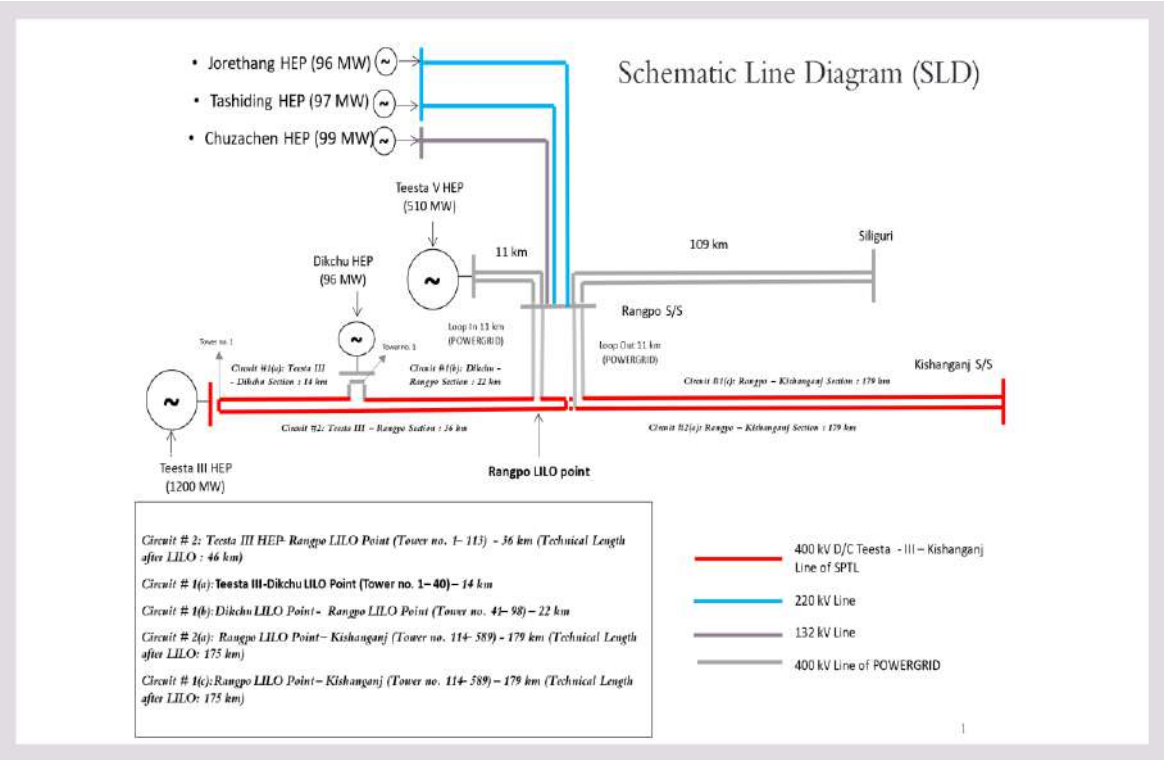
ERLDC may update. Members may discuss.

Deliberation in the meeting

OCC advised the beneficiaries who are using API in present WBES and yet to integrate are requested to configure New WBES API at the earliest so that New WBES i.e. under development by ERLDC, can go live.

2.17 Erosion of Riverbank of Teesta River in Mingley Village near Tower no. 91 of 400 kV Double Circuit Teesta III – Rangpo transmission Line: SPTL

Sikkim Power Transmission Limited (formerly, Teesta valley Power Transmission Ltd.) is entrusted with the responsibility to construct, maintain and operate the 400 kV Quad Moose Double Circuit Transmission Line from Teesta Stage-III Hydro Electric Project to Kishanganj Pooling Station of POWERGRID for evacuation of power from the large hydro generating complex of Sikkim of total capacity around 3000 MW including Teesta III HEP of 1200 MW capacity and Dikchu HEP of 96 MW capacity. The schematic of the transmission line is placed below:



The transmission line of length 215 km (589 towers) passes through Mangan, Gangtok & Namchi District of Sikkim, Darjeeling District of West Bengal and Kishanganj District of Bihar. The line passes through the difficult hilly terrain of altitude in the range of 1000m – 2600m and during monsoon period landslides & soil erosion occur in this range due to geological condition of the Eastern Himalayan Region. Also, the transmission line crosses chenga river in West Bengal & Bihar and Mahananda & Dauk River in Bihar which change their course often. The line was commissioned on 13.02.2019 and is under operation and maintenance since then.

As we all are aware that the state of Sikkim had witnessed Flash Flood in the month of October 2023 which caused damages to Teesta-III , Dikchu HEP & Teesta V HEP and also caused damages along the areas lying in basin of Teesta River. The flash flood resulted in depositing of huge riverbed material in the river basin causing the river to shift its course at multiple locations.

The said riverbank at Mingley Village was not affected before the flash flood event as the river flow was along the opposite bank. The Flash Flood of October 2023 had eroded a large portion of the riverbank. Further, due to deposition of huge riverbed material on the opposite riverbank because of the flood, the river has shifted its course and is now directly impacting the said riverbank.
It is being noticed at present that during the heavy rainfall since 12.06.2024, there has been floods across entire Gangtok District in Sikkim including Mingley Village. The Teesta River is also changing its course in certain areas and the high flow of the river has directly scoured the riverbank near the SPTL tower no. 91 (DD + 0 Mtr extension) of 400 kV Double Circuit Teesta III – Rangpo line (which is under anti-theft charged condition in both circuits from Rangpo S/s). The surrounding area and houses in the village are under threat in future in case of any slope failure. The total height of slope is 40m approximately from the riverbed level. The newspaper cutting, Photographs of the tower and the eroded slope / riverbank are attached as **Annexure-B.2.16.**
SPTL is in coordination with the District Administration and Flood Control Department for slope protection measures to prevent further erosion of the riverbank. Alternatively, SPTL is also exploring other measures including shifting of tower, if necessitated due to further erosion.

This is for necessary information to OCC forum.

SPTL may update. Members may discuss.

Deliberation in the meeting

SPTL was not present in the meeting.

ADDITIONAL AGENDA

2.18 Proposal for emergency shifting of OPGW i.r.o 132 kV DVC-Burdwan D/C line between TL 56/2-57 inside the premises of DGP 400 kV Substation of WBSETCL lying underneath 220 kV Ckts of 315 MVA ICT 1 & 2 to avoid fault tripping of said transformers due to encroachment on account of swing during stormy season: WBSETCL

- The two nos. 220 kV Ckts of 400/220 kV 315 MVA ICT 1 & 2 tripped on 15.06.24 evening at DGP 400 kV Sub-station.
- On inspection, it was observed that the OPGW of 132 kV DVC-Burdwan D/Ckt line (line No.75,76) had encroached the aforementioned lines probably due to swing in stormy weather condition causing huge flashover and damage to the B phase conductors of the LV ckts.
- The power interruption caused by the outage of 315 MVA ICT 1 & 2 could not be normalized till the swinging of the OPGW came to rest after the storm.
- The matter had been discussed with DVC on a number of occasions and joint inspection was also held several times (MOM copy enclosed).
- To overcome the issue immediately, the said OPGW has to be shifted and re-oriented as per enclosed drawing. DVC has confirmed that WBSETCL shall execute the work engaging their vendor and all cost of material, execution will be borne by WBSETCL.
- Local DVC authorities are aware of the issue. Consent of DVC HQ is awaited for execution of this work. It is understood from attached communications of DVC that they require consent of ERPC in the OCC forum for the said reorientation work (email enclosed).
- Considering extreme urgency for the above work at Durgapur 400KV SS the matter is placed before the 216th OCC Forum of ERPC for necessary deliberation & approval.

WBSETCL please update. Members may discuss.

Deliberation in the Meeting

The Representative of WBSETCL apprised the OCC forum :

- *Tripping of two nos. 220 kV Ckts of 400/220 kV 315 MVA ICT 1 & 2 tripped on 15.06.2024 evening at DGP 400 kV Sub-station.*

- *During stormy weather condition, swinging of OPGW of 132 kV DVC-Burdwan D/Ckt line which is lying underneath 220 kV Ckts of 400/220 kV 315 MVA ICT 1 & 2, is causing huge flashover and damage to the B phase conductors of the LV ckts.*

- *The power interruption caused by the outage of 315 MVA ICT 1 & 2 could not be normalized till the swinging of the OPGW came to halt after the storm.*

- *To overcome the issue immediately, the said OPGW has to be shifted and re-oriented & in this regard joint inspection was carried out several times by WBSETCL & DVC Officials.*

- *DVC has confirmed that WBSETCL shall execute the work (as per enclosed Drawing) engaging their vendor and all cost of material, execution will be borne by WBSETCL.*
- *Consent of OCC forum is required for re-orientation of the said OPGW link.*

OCC Decision

OCC advised WBSETCL to share details of all site inspection with DVC & conduct a joint field visit for carrying out this re-routing of OPGW link on priority basis.

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

3.1. ER Grid performance during May 2024.

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month May-2024 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)
602 MU	669.6 MU, 29.05.2024	31643 MW, 01.05.2024 at 00:00 Hrs.	18067 MW, 09.05.2024 at 17:20 Hrs.	1751	1457

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

Deliberation in the meeting

The grid performance of ER for the month of May was highlighted.

3.2. Update on restoration of NTPC Darlipalli Unit-1 under Forced outage

On **April 24, 2024**, Darlipalli informed the ERLDC that Unit-1 would be taken out of bar as an emergency measure on **April 26th** due to "Low LP turbine differential expansion". The unit finally went out of bar at 00:23hrs on April 27th, followed by an email stating a 60-day outage for repairs. ERLDC immediately raised concerns about the significant deviation of the outage period from the initial notification. Subsequently, Darlipalli revised the estimated restoration time to 7 days. Further, on 07.05.2024, Unit-1 LPT-B preliminary inspection was done, and OEM/OES has suggested to do the complete inspection and overhauling of the TG and do the corrections similar to Unit-2. Accordingly, Darlipalli plant declared **TG overhauling** period **60 days** tentatively from the date of outage.

As per deliberation in **215th OCC**:

➢ NTPC Darlipalli representative submitted:

- In-Situ **Rotor replacement of HP and IP turbines** is under progress.
- The Unit-1 shall be tentatively restored within **26th June 2024.**

➢ **OCC decision:**

- OCC advised NTPC Darlipalli to expedite repair works so that the Unit-1 can be positively reinstated to service as per the submitted timeline (i.e. **26th June 2024**).
- NTPC Darlipalli was also advised to share weekly progress report with ERPC delineating proper timeframe of the planned repair activities.

NTPC Darlipalli may please update. Members may discuss.

Deliberation in the meeting

The Representative of NTPC informed the forum that HP-IP rotor replacement & it's positioning in Darlipali unit#1 turbine has completed & after checking necessary rotor alignment, they will go for boxing-up of Turbine & by end of June, Unit#1 will be synchronized.

OCC Decision

OCC advised Darlipali to expedite the pending work so that Unit can be brought into operation as per said timeline as JITPL Unit2 will be undergoing shutdown on 6th July for a period of 31 days.

3.3. Update on installation of 5th 400/220 KV 315 MVA ICT in place of existing age old 50 MVAR (3x16.6 MVAR single phase units) ISTS Reactor at Jeerat 400 KV SS of WBSETCL to maintain N-1 condition.: ERPC

- At present the total installed capacity of 400/220 KV ICTs at Jeerat 400 KV SS of WBSETCL is 4X315 MVA. The defective 4th 315 MVA ICT which was out of system for over 2 years has been replaced with a Regional pool spare 315 MVA ICT & put into service on 14th April-2024.
- Peak demand of Jeerat 400 KV SS in 2023-24 was 971 MVA (Jun-2023) i.e. more than full load capacity of the ICTs in service at that time i.e. 3X315 MVA.
- After recommissioning of the 4th ICT, it is evident from the load flow studies that the load shared by Jeerat SS with 4 nos of ICTs will increase considerably as compared to earlier load sharing with 3 nos of ICTs. The anticipated load during 2024-25 will increase further & may approach the full load capacity of all the four ICTs thus violating (N-1) criterion.
- So to cater the load growth at Jeerat 400 KV SS at 400/220 KV level maintaining (N-1) condition, augmentation of 400/220 KV ICT capacity from 4X315 MVA to 5X315 MVA is necessary at an early date.
- Clear space for construction of 220 KV bay for 5th ICT is available at Jeerat SS but there is no space for construction of new 400 KV bay & installation of 5th ICT.
- Due to space constraint, it is hereby proposed to use the 400 KV bay & equipment space of existing 50 MVAR (3X16.6 MVAR single phase units) Bus reactor which is at present operating with another 3-Ph 50 MVAR reactor in group control, both of which were installed under ISTS scheme a long time ago.
- Feasibility for keeping the 3-Ph 50 MVAR reactor in service by alternative arrangement is being explored by WBSETCL. WBSETCL is also considering the possibility for installation of a 3-Ph 125 MVAR Bus Reactor in place of the age old 50 MVAR 3-Ph Reactor depending on VAR compensation requirement as per system study.
- Considering the above facts proposal for installation of 5th ICT at Jeerat 400 KV SS was placed in the 29th CMETS-ER on 27.03.2024 Region for consideration and approval. It was decided that since the existing ISTS bus reactors (50MVAr (3x16.67MVAr single phase units) & 50MVAr 3-Ph) are to be disconnected and the vacated ISTS bay and space is to be used for installation of 5th ICT, the matter needs stakeholder's consultation & needs to be placed before ERPC forum for further discussion.
- Accordingly the matter was deliberated in the 214th OCC and 215th OCC Meetings of ERPC.
- As per deliberation in **215th OCC**:

OCC decision:

- OCC agreed for the urgent requirement of the 5th ICT at 400 kV Jeerat (WB) S/S in view of system reliability.

- OCC advised PowerGrid ER-II, CTU and WBSETCL to carry out joint site inspection at 400 kV Jeerat (WB) S/S by first week of June 2024 and share the report of the same with ERPC.
- OCC also opined to explore all alternate avenues for accommodating the 5th ICT at Jeerat (WB) S/S without striking off the existing ISTS assets in healthy condition owned by PowerGrid.
- Upon finalization of the technical aspect of 5th ICT installation at Jeerat (WB) S/S, commercial settlement pertaining to asset relocation also needs to be suitably sorted out in compliance to extant provisions and regulations.
- OCC observed that since the 5th ICT is being proposed to be installed in place of one no. of 50MVAR Bus Reactor, adequate reactive compensation also needs to be ensured at Jeerat (WB) S/S to prevent overvoltage conditions.

- The issue was also discussed in latest 31st CMETS-ER dated 30.05.2024 wherein the urgent requirement of the 5th ICT was acknowledged as well as importance of joint site inspection at 400 kV Jeerat (WB) S/S by PowerGrid ER-II, CTU and WBSETCL to explore all alternate avenues for accommodating the 5th ICT at Jeerat (WB) S/S was underscored.

WBSETCL and PowerGrid ER-II may update the Status. Members may discuss.

Deliberation in the meeting

PowerGrid ER-II representative was not present in the meeting.

3.4. Update on installation of 7th (Interim) 500 MVA ICT at 400 kV Subhasgram (PG)-ERPC

As per deliberation in **215th** OCC:
PowerGrid ER-II updated:

- The 7th (interim) 500 MVA ICT has already reached 400 kV Subhasgram(PG) safely on 16.05.2024
- There may be slight delay in commencement of erection process of the ICT owing to inclement weather conditions as per weather forecast.
- The ICT shall be put to service latest by 15th June 2024.

OCC decision:
Considering the critical requirement of the 500 MVA ICT i.r.o system reliability, OCC requested PowerGrid ER-II to expedite erection activities for the 7th (interim) 500 MVA ICT at Subhasgram (PG) to the best feasible extent.

PowerGrid ER-II may please update. Members may discuss.

Deliberation in the meeting

PowerGrid ER-II representative was not present in the meeting.

- *As per latest available status, the 500 MVA 400/220 kV ICT-VII (interim) was **first time charged** on **21.06.2024** on no load and thereafter has been **loaded** from 220 kV side on **22.06.2024** from 11:55 hrs.*
- *OCC commended this achievement by PowerGrid ER-II in commissioning the 500 MVA ICT at Subhasgram (PG) that was urgently required to safeguard system reliability.*

3.5. Update on Restriction of Talcher-Kolar HVDC Bi-pole: ERPC

On **20th April'24,** ERLDC received one mail from HVDC Talcher stating the requirement of replacement of the R-phase converter transformer necessitating restriction of the power order of HVDC Talcher bi-pole to 1500MW till the replacement. It was also informed that the spare Converter Transformer of HVDC Kolar is being diverted from HVDC Kolar to HVDC Talcher and is expected to reach HVDC Talcher by **31st May 2024.**

Since April'24, either pole of HVDC blocked 5 times out of which, in 4 times the other pole went to ground return mode instead of metallic return mode resulting in overloading of 400kV Talcher-Meramundali D/C and generation backdown was done either manually or through operation of SPS.

Further, while availing the planned shutdown of Pole-2 on 28.04.2024, the other pole didn't go to metallic return mode as the automatic changeover sequence failed and remained in Ground return mode for around 15 minutes.

As per deliberation in **215th** OCC:

PowerGrid Odisha updated:

- The R-phase converter transformer has already **started from Kolar** and expected to **reach Talcher** by **25th June 2024** and the same shall be put to service by **mid of July 2024**.
- Fault in jurisdiction of southern region was cited as reason for frequent tripping of either pole and hot line washing of porcelain insulators has been taken up henceforth as a preventive measure.
- Failure of automatic changeover sequence from ground return to metallic return mode was attributed to overtravel of operating rod and auxiliary contacts in MR isolator and after adjusting the operating rod along with auxiliary contacts, metallic return changeover was done manually.
- Transportation route as well as associated challenges in shifting a bulky converter transformer was highlighted.

OCC decision:

- OCC advised PowerGrid Odisha to expedite the commissioning of converter transformer at Talcher end of HVDC Talcher-Kolar Bipolar link as per submitted timelines so that the same can be utilized up to rated capacity for reliable grid operation.

PowerGrid Odisha may update the present status of the Converter Transformer.

Deliberation in the meeting

- *PowerGrid Odisha representative was not present in the meeting.*
- *However as per the latest mail received from PowerGrid Odisha dt.21.06.2024:*
  - *The Accessories of converter transformer arrived at HVDC Talcher Station on 17.05.2024.*
  - *Presently, the spare converter transformer is near Golapally, Telangana and it has travelled approximately 550 KM from Kolar Station. The total distance from HVDC Kolar to HVDC Talcher is approximately 1500 KM. Further it is anticipated that it will take more time and shall reach HVDC Talcher Station tentatively by 30.07.2024. However, best possible effort is being taken for early completion of transportation of spare converter transformer from HVDC Kolar to HVDC Talcher.*
  - *Transport Agency is carrying out shifting of converter transformer tank to girder bridge truck for crossing Shahnagar Toll Plaza.*

❖ *If everything goes as per the anticipated timeline, considering additional 15 days for complete installation, The Rectiformer may come to service by mid-August.*

OCC decision:

- *OCC advised PowerGrid Odisha to expedite the commissioning of converter transformer at Talcher end of HVDC Talcher-Kolar Bipolar link as per submitted timelines so that the same can be utilized up to rated capacity for reliable grid operation.*
- *OCC further advised PowerGrid Odisha for sharing regular update with ERPC for monitoring of the transportation of converter transformer to HVDC Talcher station.*

3.6. AMR extension from ERLDC to SLDCs – ERPC

As per deliberation in **215th OCC**:

- SLDC Odisha pitched for extension of SEM data in real time available via AMR at RLDCs to SLDCs to facilitate better grid operation. Additional expenditure in establishing the communication link from RLDC server to SLDCs may be borne by respective SLDCs.
- NTPC Darlipalli also raised the same issue of inherent mismatch as raised by SLDC Odisha and requested for remedial action.
- Powergrid ER-II submitted:
- The possibility of sharing AMR data from RLDC to all SLDCs with structural modifications in existing framework is already under planning and the same **to be shared with the forum in subsequent OCC meeting(s) along with cost implications.**

PowerGrid ER-II may update the Status. Members may discuss.

Deliberation in the meeting

PowerGrid ER-II representative was not present in the meeting.

3.7. Unsatisfactory FRC performance by most of the entities & Non-Submission of FRC data: 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. If any data is not received or is incomplete, ERLDC resorts to using Scada data (low resolution) to calculate the performance of the respective control area. Therefore, timely submission of primary response data is crucial for compliance with the **IEGC.**

As per the decision taken in the **214th OCCM,** all the regional generators as well as states were advised to send the high-resolution data to ERLDC for assessing their performance.

As per deliberation in **215th OCC**:

- All generators whose data submission against frequency events flagged by ERLDC is pending (detailed above in agenda) were advised to submit the necessary FRC data to ERLDC at the earliest.

- All generators were also 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.

In line with the provisions of IEGC 2023, GRID-INDIA has been assessing the **Frequency Response Characteristics (FRC)** for grid events involving load/generation loss of more than 1000 MW or change in frequency by more than 0.1 Hz. In the month of **April-2024 four such events were reported**. The Plant-wise average response as observed through 10 second SCADA data available at ERLDC & data received from generators is show in the table below. It may be noted that many power plants' performance was poor / below average and data received status also very poor from most of the plants. Respective plants/State control area may explain reasons behind deficiency in performance and all utilities may follow the timeline.

ENTITY NAME	Average FRP(Beta) for the month based on SCADA data	Average FRP(Beta) for the month based on Gen data	Grade
FSTPP #STG 1 & 2	0.94	DATA NOT RECEIVED	Good
North Karanpura	0.92	DATA NOT RECEIVED	Good
FSTPP # STG 3	0.77	DATA NOT RECEIVED	Average
TSTPP #STG 1	0.74	0.31	Average
NPGC	0.70	0.10	Below Average
GMR	0.70	0.61	Below Average
Barh stage-1	0.69	DATA NOT RECEIVED	Below Average
BRBCL	0.65	1.00	Below Average
MPL	0.52	0.37	Below Average
Darlipalli	0.51	0.33	Below Average
KhSTPP #STG 1	0.51	DATA NOT RECEIVED	Below Average

KhSTPP #STG 2	0.50	0.61	Below Average
ADHUNIK	0.33	0.25	Poor
Barh stage-2	0.25	DATA NOT RECEIVED	Poor
JITPL	0.01	0.00	Poor
Bihar	0.63	DATA NOT RECEIVED	Below Average
Jharkhand	0.45	DATA NOT RECEIVED	Poor
DVC	0.53	DATA NOT RECEIVED	Below Average
OPTCL	0.60	0.375	Below Average
WB	0.58	DATA NOT RECEIVED	Below Average

Deliberation in the meeting

OCC decision:

- *OCC urged all generators whose data submission against frequency events flagged by ERLDC is pending, to submit the necessary FRC data to ERLDC at the earliest.*
- *All generators were also advised to regularly share high resolution data of primary frequency response against each reportable frequency event with ERLDC to facilitate accurate assessment of FRP for respective control areas.*
- *Comparative analysis of average FRP based on SCADA data as well as actual data furnished by respective generators along with performance grading is shared above for information to all concerned generating units.*

3.8. 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, Jharkhand SLDC regularly provides day ahead and weekly forecasts and West Bengal SLDC is submitting day-ahead forecasts. ERLDC has planned to visit all the SLDCs to sensitize them about the Forecasting. Following the visit by the ERLDC team, DVC has started sending day day-ahead forecasts to ERLDC. The latest Forecast receipt status is shown below:

AS ON 16-05-2024	Forecast Receipt Status

Entity Name	Day ahead	Weekly	Monthly
JHARKHAND	REGULAR	REGULAR	NOT RECEIVED
WEST BENGAL	REGULAR	NOT RECEIVED	NOT RECEIVED
DVC	REGULAR	NOT RECEIVED	NOT RECEIVED
BIHAR	REGULAR	REGULAR	NOT RECEIVED
SIKKIM	NOT RECEIVED	NOT RECEIVED	NOT RECEIVED
ODISHA	NOT RECEIVED	NOT RECEIVED	NOT RECEIVED

Hence it is again requested to all the concerned for timely submission of demand estimation data to ERLDC. This collaboration is essential for effective planning and preparedness to meet the region's electricity demands efficiently and reliably.

As per deliberation in **215th OCC**:

OCC decision:

- OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC as well as uploading of forecasting error on their respective websites.
- West Bengal SLDC was advised to strive for resolving technical glitch of EMS portal in coordination with concerned vendor. If the issue still remains unresolved, the same may again be intimated to ERPC.
- SLDC Odisha was advised to expedite implementation of the forecasting software while in the meantime day ahead demand forecast must be submitted to ERLDC based on historical data.
- Sikkim SLDC was advised to immediately commence regular demand estimation and timely sharing with ERLDC.
- SLDCs who are submitting day ahead forecast were advised to also share the forecasting data on weekly as well as monthly basis with ERLDC.

ERLDC may please update. Members may discuss.

Deliberation in the meeting

The Representative of SLDC, Odisha informed the forum that they have been sharing day ahead forecasting data with ERLDC since 10th June'2024.

OCC decision:

- *OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC 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 on weekly as well as monthly basis with ERLDC.*
- *SLDC Odisha was advised to expedite implementation of the forecasting software.*

3.9. Finalization of dates for mock black start in capable units of Eastern region: ERLDC

As per **IEGC 2023** regulations, each user is required to carry out a mock trial run of the restoration procedure for different sub-systems including black-start of generating units along with grid forming capability of inverter-based generating station and VSC-based HVDC black-start support at least once a year under intimation to the concerned SLDC and RLDC.

As such a tentative list for the year 2024 is prepared for conducting mock Black start of capable hydro units in the Eastern Region, matching with the dates in which such tests were conducted in previous years. The same agenda was discussed in the 214th OCC meeting and it was deliberated that all hydro stations of ER to update the schedule of mock black start as prepared by ERLDC.

A few tentative dates, as received, have been highlighted in sky blue color.

Sl No	Name of Hydro Station	2022 Actual Date of Test	2023 Actual Date of Test	Schedule of Mock Black Start	2024 Actual Date of Test
1	U. Kolab	23rd, June2022		June-2024	
2	Balimela	08th Sep-2022		July-2024	
3	Rengali	08-December- 2022	12th July 2023	June-2024	
4	Burla	23-June-2022		July-2024	
5	U. Indravati	25-May-2022		May-2024	
6	Maithon	DVC representative submitted that upgradation work is under progress due to issues in the governing system. Detailed timeline would be submitted to ERPC and ERLDC. Detail timeline yet to be received from DVC SLDC	14th August 2023	Dec-2024	
7	TLDP-III			Oct-2024	
8	TLDP-IV			Oct-2024	
9	Subarnarekha	13th December 2022		Sep-2024 4th week	
10	Teesta-V			N/A	
11	Chuzachen			Oct-2024	
12	Teesta-III	08-April-2022		N/A	
13	Jorethang		19th and 20th December 2023	Dec-2024 3rd week	

14	Tashiding		12th December 2023	2nd week of Dec 2024	
15	Dikchu			N/A	
16	Rongnichu			March 2024	18th March and 20th March 2024
17	Mangdechu				

The users, in this case mean includes generating company and they are requested to kindly respond and review the tentative dates specific to their plant units and update the list. For intra state black start capable hydro units, SLDCs are requested to respond on their behalf.
So far, only **Tashiding, Jorethang** and **Subarnarekha (JUSNL)** have updated.

As per deliberation in **215th** OCC:

➢ ERLDC submitted:

- Tentative schedule of mock black starts in capable hydro generating units of Eastern region has been prepared based on available historical data.
- So far, relevant details have been received only from Tashiding, Jorethang and Subarnarekha (JUSNL).

OCC decision:

- OCC advised all black start capable hydro generating units of ER to update their schedule of mock black start to ERLDC at the earliest.
- OCC also opined to finalize this schedule of mock black start by next OCC meeting if no update on the same is received at ERLDC from concerned hydro generating units in the meantime.

ERLDC may update. Members may review and discuss.

Deliberation in the meeting

OCC decision:

- *OCC advised all black start capable hydro generating units of ER to update their schedule of mock black start to ERLDC at the earliest.*
- *OCC further opined that in case of non-receipt of further update by respective hydro generating units the proposed tentative schedule of mock black start may be considered as final.*

3.10. 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.

It was deliberated by Bihar in the 214th OCC that an 80 MW load has already been implemented under ADMS while an additional 400 MW load is yet to be implemented.
In the 215th OCC meeting, SLDC Bihar confirmed the submission of a list of 80MW load.

DVC deliberated in the 214th OCC meeting that after the implementation of the Chandrapura islanding scheme, the ADMS scheme has been changed and the revised feeder list is yet to be implemented. No further updates received so far.

Bihar & DVC may update the Status. Members may discuss.

Deliberation in the meeting

OCC decision:

OCC advised:

- *Bihar to share detailed action plan for implementation of additional 400 MW load under ADMS with ERLDC at the earliest.*
- *DVC to share revised feeder list with ERLDC in which ADMS to be implemented after operationalization of Chandrapura islanding scheme.*

4. PART-D: OPERATIONAL PLANNING

4.1. Anticipated power supply position during July-2024

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of July 2024 were prepared by ERPC Secretariat (**Annexure D.1**) on the basis of LGBR for 2024-25 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 July 2024 is provided at **Annexure D.1**.*

4.2. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on 13-06-2024)

a) Thermal Generating Stations outage report:

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	BARAUNI TPS	BIHAR	NTPC	7	110	Poor condenser vacuum	19-Jul-2023
2	BARAUNI TPS	BIHAR	NTPC	6	110	Low vacuum	22-Jul-2023
3	RTPS	DVC	DVC	2	600	Initially Unit was taken out due to very low lube oil presssure, later unit was taken under annual overhauling w.e.f 00.00 hrs of 27/02/2024, now under forced outage wef 23/03/2024 due to damage in turbine bearing.	26-Feb-2024
4	DARLIPALI	ODISHA	NTPC	1	800	Turbine related problem	27-Apr-2024
5	IBEUL	ODISHA	IBEUL	1	339.6	Clinker formation in boiler	29-May-2024
6	BARH	BIHAR	NTPC	2	660	Due to abnormal sound from Boiler	13-June-2024
7	HALDIA ENERGY LTD	WEST BENGAL	HEL, CESC	1	300	Failure of R-Ph bushing of GT	29-May-2024
8	TENUGHAT	JHARKHAND	TVNL	1	250	Excessive hydrogen leakage	12-June-2024
9	SAGARDIGHI	WEST BENGAL	WBPDCL	4	500	Boiler Tube Leakage	12-June-2024

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
NIL							

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 to 6	200*6	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	DIKCHU Hep	SIKKIM	SKPPL	1	48	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
3	TEESTA HPS	SIKKIM	NHPC	1 to 3	170*3	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
4	INDRAVATI	ODISHA	OHPC	2	150	Capital Maintenance	23-Nov-2023
5	CHIPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15-Dec-2023
6	BALIMELA HPS	ODISHA	OHPC	2	60	High Turbine Vibration	14-Mar-2024

Long outage report of transmission lines (As on 15.04.2024):

Transmission Element / ICT	Outage From	Reasons for Outage
220/132KV 100 MVA ICT II AT LALMATIA	22.01.2019	Commissioning work of 220/132KV, 100MVA Transformer and its associated control Panel under progress.
220 KV PANDIABILI - SAMANGARA D/C	03.05.2019	Tower Collapsed during Cyclone FANI (Restoration project is entrusted upon PGCIL & 220kV Samangara-Pandiabili ckt-I&II are anti-theft charged from Pandiabili end from loc no.01 to loc no.74)
220/132KV 100 MVA ICT 3 AT CHANDIL	30.04.2020	Due to Fire hazard ICT damaged and burnt.

220KV-FSTPP-LALMATIA-I	21.04.2021	Transmission line is idle charged between Lalmatia GSS end up to Tower loc no 94 (50.30km)
220KV-WARIA-BIDHANNAGAR-1 & 2	08.06.2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
220KV-MUZAFFARPUR(PG)-GORAUL(BH)-1	11.06.2022	Main Bay is under breakdown due to flashing in GIS module at Muzaffarpur end
400/220KV 315 MVA ICT 2 AT PATRATU	27.09.2022	ICT tripped on few occasions due to Buchholz later DGA violation found, internal fault in transformer to be rectified. (DGA violation)
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	
400KV-RANGPO-DIKCHU-1	04.10.2023	Hand tripped from Rango 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-KHSTPP-BANKA (PG)-1	24.02.2024	Switchyard bay updating work
400KV-JHARSUGUDA-ROURKELA-3&4	01.04.2024	Reconductoring work
132KV-MADHEPURA (BH)-SAHARSA(PMTL)-1	04.04.2024	To control loading on 132kV Madhepura-Saharsa line
HVDC PUSAULI	06.05.2024	Inspection of HVDC Valve hall to inspect the VESDA alarm reason
400KV/220KV 315 MVA ICT 2 AT RENGALI	07.05.2024	Commissioning of ICT-2 at Rengali under ADD CAP 2019-24
132KV-RANGPO-GANGTOK-1	10-05-2024	Continuous Shutdown for Reconductoring Work
132KV-KHSTPP-SABOUR-1	19-05-2024	To control loading of 400/132kV ICT-2 to rectify hotspot problem on 132kV side
400KV-MERAMUNDALI-LAPANGA-1 &2	20-05-2024	Tower collapse at location no 51
220KV-RANGPO-NEW MELLI-2	21-05-2024	SF6 Gas leakage rectification by OEM Hyosung at Rangpo.

132KV-RANGPO-SAMARDONG-2	24-05-2024	Fault Rectification work for Line -I
220KV-KATAPALLI-BOLANGIR(PG)-1	28-05-2024	220KV Bolangir-Katapalli line tripped at 13:08 Hrs on 30/05/24 from Bolangir(PG) end
220KV-SUBHASGRAM(PG)-NEW TOWN-1	28-05-2024	Line Opened for reconfiguration of line to New town AAIII-Subhasgram(PG) TBC-Baruipur
400KV-RANCHI-RAGHUNATHPUR-2 &3	30-05-2024	Tower collapse at Loc no-195

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 May -2024.

The details of new units/transmission elements commissioned in the month of May-2024 based on the inputs received from beneficiaries:

NEW ELEMENTS COMMISSIONED DURING May, 2024							
GENERATING UNITS							
SL. NO.	**Location**	**Owner/ Unit name**	**Unit No / Source**	**Capacity added (MW)**	**Total/Installed Capacity (MW)**	**DATE**	**Remarks**
NIL							
ICTs/ GTs / STs							
SL. NO.	**Agency/ Owner**	**SUB-STATION**	**ICT NO**	**Voltage Level (kV)**	**CAPACITY (MVA)**	**DATE**	**Remarks**
1	**SJVN Thermal Private limited**	**Buxar TPS**	**ST-1**	**400/11 kV**	**110**	**11-05-2024**	
TRANSMISSION LINES							
SL. NO.	**Agency/ Owner**	**Line Name**		**Length (KM)**	**Conductor Type**	**DATE**	**Remarks**
1	BSPTCL	400KV-BUXAR-NAUBATPUR-2		126.192	Twin Moose Conductor	11-05-2024	First Time Charged for drawing of startup power for BUXAR TPP.
2	Power Deptt, Govt. of Sikkim	132KV-RANGPO-SAMARDONG-1		2.843(Twin Moose ACSR-2.312kms+220 kV Cable - 0.531km).	(Twin Moose ACSR-2.312kms+220 kV Cable - 0.531km).	18-05-2024	First Time Charged at NO LOAD Condition.
3	Power Deptt, Govt. of Sikkim	132KV-RANGPO-SAMARDONG-2		2.843(Twin Moose ACSR-2.312kms+220 kV Cable - 0.531km).	(Twin Moose ACSR-2.312kms+220 kV Cable - 0.531km).	18-05-2024	First Time Charged at NO LOAD Condition.
LILO/RE-ARRANGEMENT OF TRANSMISSION LINES							
SL. NO.	**Agency/ Owner**	**Line Name/LILO at**		**Length (KM)**	**Conductor Type**	**DATE**	**Remarks**

1	PGCIL	400KV-BIHARSARIFF(PG)-SAHUPURI(CHANDAULI)-2	289.441	ACSR MOOSE	18-05-2024	400kV Biharshariff-Varanasi-2 line has been Liloed at Sahu Puri (Chandauli) and is now designated as 400kV Biharshariff (PG)-Sahupuri (Chandauli)-2.
2	BSPTCL	132KV-DMTCL(MOTIHARI)-BETTIAH-1	38.162	HTLS Conductor equivalent to ACSR Panther	28-05-2024	Following the reconductoring process, the High Temperature Low Sag (HTLS) conductor now has a capacity of 1050 A. However, the associated bays at both ends can only accommodate up to 800 A, thereby limiting the power flow capacity to 800 A
3	BSPTCL	132KV-DMTCL(MOTIHARI)-BETTIAH-2	38.162	HTLS Conductor equivalent to ACSR Panther	28-05-2024	
BUS/LINE REACTORS						
SL. NO.	**Agency/ Owner**	**Element Name**	**SUB-STATION**	**Voltage Level (kV)**	**DATE**	**Remarks**
NIL						
BUS						
SL. NO.	**Agency/ Owner**	**Element Name**	**SUB-STATION**	**Voltage Level (kV)**	**DATE**	**Remarks**
1	**SJVN Thermal Private limited**	**BUXAR - 400KV - Bus 1**	**BUXAR TPS(BTPS)**	**400**	**11-05-2024**	
2	**SJVN Thermal Private limited**	**BUXAR - 400KV - Bus 2**	**BUXAR TPS(BTPS)**	**400**	**11-05-2024**	
BAYS						
SL. NO.	**Agency/ Owner**	**Element Name**	**SUB-STATION**	**Voltage Level (kV)**	**DATE**	**Remarks**
1	**SJVN Thermal Private limited**	**400KV MAIN BAY OF NAUBATPUR-2 AT BUXAR TPS**	**BUXAR TPS**	**400**	**11-05-2024**	
2	**SJVN Thermal Private limited**	**400KV MAIN BAY OF 110 MVA ST-1 AT BUXAR TPS**	**BUXAR TPS**	**400**	**11-05-2024**	
3	**SJVN Thermal Private limited**	**400KV TIE BAY OF NAUBATPUR-2 AND 110 MVA ST 1 AT BUXAR**	**BUXAR TPS**	**400**	**11-05-2024**	
4	**NTPC NORTH KARANPURA**	**400KV MAIN BAY OF 125MVAR 400KV B/R-1 AT NORTH KARANPURA**	**NORTH KARANPURA**	**400**	**25-05-2024**	
5	**NTPC NORTH KARANPURA**	**400KV TIE BAY OF (125MVAR 400KV B/R-1 AND 400KV/11KV 265 MVA GT 2) AT NORTH KARANPURA**	**NORTH KARANPURA**	**400**	**25-05-2024**	

Members may note.

Deliberation in the meeting

Members noted.

4.4. UFR operation during the month of May 2024.

Frequency profile for the month as follows:

MONTH	MAX (DATE/TIME)	MIN (DATE/TIME)	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
May, 2024	50.46 Hz on 07-05-2024 at 18:02 hrs	49.72 Hz on 11-05-2024 at 00:02 hrs	2.49	80.05	17.46

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

Members may note.

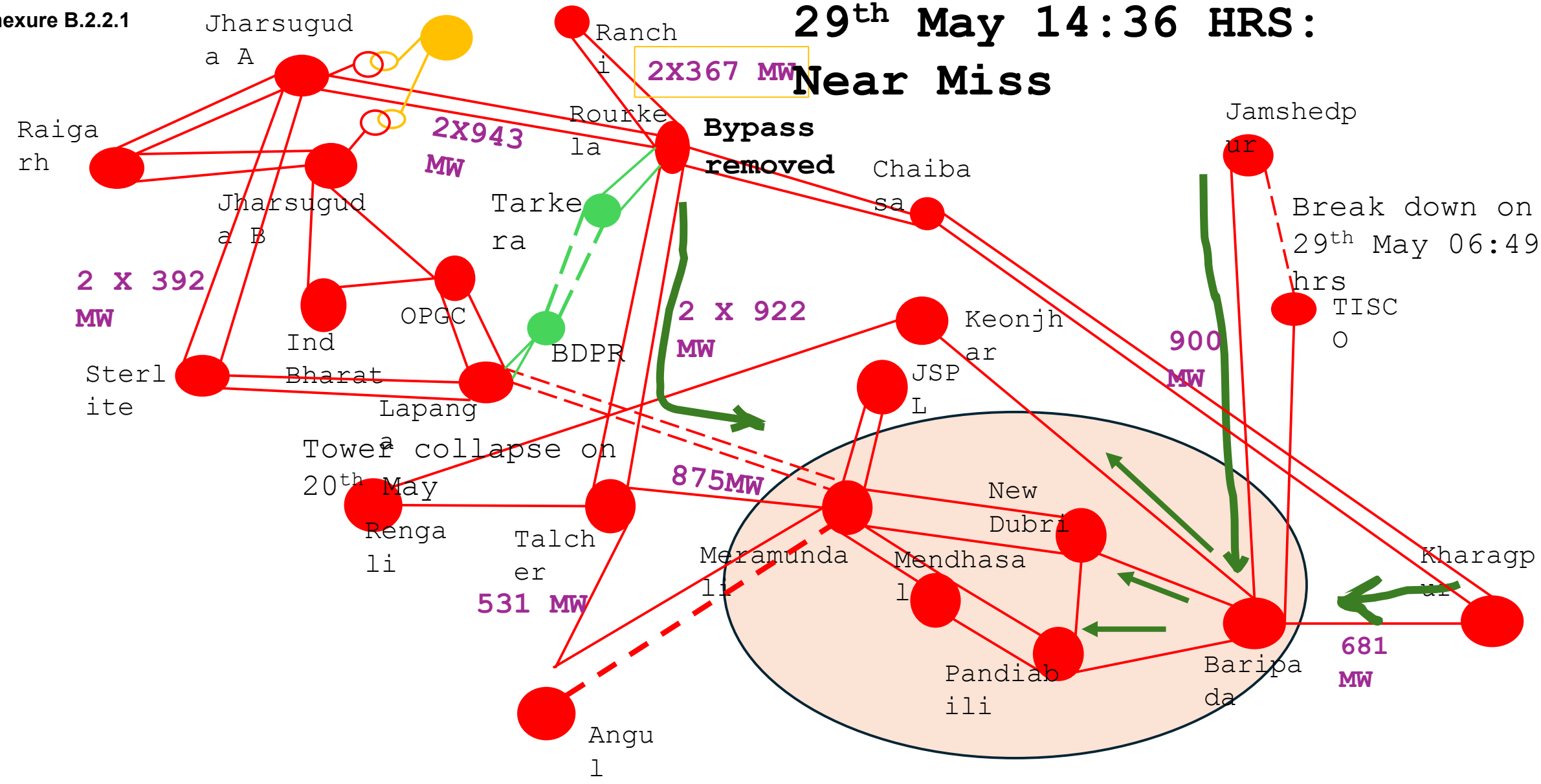
Deliberation in the meeting

Members noted.

****

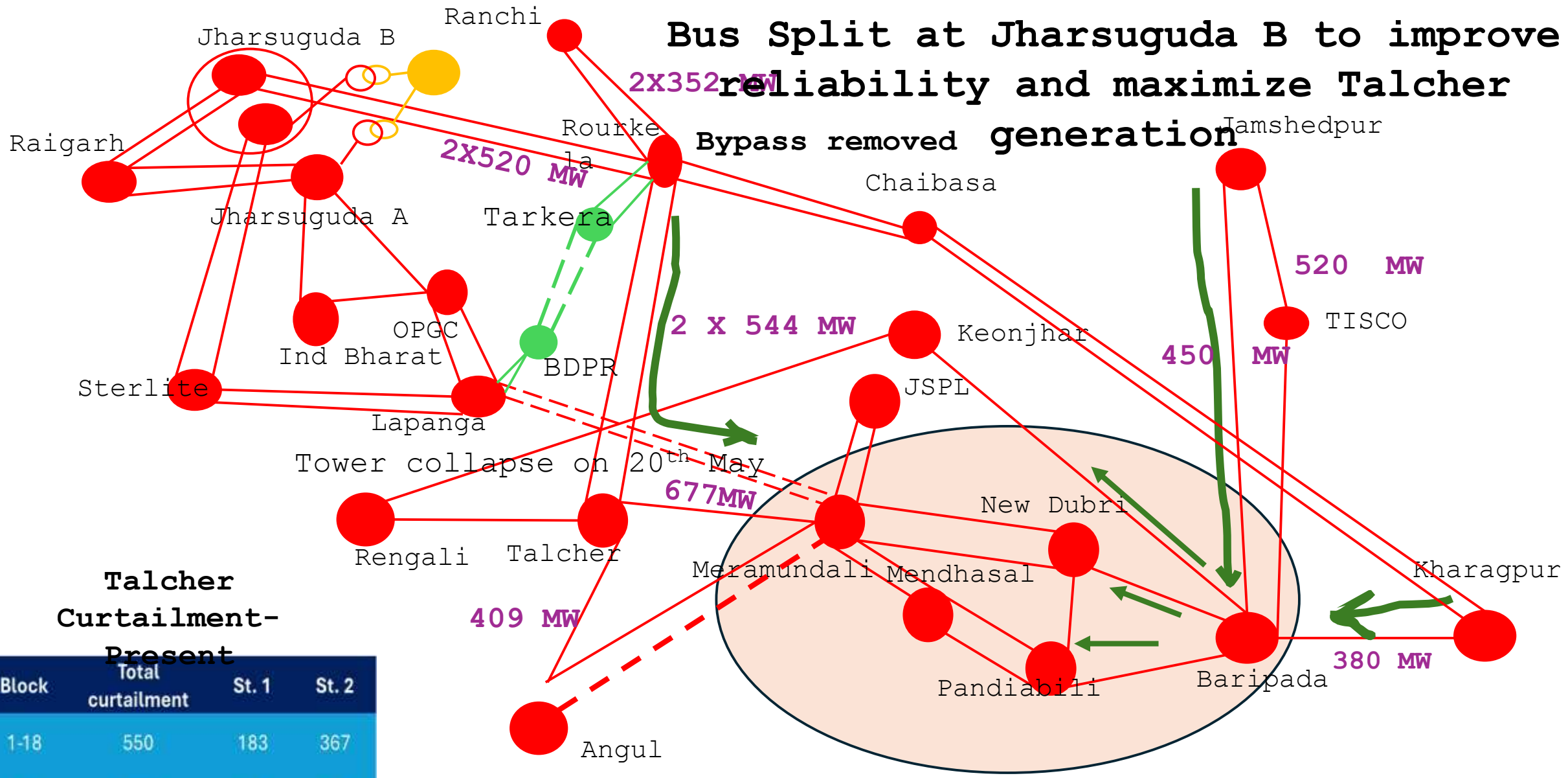
Annexure B.2.2.1

29th May 14:36 HRS: Near Miss



Demand met by Odisha at 14:36 hrs 6855 MW on 29th May WR injection-

Bus Split at Jharsuguda B to improve reliability and maximize Talcher generation

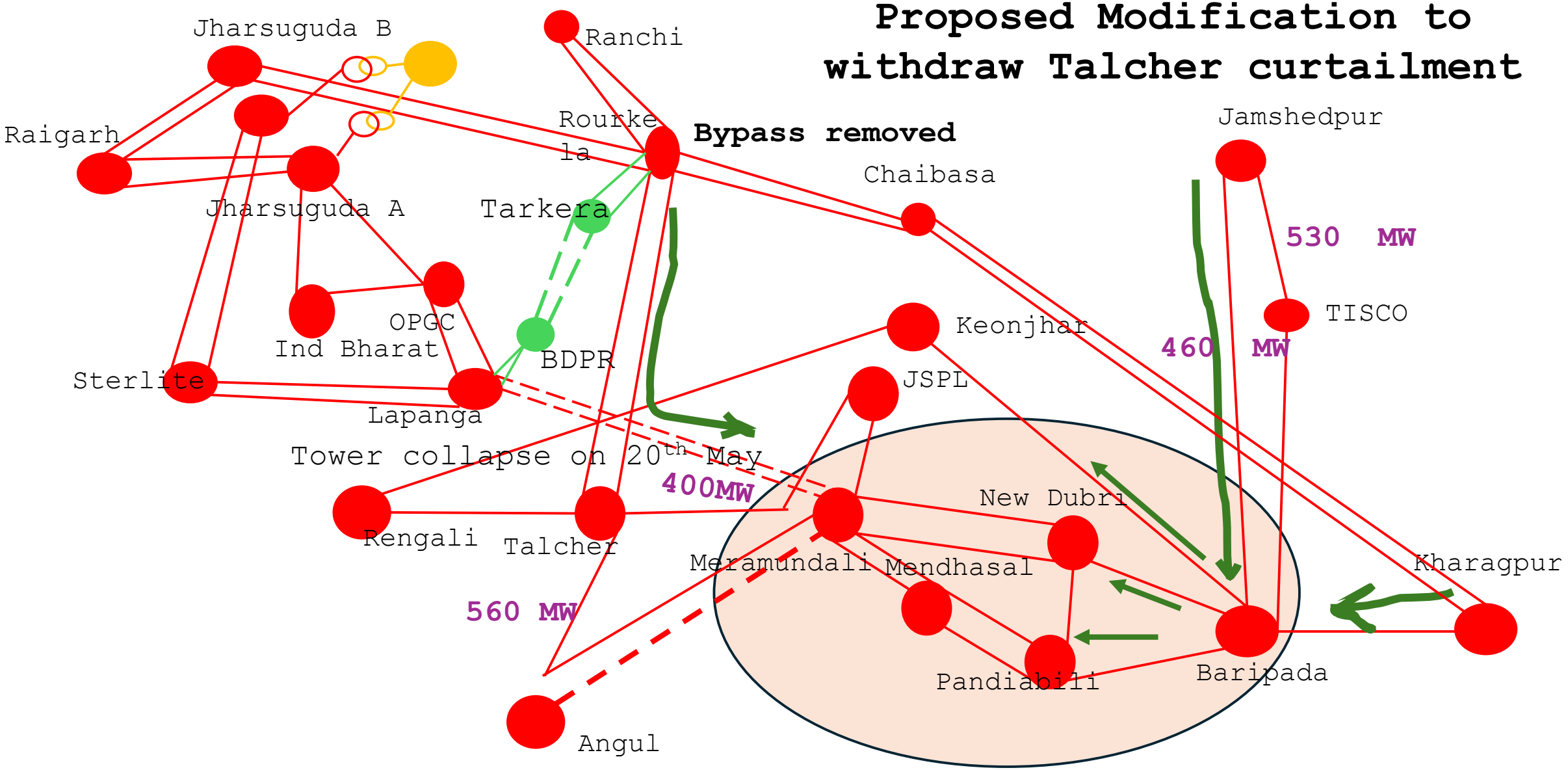


Talcher Curtailment- Present

Block	Total curtailment	St. 1	St. 2
1-18	550	183	367
19-40	300	100	200
41-96	800	267	533

18th June 13:23

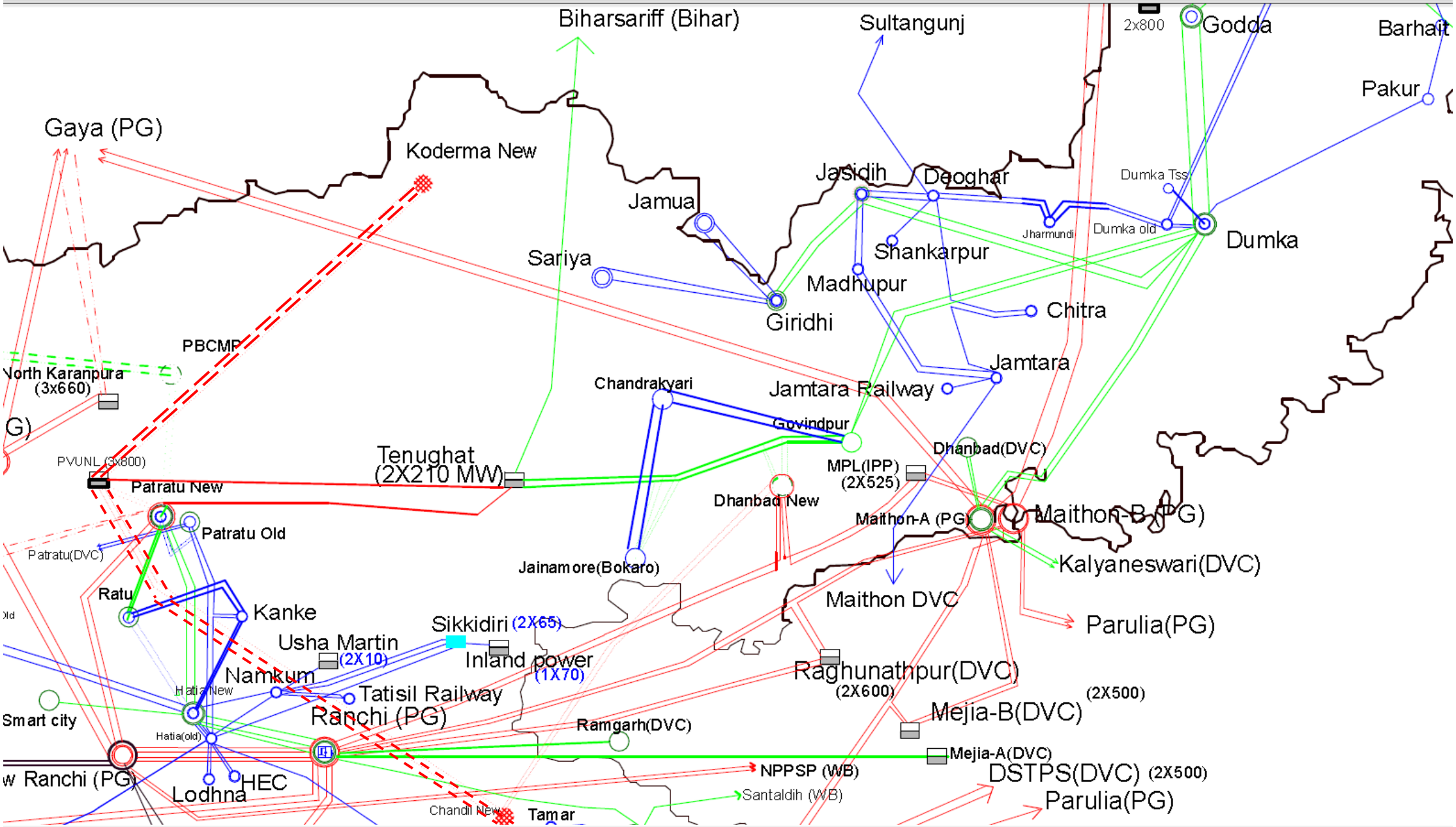
Proposed Modification to withdraw Talcher curtailment



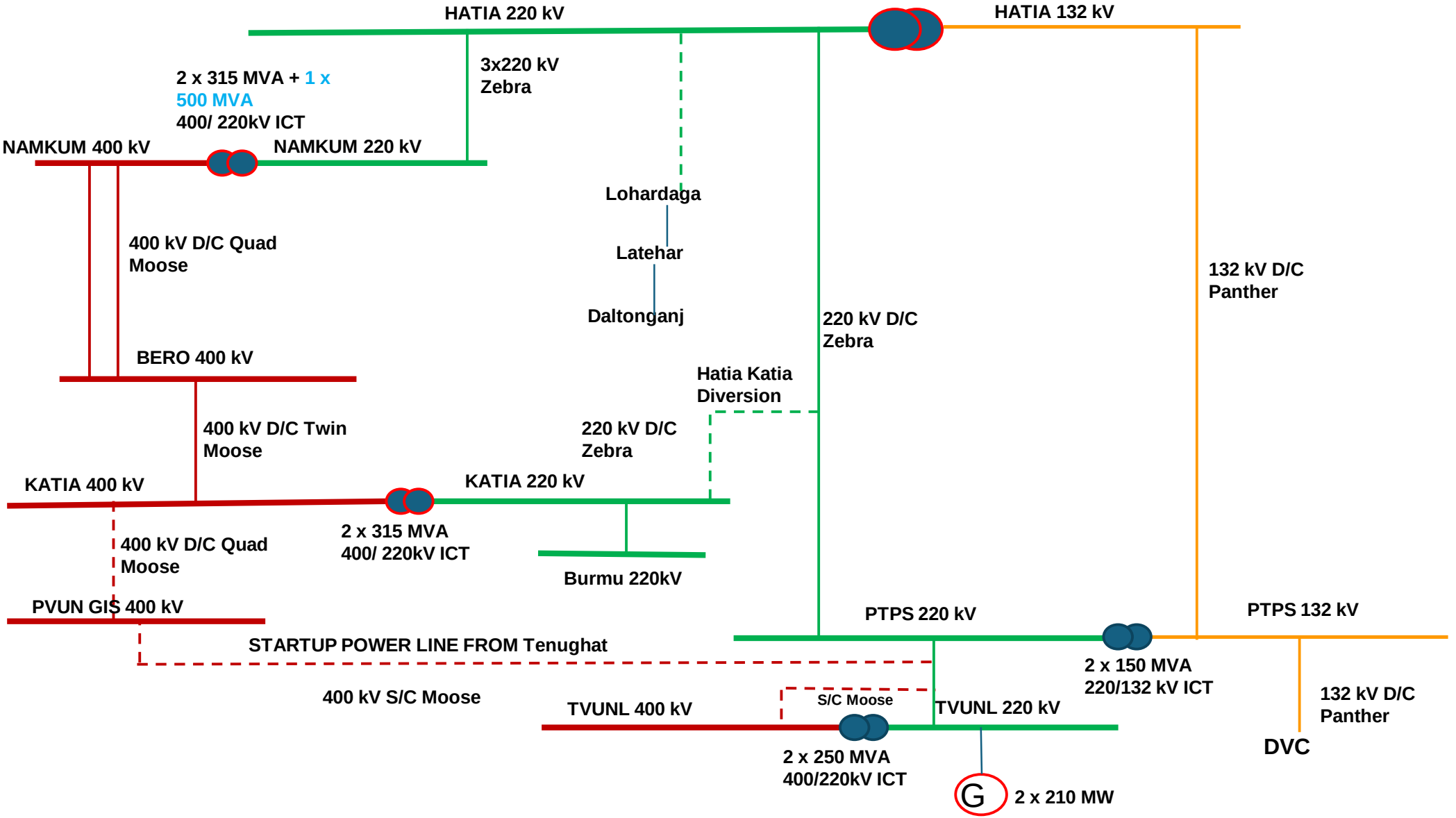
Option1: Radial load feeding from Angul via Angul-Meramundali line

Option 2 : Bypassing arrangement of 400kV Talcher-Meramundali-JSPL at Meramundali

Reliable evacuation path for Tenughat

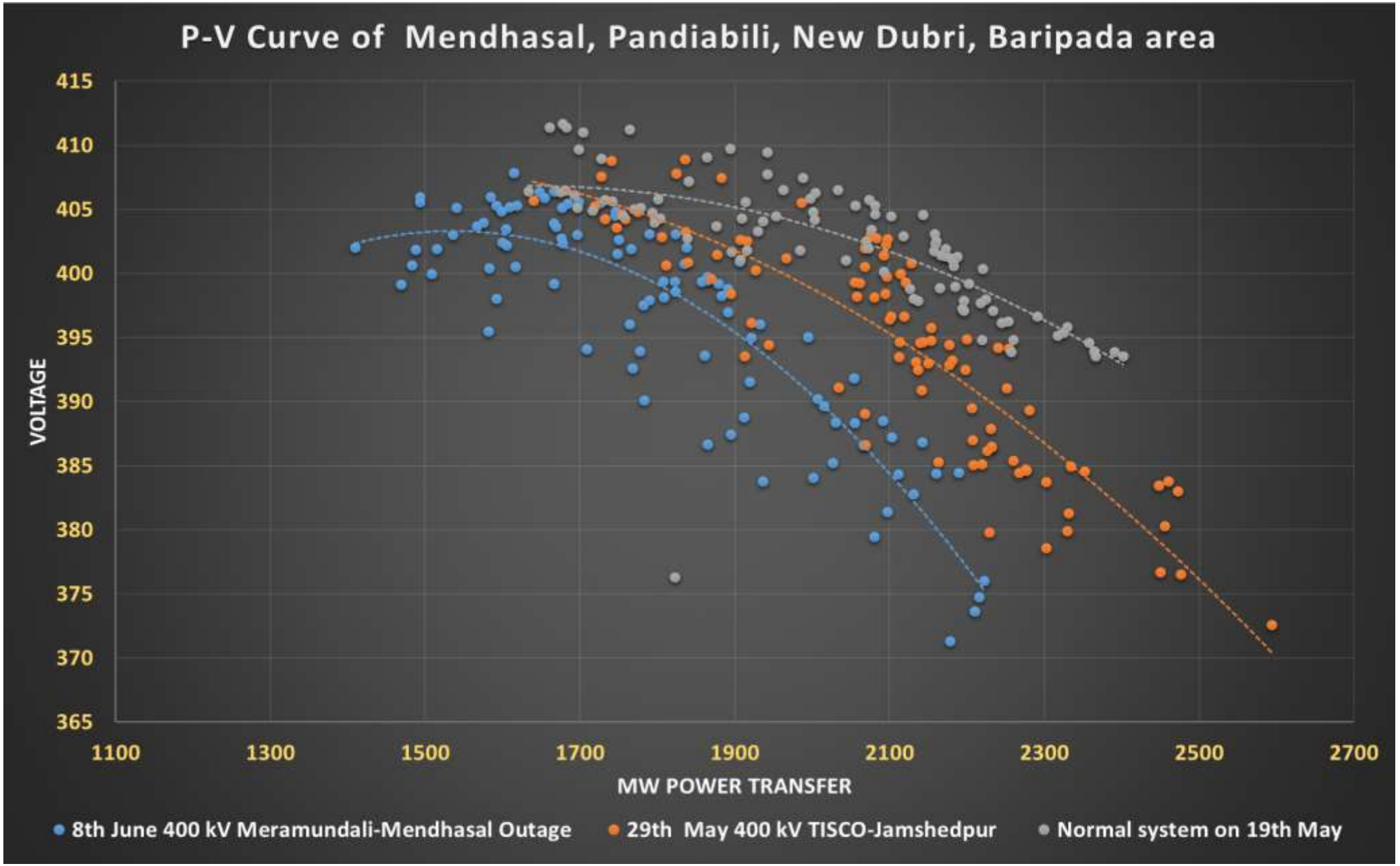


Contd…

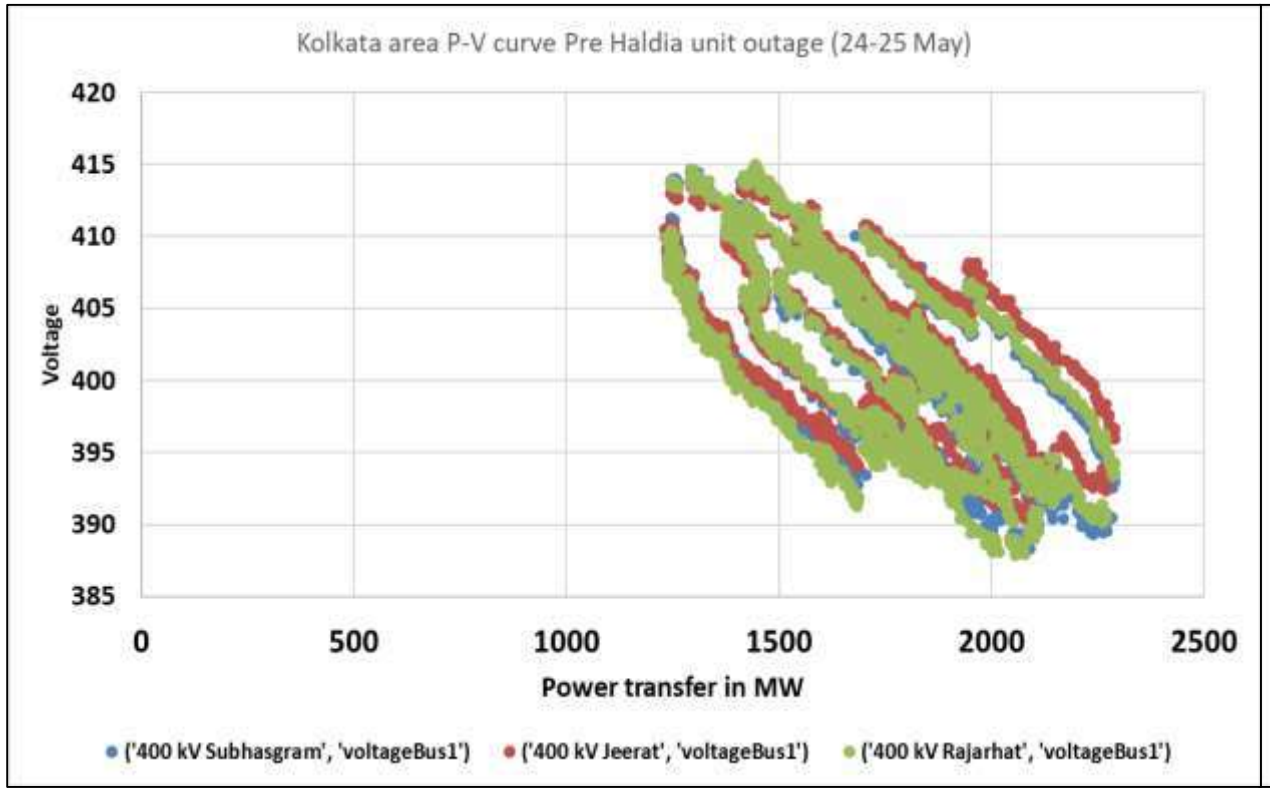


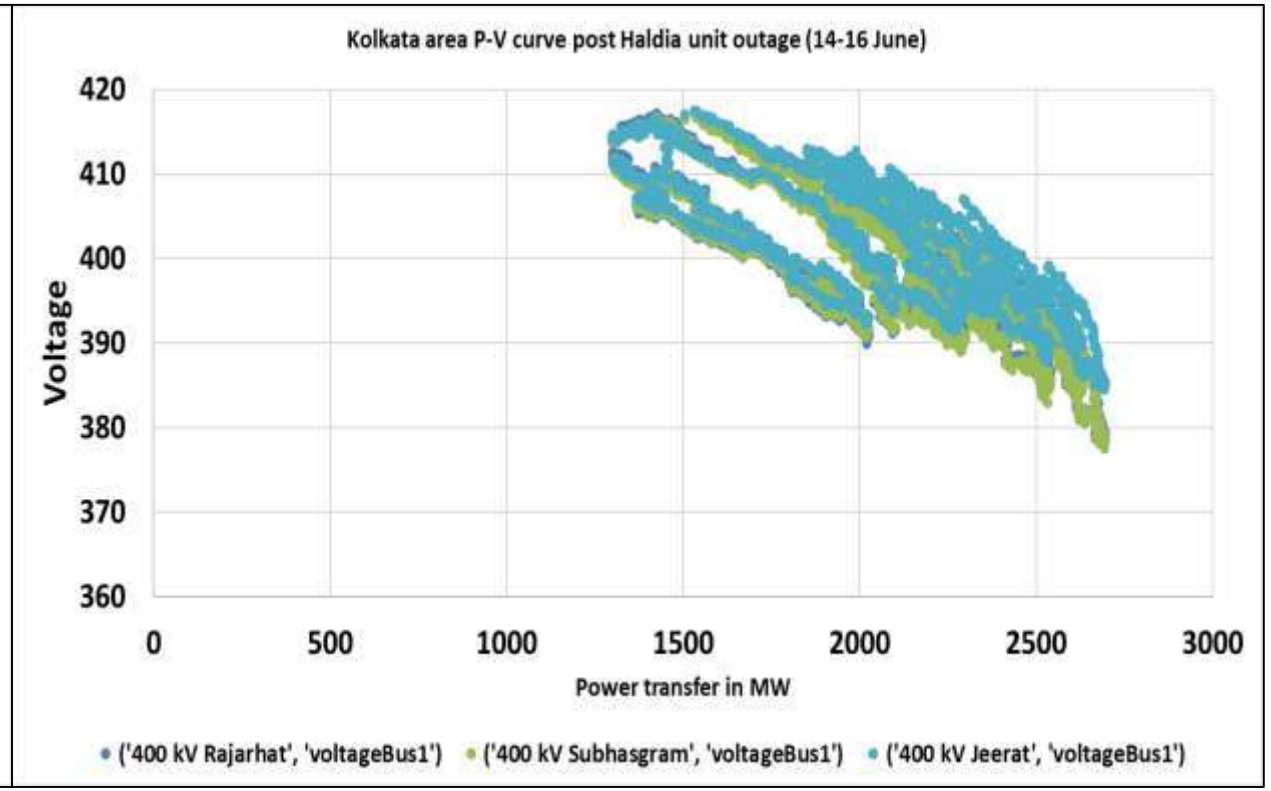
Back to Inc

P-V Analysis of Odisha Mendhasal Area



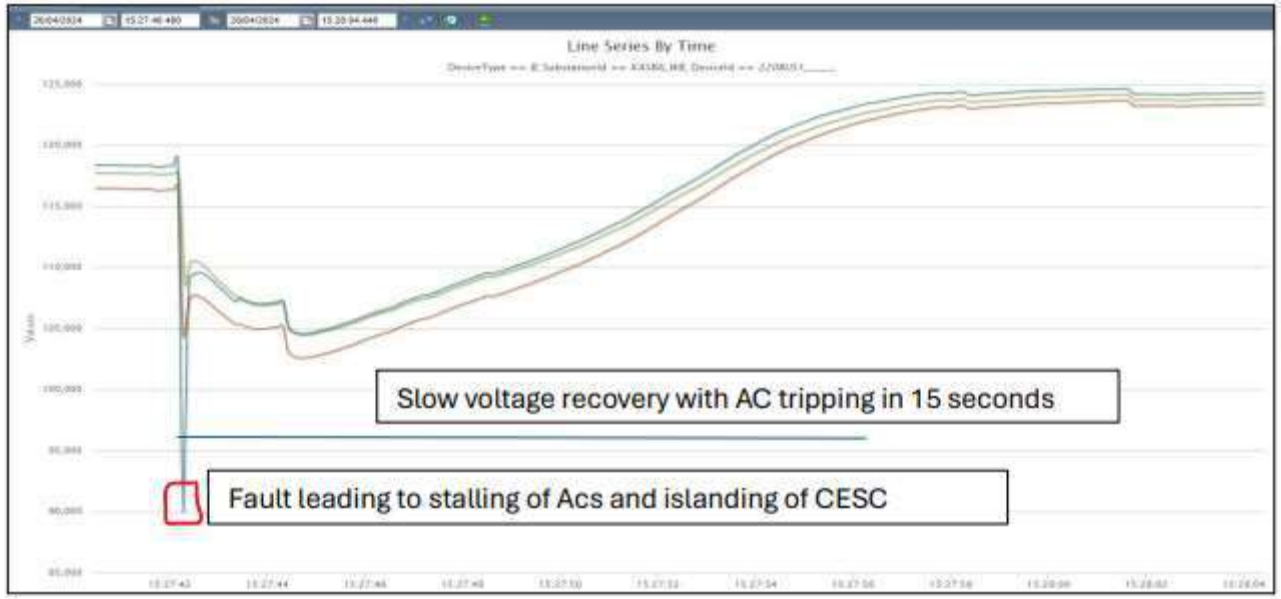
P-V Analysis of Kolkata Area



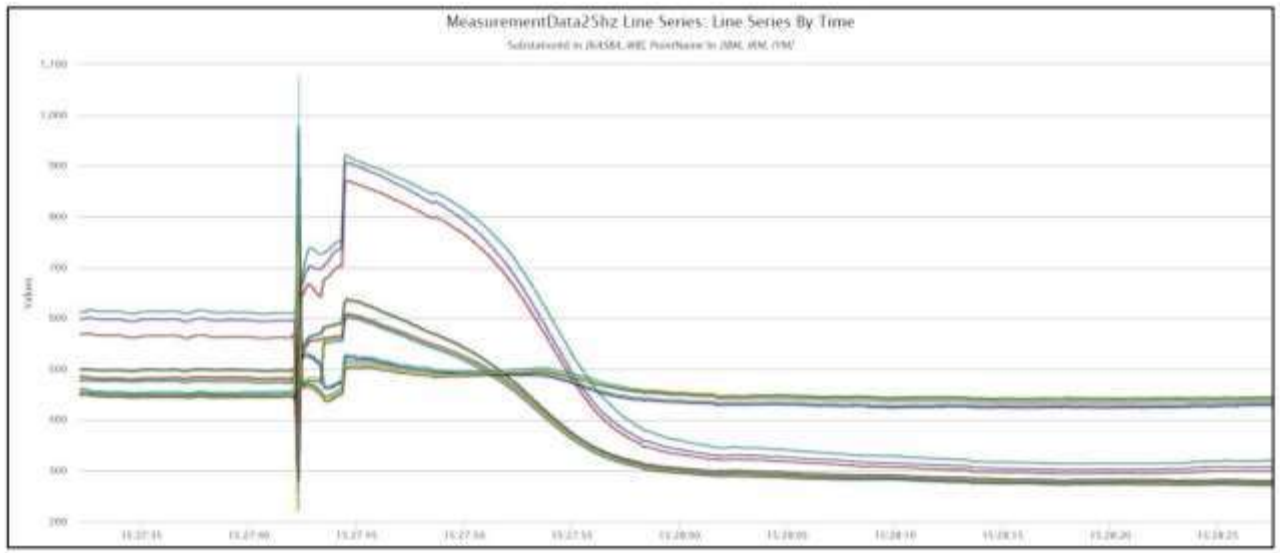


Back to Inc

220 KV KASBA substation Voltage attached.



Line current of lines emanating from KASBA attached below also showing increase in 3 phase current due to stalling.



Similar Occurrence in CESC of Eastern region

Demand from SCADA attached also showing load reduction due to stalling and tripping of ac loads then with sequentially these ac loads came into the system and demand again increased.

Back to Inc

ANNEXURE B.2.8

APPROVED MAINTENANACE SCHEDULE OF THERMAL GENERATING UNITS

SYSTEM	STATION	UNIT NO.	CAPACITY(MW)	PERIOD (AS PER LGBR 2024-25)		NO OF DAYS	REASON	APPROVED PERIOD		NO OF DAYS	WHEATHER AS PER LGBR OR NOT	REMARK
				FROM	TO			FROM	TO			
CESC	Southern TPS	1	67.5	24.07.2024	02.08.2024	10	PG Test/ Boiler License Renewal	24.07.2024	02.08.2024	10	YES	**APPROVED**
DVC	Mejia TPS	3	210	01.07.2024	25.12.2024	178	ESP upgradation	10.07.2024	08.01.2025	178	NO	**CAN ONLY BE AVAILED AFTER REVIVAL OF RTPS#3**
	Mejia TPS	1	210	01.01.2024	25.01.2025	25	Boiler RLA & overhauling	01.08.2024	28.08.2024	28	NO	**CAN ONLY BE AVAILED AFTER REVIVAL OF MEJIA TPS UNIT#2**
	Mejia TPS	2	210	-	-	28	AOH/BOH	01.07.2024	28.07.2024	28	NO	**APPROVED**
GMR	GMR	1	350	12.07.2024	20.08.2024	40	COH	06.07.2024	15.08.2024	40	NO	**APPROVED SUBJECT TO CONSENT FROM NRPC**
JSEB	TENUGHAT TVNL	2	210	01.07.2024	14.08.2024	45	AOH	01.07.2024	14.08.2024	45	YES	**APPROVED**
NTPC	FARAKKA	5	500	01.07.2024	30.07.2024	30	Boiler + LPT +Generator	01.07.2024	30.07.2024	30	YES	**APPROVED**
	KhSTPS-I	2	210	05.07.2024	03.08.2024	30	Boiler + Boiler RLA +Generator	-	-	-	-	**NOT AVAILED**
	KhSTPS-I	3	210	10.02.2025	11.03.2025	30	Boiler + Boiler RLA +Generator	05.07.2024	03.08.2024	29	NO	**APPROVED (INTER CHANGED WITH UNIT #2)**
	KhSTPS-II	6	500	-	-		AOH	20.08.2024	23.09.2024	35	NO	**APPROVED SUBJECT TO CONSENT FROM NRPC**
BRBCL	Nabinagar TPS	3	250	01.07.2024	04.08.2024	35	Boiler, LP OH & Generator rotor threadout	01.07.2024	04.08.2024	35	YES	**APPROVED**
OPGC	IBTPS	4	660	15.07.2024	13.08.2024	30	Annual Maintenance	06.08.2024	10.09.2024	35	NO	**APPROVED SUBJECT TO REVIVAL OF NTPC DARLIPALLI UNIT#1**
	IBTPS	2	210	01.08.2024	09.09.2024	40	R&M 1st phase	03.11.2024	13.12.2024	40	NO	**APPROVED**
WBPDCL	Bakreswar TPS	5	210	02.07.2024	05.08.2024	35	AOH/BOH along with De-NOx	02.07.2024	05.08.2024	35	YES	**APPROVED**
	Kolaghat TPS	6	210	08.07.2024	11.08.2024	35	AOH/BOH	08.07.2024	11.08.2024	35	YES	**APPROVED**
JITPL	JITPL	2	600	-	-		AOH/BOH	06.07.2024	06.08.2024	35	NO	**APPROVED**
APRNL	APRNL	1	270	15.10.2024	13.11.2024	29	AOH/BOH	16.08.2024	14.09.2024	29	NO	**APPROVED**

Annexure B2.13.4

भारत सरकार
विद्युत मंत्रालय
पूर्वी क्षेत्रीय विद्युत समिति
GOVERNMENT OF INDIA
MINISTRY OF POWER
EASTERN REGIONAL POWER COMMITTEE

No: ERPC/TCC&COMMITTEE/14/2018/ 6731-6800 Date: 18.12.2018.

To,

1. Members of Eastern Regional Power Committee.
2. Members of TCC.

Subject: Minutes of 39th ERPC & TCC Meetings.

Sir,

The minutes of the 39th TCC & ERPC meetings held on 16th & 17th November, 2018 respectively in Jaipur have been issued and uploaded on www.erpc.gov.in. As per the decision of ERPC distribution of hard copies of the Minutes of Meetings has been discontinued as a GO Green initiative.

Yours faithfully,

18/12/18

(J.Bandyopadhyay)
Member Secretary

Attach: As above.

14 गोल्फ क्लब रोड, टालीगंज, कोलकाता-700033 । 14 Golf Club Road, Tollygunge, Kolkata 700033
Telephone : 24239657, 24239651, 24239650 । Fax : 24239652, 24239653 । www.erpc.gov.in, E-mail: mserpc-power@nic.in

POWERGRID emphasized that above figures are based upon received offer only from M/S TCS. Already negotiation process is going on with M/S TCS and once finalized, the value will be intimated during placement of LOA.

TCC may approve.

Deliberation in the TCC meeting

TCC agreed to implement 4th phase AMR at a cost of Rs 1.75 Cr in place of Rs. 93.56 lakhs approved earlier, considering the added requirement of meters, locations, additional functionality, AMC etc.

It was referred to ERPC for final concurrence.

ERPC may approve.

Deliberation in the ERPC Meeting

After deliberating in details regarding the added requirement of Meters, Locations, Additional functionalities etc. as detailed in the Agenda and taking into consideration the deliberations in the TCC meeting on the previous day, ERPC accorded the approval for procurement and installation of AMRs under 4th phase in the Eastern Region at an estimated cost of Rs. 1.75 Crore in place of Rs. 93.56 Lakh as approved earlier in the 37th ERPC Meeting. ERPC suggested that Power Grid should ensure reliability in data transmission by implementing LAN connectivity through OPGW Network wherever feasible.

ITEM NO. 3.3:	**REPLACEMENT OF OLD RTUS IN EASTERN REGION FOR REPORTING OF RTU/SAS TO BACKUP CONTROL CENTRES (INCLUSION OF CHANDWA, KISHENGANJ & DALTONGANJ S/S)**

In 36thTCC/ERPC meeting, proposal of replacement of RTU (as per Committee constituted in 35th ERPC meeting), was approved. It was also advised that replacement of OPGW on older ULDC lines might be deliberated in lower forum before submitting for TCC/ERPC approval.

In 37th TCC/ERPC Meeting, ERPC authorized POWERGRID to undertake the works related to replacement of the old RTUs of the Eastern Region. It was also decided by the ERPC that the investment made in this regard shall be recovered by POWERGRID **through tariff**. However, subsequent O&M shall be the responsibility of the concerned constituents.

In 38thTCC/ERPC Meeting, ERPC accorded in-principle approval to undertake the works related to "Upgradation of SCADA / RTUs / SAS in the Central sector stations and strengthening of OPGW network" with the following scope:

A) *Replacement of Old RTUs/SAS andUpgradation of SAS in Eastern Region.*

B) *Implementation of BCU based Substation Automation System at 05 nos.substations in Eastern Region.*
C) *Replacement of Old DCPS & UPS in Eastern Region.*
D) *Laying of OPGW (903 Km) in Eastern Region.*

The detailed scope of the project is enclosed in ***Annexure-B3.***

In the meeting it was also decided that Power Grid would prepare necessary DPR for cost estimation and the same should be placed in the next ERPC Meeting for according the financial approval.

In 150th OCC, Powergrid requested to include 400kV Chandwa, Kishenganj & Daltonganj Substations of Powergrid ER-I in the above project. The total nos. of Sub-stationofPOWERGRID/ER-1 for RTU/SAS Upgradation under the aforementioned projectshallbecome18(namelyBiharsharif,Jamshedpur,Purnea 400,Purnea220,Sasaram HVDC, Muzaffarpur, Patna, Banka, Lakhisarai, Ranchi, New Ranchi, Chaibasa, Gaya, Sasaram 765, Ara, Chandwa, Kishenganj &Daltonganj).

OCC in principle agreed to include 400kV Chandwa , Kishenganj & Daltonganj Substations in the project.

OCC advised Powergrid to give a detailed presentation on scope of work of the project along with cost implication in 39th TCC Meeting.

In 22nd SCADA O & M meeting held on 30th October 2018, it has been clarified that as per Annexure-B3, POWERGRID's scope shall be limited to replacement / up-gradation of old RTUs / SAS only for POWERGRID sub-stations in the Eastern Region. Other utility/constituents have to take up the replacement / up-gradation activity of their own. However, utility/constituents can approach POWERGRID for the same on consultation basis through POWERGRID.

Powergrid may give a presentation.

Deliberation in the TCC meeting

Powergrid gave a presentation on scope of work under the project along with cost implication. Powergrid informed that total cost involvement would be around Rs. 88.57 Cr. with an implementation time of 36 months. This cost includes procurement and installation of 4 no. of PMUs for 4 STATCOM Projects in the Eastern Region.

During the presentation, ERPC Secretariat asked for clarification for the breakup of 1178 km length of OPGW which was earlier 903 km as approved in 38th TCC/ERPC meeting.

Powergrid could not furnish the details in the meeting.

TCC advised Powergrid to submit the clarification regarding the above to ERPC Secretariat.

TCC accepted the project and recommended that funding for this project shall be explored first from PSDF. If no fund is granted from PSDF, then the project would be taken as regional project and will be recovered through Tariff.

TCC authorised Powergrid to place the proposal for PSDF.

TCC referred to ERPC for approval.

ERPC may approve.

Deliberation in the ERPC Meeting

Powergrid clarified that the length of OPGW has been increased from 903 km to 1178 km due to inclusion of OPGW relating to "the last mile connectivity between Power grid S/s and the Switch yard Control room of Central Sector Generators" project as approved in the 38th ERPC Meeting (Item No. 3.4). Detail breakup of OPGW is enclosed at ***Annexure-B3.1****.*

After deliberation, ERPC decided the followings:

i) ERPC approved the proposal of Power Grid for replacement of the old RTUs in the Eastern Region for reporting of RTU / SAS to backup control centres at an estimated cost of Rs. 88.57 Crore with an implementation time of 36 months.

ii) Power Grid shall place a proposal before PSDF Committee for financing the above project from PSDF.

iii) In case of non- availability of required funding from PSDF, the project shall be implemented by Power Grid and the cost shall be recovered by Power Grid through tariff.

iv) Member Secretary, ERPC shall coordinate with Power Grid for implementation of the above project.

ITEM NO. 3.4:	**ARRANGEMENT FOR AUXILIARY POWER SUPPLY OF MAKE-UP WATER PUMP HOUSE FOR TTPS-III PROJECT OF NTPC**

As informed by NTPC, a power project namely Talcher Thermal power Project Stage –III (TTPS-III) of NTPC with capacity of 2X660MW is coming up in the vicinity of existing TTPS station (460 MW). The make-up water for TTPS-III is proposed to be taken from reservoir of Samal barrage, which is at a distance of approximately 28 Km from the project. The route for laying the power supply for 28Km involves forest and densely populated residential /Agricultural land as such it would not be feasible to get ROW for laying the line.

The make-up water pump house of TTPS-III has three pumps with each having power rating of 600KW. During normal operation, two pumps would be running and one standby. The maximum power consumption would be 1.8MW.The pump house is in the vicinity (at a distance of 7 Km) of TSTPS-I.

Minutes of meeting regarding joint site Inspection by M/S WBSETCL & M/S DVC Transmission , M/S DVC communication wing on 01.03.2024 regarding reorientation of OPGW conductor of DVC lying below Transmission lines of WBSETCL at different locations

Annexure B.2.18

Members present :

From WBSETCL

1. Sri A. Mukherjee, SE & Area Manager

From DVC

1. Sri S.K. Mondal , SM (T) GOMD VI, Durgapur
2. Sri Bidyut Biswas, Manager (Comm), DVC , Mathura

A joint inspection has been carried out on 01.03.2024 with representatives of DVC and WBSETCL for

i. Shifting of OPGW wire of 132KV DTPS- Kalipahari D/C line lying below 400KV DGP PPSP D/C line, near Vill Dakshinkhanda and reconfigure in Diamond configuration as per annexure drawing enclosed to avoid tripping of O/H 400KV DGP- PPSP line on encroachment of OPGW during stormy weather conditions.

ii. Shifting of OPGW wire of 132KV DVC- Burdwan D/C line lying below 220KV 315MVA LV D/C line inside the premises of Durgapur 400KV sub-station line and reconfigure in Diamond configuration as per annexure drawing enclosed to avoid tripping of O/H 220KV 315MVA LV D/C line on encroachment of OPGW during stormy weather conditions.

The following points were discussed :-

1. For reconfiguration of OPGW mentioned sl no 1above for 132KV DTPS- Kalpahari line (no 21,22) lying below 400KV Durgapur- PPSP D/C line , the materials required for the work shall have to be supplied by WBSETCL as per list enclosed with drawing. The work will be executed by WBSETCL by engagement of enlisted vendor of DVC on chargeable basis after getting approval from the Competent authority under supervision of DVC. Also OCC approval should be arranged by WBSETCL.

List of materials required (to be supplied by WBSETCL):-

Sl no	Item description	Quantity required	Remarks
1	24fibre OPGW CONDUCTOR	274M	AFTER CONSIDERING EXISTING 209MTR SHALL BE USED
2.	TENSION FITTINGS FOR OPGW	12 SET	
3.	TENSION PLATE	02SET	
4.	JUNCTION BOX	02 NO	
5.	DOWNLEAD CLAMP	30 NO	
6.	EARTH BOND	08 NOS	
7.	VIBRATION DAMPER	06 NOS	

01.03.2024

01/03/2024

2. For reconfiguration of OPGW mentioned sl no 2 above for 132KV DVC- Burdwan D/C line (no 75,76) lying below 400KV Durgapur- 315MVA PTR , the materials required for the work shall have to be supplied by WBSETCL as per list enclosed with drawing . The work will be executed by WBSETCL by engagement of enlisted vendor of DVC on chargeable basis.

01/03/24

Sl no	Item description	Quantity required	Remarks
1	24fibre OPGW CONDUCTOR	200M	CONSIDERING 130MTRS MAY BE USED FROM EXISTING LINE
2	TENSION FITTINGS FOR OPGW	06 SET	
3.	TENSION PLATE	02SET	

rigaration.pdf

	BOX	01 NO
5	DOWNLEAD CLAMP	15NO
6	EARTH BOND	04 NOS
7	VIBRATION DAMPER	04 NOS

PLEASE NOTE THAT THE ABOVE WORK HAS TO BE DONE BEFORE THE ONSET OF STROMY SEASON FOR WHICH THE SHUTDOWN SCHEDULE SHALL BE PREPARED BY WBSETCL IN CORDINATION WITH DVC

For WBSETCL

01/03/2024

1 SRI ABHIJIT MUKHERJEE
SE & AM Dgp 400KV AO

For DVC

01/03/2024

1 SRI SAMIR KUMAR MONDAL
SENIOR MANAGER (E)
GOMD-VI, DVC, Durgapur

01/03/2024

SRI BIDYUT BISWAS
MANAGER (COMMUNICATION)
DVC, MAITHON

ail

Durgapur 400KV Area Office <dgp400kvao@gmail.com

Approval of OPGW Diamond Crossing, in the OCC of ERPC.

r 400KV Area Office <dgp400kvao@gmail.com>
RKUMAR MONDAL <samir.mondal@dvc.gov.in>

12 June 2024 at 13.05

ter has been taken up from WBSETCL end and processed to higher authority for needful as ned in Points I & II

AYANTA BANERJEE" <jayanta.banerjee@dvc.gov.in>
HIJIT CHAKRABORTY" <abhijit.chakraborty@dvc.gov.in>
NESHKUMAR SINGH" <dinesh.singh@dvc.gov.in>, "SUBRATA BANIK" <subrata.banik@dvc.gov.in>, "RABIN MANDAL" <rabin.mandal@dvc.gov.in>, "TARUNKUMAR MONDAL" ondal@dvc.gov.in>, "CHANDAN CHANDAN" <chandan@dvc.gov.in>, "PARTHASARATHI HAZRA" <partha.hazra@dvc.gov.in>
onday, May 13, 2024 6:12:05 PM
Approval of OPGW Diamond Crossing, in the OCC of ERPC.

e to the eoffice file No. GS-WS012/3/2024-GOMD VI (Comp. No. E-58269) and attached OPGW Diamond Crossing Configuration & MOM, following may please be taken from your end

ay please be taken with the WBSETCL for:

g Approval of the OPGW Diamond Crossing Configuration in the OCC meeting of the ERPC.
minutes of the OCC meeting in the ERPC should include the point of issuance of an urgent shutdown for WBSETCL's 400 KV and associated lines, necessary for the te maintenance of these DVC's OPGW link, in case of any fault in OPGW link.
rporation of above points is necessary, as these OPGW links carry DVC's SLDC data as well as Internet connectivity of DVC's IT Network, being the mail ng link betwwen DVC Howrah & DVC's field formation.

taining the OCC / ERPC approval as mentioned above, the proposed OPGW crossing may be done.

gards,
र्जी / Jayanta Banerjee
बंधक (संचार)
al Manager (Communication)
DVC, कोलकाता / Kolkata.

Durgapur 400KV Area Office <dgp400kvao@gmail

Approval of OPGW Diamond Crossing, in the OCC of ERPC.

rgapur 400KV Area Office <dgp400kvao@gmail.com> 12 June 2024 at 13
p: SAMIRKUMAR MONDAL <samir.mondal@dvc.gov.in>

Dear sir
the matter has been taken up from WBSETCL end and processed to higher authority for needful as mentioned in Points I & II

rom: "JAYANTA BANERJEE" <jayanta.banerjee@dvc.gov.in>
To: "ABHIJIT CHAKRABORTY" <abhijit.chakraborty@dvc.gov.in>
Cc: "DINESHKUMAR SINGH" <dinesh.singh@dvc.gov.in>, "SUBRATA BANIK" <subrata.banik@dvc.gov.in>, "RABIN MANDAL" <rabin.mandal@dvc.gov.in>, "TARUNKUMAR MONDAL" <tarun.mondal@dvc.gov.in>, "CHANDAN CHANDAN" <chandan@dvc.gov.in>, "PARTHASARATHI HAZRA" <partha.hazra@dvc.gov.in>
Sent: Monday, May 13, 2024 6:12:05 PM
Subject: Approval of OPGW Diamond Crossing, in the OCC of ERPC.

Dear Sir,

Reference to the eoffice file No. GS-WS012/3/2024-GOMD VI (Comp. No. E-58269) and attached OPGW Diamond Crossing Configuration & MOM, following may please be taken from you

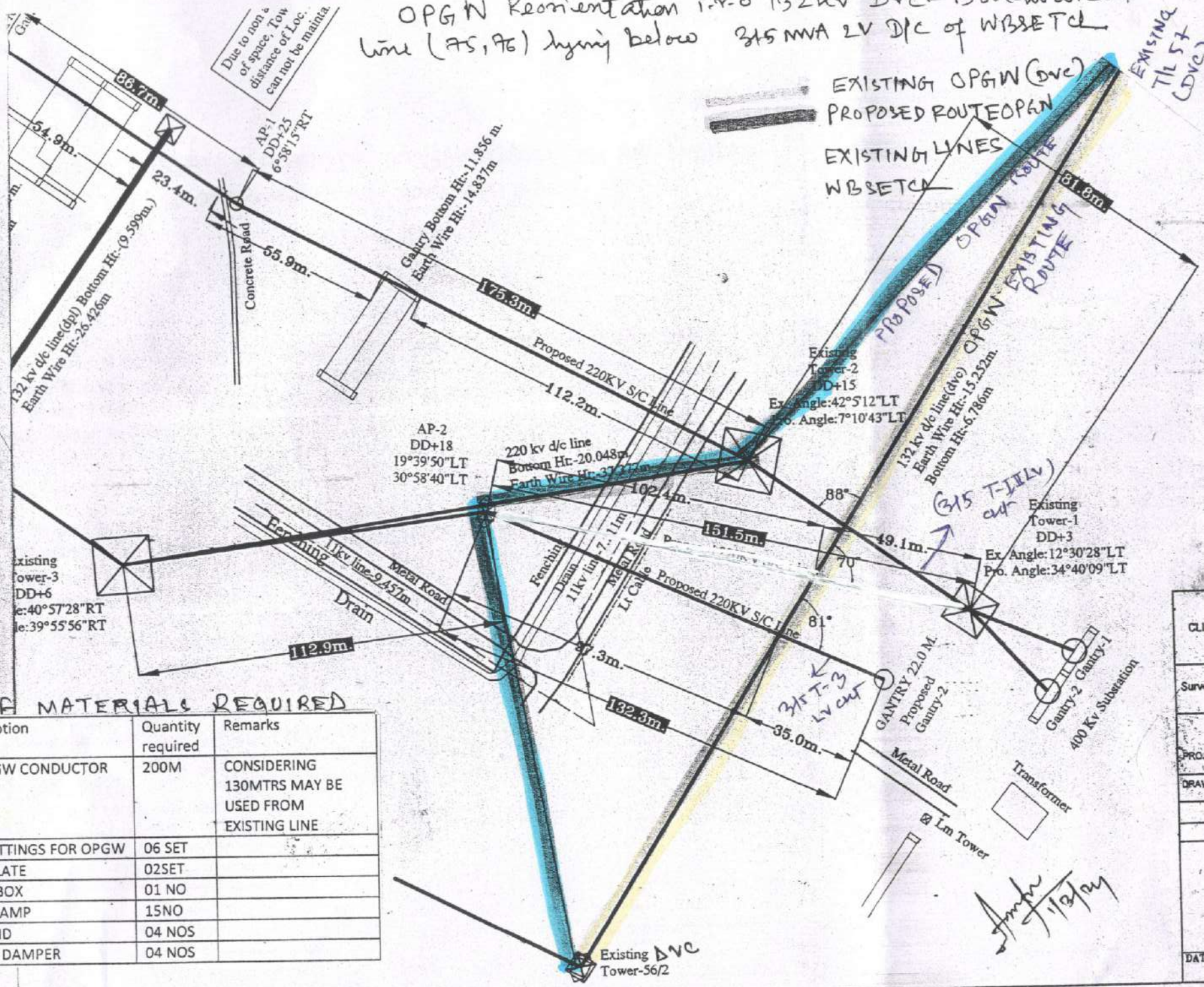
Matter may please be taken with the WBSETCL for:

(i) Getting Approval of the OPGW Diamond Crossing Configuration in the OCC meeting of the ERPC.
(ii) The minutes of the OCC meeting in the ERPC should include the point of issuance of an urgent shutdown for WBSETCL's 400 KV and associated lines, necessary f immediate maintenance of these DVC's OPGW link, in case of any fault in OPGW link.
The incorporation of above points is necessary, as these OPGW links carry DVC's SLDC data as well as Internet connectivity of DVC's IT Network, being the mail connecting link betwwen DVC Howrah & DVC's field formation.

Upon obtaining the OCC / ERPC approval as mentioned above, the proposed OPGW crossing may be done.

सादर / Regards,
जयन्त बनर्जी / Jayanta Banerjee
वरिष्ठ महाप्रबंधक (संचार)
Sr. General Manager (Communication)
दा.घा.नि. / DVC, कोलकाता / Kolkata.

OPGW Reorientation i.r.o 132KV DVC – Burdwan D/r Line (75,76) lying below 315 MVA 2V D/C of WBSETCL



LIST OF MATERIALS REQUIRED

Sl no	Item description	Quantity required	Remarks
1	24fibre OPGW CONDUCTOR	200M	CONSIDERING 130MTRS MAY BE USED FROM EXISTING LINE
2.	TENSION FITTINGS FOR OPGW	06 SET	
3.	TENSION PLATE	02SET	
4.	JUNCTION BOX	01 NO	
5.	DONATE CLAMP	15NO	
6.	EARTH BOND	04 NOS	
7.	VIBRATION DAMPER	04 NOS	

Annexure D.1

Updated Anticipated Peak Demand (in MW) of ER & its constituents for July 2024

1	**BIHAR**	**Demand (MW)**	**Energy Requirement (MU)**
	NET MAX DEMAND	8157	4745
	NET POWER AVAILABILITY- Own Sources	427	313
	Central Sector+Bi-Lateral	6757	3771
	SURPLUS(+)/DEFICIT(-)	-973	-661
2	**JHARKHAND**		
	NET MAXIMUM DEMAND	2100	1271
	NET POWER AVAILABILITY- Own Source	280	108
	Central Sector+Bi-Lateral+IPP	1248	658
	SURPLUS(+)/DEFICIT(-)	-572	-505
3	**DVC**		
	NET MAXIMUM DEMAND	3450	2215
	NET POWER AVAILABILITY- Own Source	5450	3188
	Central Sector+MPL	300	226
	Bi- lateral export by DVC	2300	1781
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	0	-582
4	**ODISHA**		
	NET MAXIMUM DEMAND (OWN)	5700	3571
	NET MAXIMUM DEMAND (In Case of CPP Drawal of 900 MW(peak) and average drawl of 700 MW)	6600	4092
	NET POWER AVAILABILITY- Own Source	4040	3193
	Central Sector	1461	1070
	SURPLUS(+)/DEFICIT(-) (OWN)	-199	692
	SURPLUS(+)/DEFICIT(-) (I(In Case of CPP Drawal of 950 MW(peak) and average drawlm of 700 MW)	-1099	171
5	**WEST BENGAL**		
	WBSEDCL		
5.1	NET MAXIMUM DEMAND	9468	5980
	NET MAXIMUM DEMAND (Incl. Sikkim)	9478	5987
	NET POWER AVAILABILITY- Own Source (Incl. DPL)	5041	3020
	Central Sector+Bi-lateral+IPP&CPP+TLDP	2302	1245
	EXPORT (To SIKKIM)	10	7
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	-2135	-1722
5.2	**CESC**		
	NET MAXIMUM DEMAND	2230	1199
	NET POWER AVAILABILITY- Own Source	830	556
	IMPORT FROM HEL	541	392
	TOTAL AVAILABILITY OF CESC	1371	948
	DEFICIT(-) for Import	-859	-251
		830	-251
	WEST BENGAL (WBSEDCL+CESC+IPCL)		
	(excluding DVC's supply to WBSEDCL's command area)		
	NET MAXIMUM DEMAND	11698	7179
	NET POWER AVAILABILITY- Own Source	5871	3576
	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	2843	1637
	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXPORT	-2984	-1966
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXPORT	-2994	-1973
6	**SIKKIM**		49
	NET MAXIMUM DEMAND	93	315
	NET POWER AVAILABILITY- Own Source	378	90
	Central Sector	137	356
	SURPLUS(+)/DEFICIT(-)	423	
	EASTERN REGION		
	NET MAXIMUM DEMAND	31198	19296
	NET MAXIMUM DEMAND ((In Case of CPP Drawal of 800 MW(peak) and average drawl of 700 MW)	32098	19817
	BILATERAL EXPORT BY DVC (Incl. Bangladesh)	2393	1781
	EXPORT BY WBSEDCL TO SIKKIM	10	7
	EXPORT TO B'DESH & NEPAL OTHER THAN DVC	642	478
	NET TOTAL POWER AVAILABILITY OF ER	26228	16365
	(INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)		
	SURPLUS(+)/DEFICIT(-)	-8015	-5196
	SURPLUS(+)/DEFICIT(-) (In Case of CPP Drawal for Odisha)	-8915	-5717

Annexure A

Participants in 216th OCC Meeting

Venue: ERPC Conference Hall, Kolkata **Time: 10:30 Hrs.** **Date: 21.06.2024 (Friday)**

Sl. No.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
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Participants in 216th OCC Meeting

Venue: ERPC Conference Hall, Kolkata | Time: 10:30 Hrs. | Date: 21.06.2024 (Friday)

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