सत्यमेव जयते
भारत सरकार
Government Of India
विद्युत मंत्रालय
Ministry Of Power
पूर्वी क्षेत्रीय विद्युत समिति
Eastern Regional Power Committee
14 Golf Club Road, Tollygunje-70033 Website: www.erpc.gov.in

NO. ERPC/EE/OPERATION/2023/ 1202 **DATE: 01.12.2023**

To

As per list enclosed/ संलग्न सूची के अनुसार.

विषय: 23.11.2023 (गुरुवार) को ईआरपीसी सचिवालय, कोलकाता में भौतिक रूप से आयोजित 209वीं ओसीसी बैठक का कार्यवृत्त - संबंध में।

Sub: Minutes of 209th OCC Meeting held on 23.11.2023 (Thursday) physically at ERPC secretariat,Kolkata - reg.

Sir/ महोदय,

कृपया अपनी जानकारी और आवश्यक कार्रवाई के लिए 23.11.2023 (गुरुवार) को ईआरपीसी सचिवालय, कोलकाता में 10:30 बजे आयोजित 209वीं ओसीसी बैठक के संलग्न कार्यवृत्त देखें। यह ईआरपीसी वेबसाइट (**www.erpc.gov.in**) पर भी उपलब्ध है।

Please find enclosed minutes of 209th OCC Meeting held on 23.11.2023 (Thursday) 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.

Regards/ सम्मान,

Yours faithfully/ आपका विश्वासी,

01/12/2023

(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. DGM (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

MINUTES

OF

209TH OCC MEETING

Date: 23.11.2023

Eastern Regional Power Committee

14, Golf Club Road, Tollygunge

Kolkata: 700033

Contents

EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 209TH OCC MEETING HELD ON 23.11.2023 (THURSDAY) AT 10:30 HRS

Member Secretary, ERPC chaired the 209th OCC meeting. On welcoming all the participants, he outlined the performance of ER grid during October 2023 and highlighted the following points:

- *In October -2023, energy consumption of ER was **17,453 MU** which is 12.98 % more than October -2022.*
- *In October -2023, Peak demand met of ER was **26,208 MW** which is 0.04 % less than October -2022.*
- *During October -2023, **74.4 %** of the time, grid frequency was in IEGC band(49.90 Hz-50.05Hz)*
- *Thermal PLF of ER during October 2023 was **77.5 %.***
- *Generating stations whose PLF is more than 90% during October -2023:*

Utility	***Generating station***	***PLF(%)***
WBPDCL	*Bakreswar TPS*	*100*
	Santaldih TPS	*98*
NTPC	*Darlipalli STPS*	*99*
	Talcher STPS	*94*
MPL	*Maithon RB TPP*	*93*
CESC	*Budge Budge TPS*	*92*

Transmission line (132 kV & above) commissioned during October-2023:

- *400kV Tenughat–PVUNL-1(ckt-1) D/C (Twin Moose) 64 ckt.km by JUSNL*

As far as coal stock is concerned, stock position is in sub-optimal range in most generating units especially Jharkhand (TVNL) (only 3% stock), WBPDCL (Kolaghat TPS having only 6% stock) along with Bokaro 'A' TPS (DVC)(with 21% stock) and Barauni TPS (NTPC) (only 10 % stock) need to diligently focus on building their actual coal stock as per their normative requirement.

Coal stock position (As on 20.11.2023) is detailed as follows:

SL.	Name of States/Power Stns.	% of Actual Stock vis-à-vis Normative Stock
1.	Jharkhand (TVNL)	3%
2.	Odisha/IBTPS	62 %
3.	WBPDCL	12 % (Min. Kolaghat TPS-6%, Max. Bandel TPS-25 %)
4.	DVC	34 % (Min.Bokaro 'A' TPS-21 %; Max. Koderma TPS - 44%)
5.	NTPC	47 % (Min.Barauni TPS – 10 %; Max. North karanpura TPP -143%)

In this regard he highlighted paucity of fund as the key contributor to low coal stock position in some of thermal generating units (specially DPL) and advised WBPDCL to strive for building optimum coal stock on sorting out various operational, commercial and administrative issues pertinent to coal linkage of respective generating units.

ED, ERLDC underscored various challenges faced by the constituents in post-implementation phase of IEGC 2023, mainly related to FGMO,resource adequacy planning, system study and real time contingency analysis in various time frames. He further added that ERLDC,in line with Ministry of Power guidelines, is carrying out real time monitoring of all ISGS and intra-state generating units encompassing details of Installed capacity,effective installed capacity, declared capacity, un-requisitioned surplus power etc and lauded active cooperation from all concerned SLDCs in this regard.

1. PART-A

1.1 Confirmation of Minutes of 208th OCC Meeting held on 17th October 2023 physically at ERPC Secretariat, Kolkata

The minutes of 208th Operation Coordination sub-Committee meeting held on 17.10.2023 was circulated vide letter dated 26.10.2023.

Members may confirm the minutes of 208th OCC meeting.

Deliberation in meeting

Members confirmed the minutes of 208th OCC meeting.

2. PART-B: ITEMS FOR DISCUSSION

2.1 Direction to all GENCOs including Independent Power Producers (IPPs) for timely Import of Coal for blending purposes and maximizing production in captive coal mines-ERPC

Ministry of Power issued an advisory dated 01.09.2023 regarding blending of imported coal @ 4% by weight till March, 2024.

The status of Power Supply position has been reviewed by Govt and it has been observed that there is consistent rising trend in the Power demand in the country coupled with inadequate supply of domestic coal which has resulted in rapid depletion of coal stocks at Domestic Coal Based (DCB) Plants across the country. The gap between receipt of domestic coal and consumption of coal (domestic + equivalent domestic of imported coal) during 01stOctober to 09th October, 2023 was to the tune of 12 MT.

About 11% fall of Hydro Generation has been recorded in H1 of FY 24 compared to the corresponding period of FY 23 due to variable monsoon rainfall. Approximately 2 GW of hydro capacity is out because of recent floods in Sikkim. The Reservoir levels in Northern, Eastern and Southern regions are less compared to the previous year as on 9th Oct' 2023, which has resulted in lower reservoir energy content at pan India level. This has put additional burden on Coal Based Thermal Generation.

Therefore, in order to ensure uninterrupted power supply across the country, after careful consideration and in consultation with Central Electricity Authority (CEA) and Grid India, it has been decided blending of imported coal @ 6% (by weight) minimum may be continued till March 2024. The Gencos may continuously review their stock position and opt for blending as per the requirements if the shortfall in domestic coal supply is more than 6 per cent. Letter from Ministry of Power in this regard dated 25.10.2023 attached at **Annexure B.1**

GENCOs may update. Members may discuss.

Deliberation in meeting

ERPC representative apprised the forum on communication from Ministry of Power dated 25.10.2023 regarding blending of imported coal by all GENCOs @ 6% by weight in place of 4% by weight(as recommended earlier) in a bid to keep pace with rising power demand amid variable Hydro Generation with low reservoir levels and outage of 2GW hydro capacity because of Sikkim flood.

NTPC representative submitted that directions for imported coal blending shall be complied in their generating units to the best possible extent and NPGC Nabinagar is already maintaining imported coal stock.

WBPDCL representative submitted that proposal for imported coal blending is presently under consideration of top management and further updated on commencement of production in new captive mine from January 2024.OCC advised WBPDCL to be adequately prepared to carry out optimal operation of all generating units even in case of disruption of coal supply

from CIL, thus may accordingly consider maintaining imported coal stock in line with MOP directions.

DVC representative affirmed to follow the MoP guidelines.

SLDC Odisha informed that the directions on imported coal blending have been communicated to OPGC, Vedanta and GMR for necessary action.

CESC representative affirmed that optimal operation of none of their generating units is attributed to scarcity of coal.

Advising ERLDC to intimate JITPL regarding MOP instructions on imported coal blending, OCC urged all GENCOs to make sincere efforts for complying with the same or patiently wait for coal rationing policy to be finalized by CEA.

2.2 Seeking Project Appraisal from ERPC for PSDF Grant against Implementation of SAMAST –DVC

Implementation of SAMAST at the state-level is a prerequisite today in order to ensure the transparency and accountability in the Scheduling and other real-time activities & timely compliance of the regulatory norms in a smooth manner. With the growing complexities in the network management and publication of stringent norms and procedures, it has become essential to automate the operational activities of LDCs. The SAMAST Scheme, conceptualised and recommended by the FoR (Forum of Regulators), appears to provide a comprehensive solution to address all these issues related to load despatch activities.

DVC has planned to implement the complete SAMAST project through the Entrepreneur Resource Planning (ERP) project of DVC under a separate head as 'SLDC module'. The scope pertaining to the project is mainly on the procurement of an Integrated Software for SLDC, covering automation in Scheduling, Open Access, Deviation Settlement, Energy Accounting, Outage Management etc. and its associated Communication and IT infrastructure.

In this regard, a DPR has been prepared exclusively for the SLDC module for grant of funding from PSDF under category 3(f), as mentioned of the attached letter (**Annexure-B.2)** of the Under Secretary (OM), MoP Dtd. 04-07-2023. The in-principal approval of the competent authority of DVC has already been obtained.

The DPR has been placed before ERPC on 31-10-2023 for appraisal on the project as per the requirement under PSDF Application Format-A5.

DVC may update. Members may discuss.

Deliberation in meeting

DVC representative submitted that SAMAST shall be implemented along with ERP in DVC and requested for technical consent from OCC so as to proceed to NLDC for subsequent formalities of project implementation.

Complimenting the initiative of SAMAST implementation and keeping in mind the necessity of implementing the same, OCC advised DVC for approaching NLDC in a bid to avail necessary fund for the SAMAST project.

2.3 Shutdown proposal of generating units for the month of December'2023-ERPC

Maintenance Schedule of Thermal Generating Units of ER during 2023-24 in the month of December'2023							
System	Station	Unit No.	Capacity (MW)	Period (as per LGBR 2023-24)		No. of Days	Reason
				From	To		
DVC	DSTPS	2	500	01.12.2023	28.12.2023	28	AOH-Blr, FGD & De-NOx Burner & LPT
WBPDCL	Bakreswar TPS	2	210	16.11.2023	05.12.2023	20	AOH/BOH
	Bandel TPS	5	215	09.12.2023	28.12.2023	20	AOH/BOH
	BUDGE-BUDGE	2	250	23.11.2023	19.12.2023	27	Not Specified
CESC	BUDGE-BUDGE	3	250	21.12.2023	27.12.2023	7	Not Specified
	FSTPP	4	500	01.11.2023	15.12.2023	45	BLR +HP +IP +Gen + LPT insitu PAUT & MPI+All brg insp+ FGD damper installation
NTPC	KhSTPS	4	210	01.12.2023	04.01.2024	35	Boiler + HP + IP + Generator
	KhSTPS	5	500	01.12.2023	14.01.2024	45	Boiler+LP+Gen.+ Combustion Modification (Approved in LGBR 2022-23)
	Nabinagar TPS	4	250	01.12.2023	09.01.2024	40	Boiler+ LPT O/H + Generator rotor thread out and checking +NOX Work
BRBCL	MPL	2	525	17.12.2023	25.01.2024	40	AOH/COH
MPL	MPL	1	350	10.11.2023	19.12.2023	40	COH
GMR	GMR	1	350	10.11.2023	19.12.2023	40	COH

Members may discuss.

Deliberation in meeting

DVC representative sought planned shutdown of DSTPS U#2 from 16.12.2023 for 28 days due to FGD works cum Boiler overhauling, DSTPS U#1 from 08.12.2023 for 5 days and RTPS U#1 from 29.11.2023 for 5 days for only FGD works. It was also submitted that both DSTPS U#1 and RTPS U#1 have not undergone annual overhauling since last 8 months. Further vide mail dated 26.11.2023 it was informed on behalf of DVC that RTPS U#1 going off bar w.e.f 24.11.2023 owing to BTL, proposed shutdown of RTPS U#1 for FGD hook-up has been preponed from 24.11.2023 to 30.11.2023 with its expected revival by evening of 01.12.2023.

DPL representative requested shutdown of DPL U#7 from 10.12.2023 to 31.01.2024 for annual overhauling.

CESC representative apprised of availing shutdown of Budge Budge TPS U#1 for boiler checking from 21.12.2023 to 27.12.2023.U#2 from 04.01.2024 to 30.01.2024 for boiler certification as well as turbine overhauling and U#3 from 28.12.2023 to 03.01.2024 for Boiler checking.HEL U#1 shutdown was requested from 02.12.2023 to 20.12.2023 for annual overhauling cum De-NOX modification while restoration to service of HEL U#2 on 29.11.2023 was also intimated.

NTPC representative affirmed availing shutdown of Kahalgaon TPS U#4 as per approved LGBR for FY 2023-24. Owing to recurrent Boiler tube leakage problem, Barh U#1 shutdown, which was already approved earlier, was requested to be preponed from 21.11.2023 to 05.01.2024 for carrying out necessary boiler maintenance works and deferment of NPGC Unit#02 shutdown was proposed w.e.f 16.12.2023 for 80 days. Proposal for BRBCL Nabinagar TPS U#1 shutdown from 01.12.2023 to 09.01.2024 was also submitted.

GMR representative requested shutdown of GMR U#2 from 16.12.2023 to 24.01.2024.

MPL representative denied of availing shutdown of U#2 in line with approved LGBR for FY 2024-25 and apprised that the same shall availed around July 2024.

OCC granted consent to all above mentioned planned shutdown requests and urged all concerned generating units of ER to meticulously adhere to the approved maintenance schedule and complete the overhauling related works in upcoming winter. It was intimated that no planned shutdown requests for the period from March 2024 to May 2024 shall be entertained. OCC also advised all generating utilities to adhere to 3% ramping capability and stable operation at minimum turndown level (55% of MCR) without oil support as per guidelines.

The detailed shutdown schedule as approved by OCC is provided at ***Annexure B.3.***

2.4 Rescheduling of Overhauling of 660 MW Unit-2 of NPGC Nabinagar-NTPC

As decided in 207th OCC meeting the Boiler modification works along with Overhauling of Unit-2 of NSTPS is to start from **25th Nov' 2023** for a duration of **80 days**.

However, due to contractual issues of OEM, the sub-agency responsible for conducting the boiler modification job is yet to mobilise the manpower & tools/tackles at site. Since boiler modification job requires adding of extra coils in economiser, reheater, shortening and In-situ shot peening of superheater coils, which cannot be completed within the approved time frame without adequate pre-shutdown preparations & mobilization of resources(manpower/tools/tackles). In view of above, it is proposed to defer the start date of Overhauling of **NPGC Unit-2** to **16th Dec'2023**.

NTPC may update. Members may discuss.

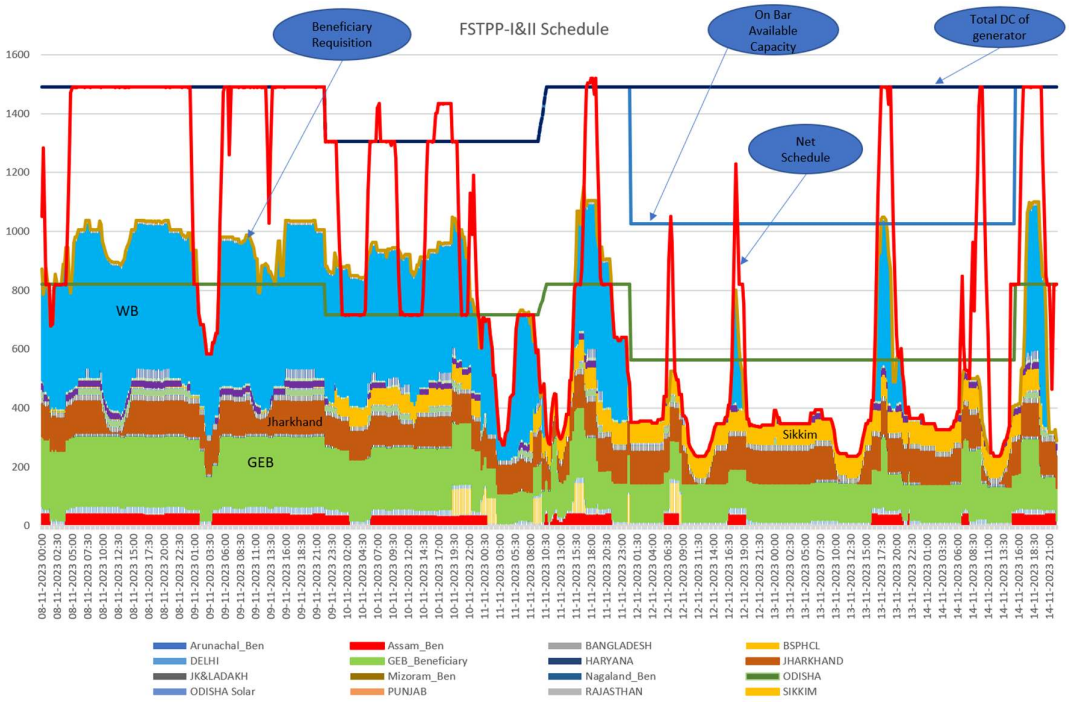
Deliberation in meeting

NTPC representative submitted that overhauling of NPGC unit-02 couldn't be commenced from 25.11.2023 as approved earlier owing to non-availability of spares and essential materials, thus pleaded for rescheduling the proposed shutdown from 16.12.2023 for smooth execution of plant maintenance activities in shutdown period of 80 days.

Considering merit of the proposal, OCC acceded to shutdown request of NTPC subject to revival of the unit (NPGC Unit#02) latest by 05.03.2023.

2.5 Aspects to be considered by generating stations in case of USD- ERLDC

Recently a few generating units of Barh, FSTPP-1&2 and FSTPP-3 had gone under USD due to less requisition from their respective beneficiaries. In all the cases, the generating stations were supposed to meet the supply obligations of their beneficiaries as per provisions of IEGC 2023 and Suo-moto order from Hon'ble CERC in petition no. 14/SM/2023. The pattern of DC, requisition, and schedule for FSTPP-1&2 for 08-11-2023 to 14-11-2023 is shown below:



It may be observed that the net schedule of the generator may be more than the available capacity On-bar as the generator shall ensure to meet their supply obligations i.e., requisitions from beneficiaries as per total DC of the plant, which may vary throughout the day. Further, SCED and TRAS-Shortfall dispatch may also be up to the total DC. Following aspects may be considered by generating stations for ensuring that their schedule remains within the actual available capacities On-bar and actual generation in case of USD of one or more generating unit:

2.5.1 Scheduling of power procured through bilateral transactions by generating station from alternate sources in case of USD to meet its supply obligations in line with cl. 47.2(b) of IEGC 2023

a. The power procured through bilateral transactions by generating station from alternate sources to meet supply obligations shall have to be scheduled under TGNA by applying for exigency TGNA in NOAR.
b. The application, approval, scheduling process and timelines shall be as per GNA Regulations.
c. Applicants cannot revise Exigency TGNA as per GNA Regulations.
d. Transmission charges and losses shall not be applicable for such transactions.

2.5.2 Scheduling of generating station upto Total DC including capacity of the unit(s) under USD

a. Generating stations may provide email request in such cases in order to temporarily exclude the plant from SCED.
b. However, if the plant is excluded from SCED, they may not receive SCED support as per clause 47.2(c) of IEGC 2023.

ERLDC may update. Members may discuss.

Deliberation in meeting

ERLDC presented a case study on USD of Unit 5 of FSTPP 1&2 from 00:18 hrs of 12-11-2023 to 15:52 hrs of 14-11-2023, wherein they highlighted that the requisitions being provided by the beneficiaries at 08:00 hrs of D-1 are of the range of 1000-1200 MW against DC of 1491 MW. However, the requisitions are being reduced to around 350-680 MW just before the start of the day. Due to such reduction of requisition very close to the start of delivery day, generators are not able to participate for the appropriate quantum in DAM to achieve at least schedule upto minimum turndown level. Generators have option of participating in RTM for achieving schedule upto minimum turndown level or go under USD. Further as per provisions of IEGC 2023, generator shall be required to meet power supply obligation of their beneficiaries if they wish to retain their DC. Also, USD of large number of units shall cause reduction in the overall reserves available in the system.

West Bengal representative mentioned that beneficiaries are allowed to provide less requisition prior to 7th/8th TB as per IEGC 2023. Generators may go under USD if their schedules remain below minimum turndown level. But they shall be required to fulfil their power supply obligation as per IEGC.

ERLDC mentioned that if the generating station takes one or more units under USD, they may meet their supply obligation by either procuring power through bilateral transactions under TGNA or through collective transactions. ERLDC also highlighted the steps and procedure to be followed for scheduling these transactions.

MS ERPC suggested that NTPC may plan in such a manner that if they take units of higher cost generators under USD they may use URS power available in lower cost generating stations for meeting power supply obligations of the generating stations where units have been taken under USD by scheduling through bilateral TGNA transactions. This shall ensure the lower cost generating stations shall be fully scheduled while the higher cost generating station may be under USD.

2.6 Declaration of OFF Bar DC against RSD as per clause 47th of IEGC 2023-NTPC

As per clause 47, 1) of IEGC 2023, in case the schedule is less than technical minimum then generating station may go under unit shutdown, however obligation of supply of power to beneficiaries who had given schedule prior to going USD will be with generating station.

As per prevailing practice, in case of USD generating stations were allowed to declare off bar DC. However same is not being allowed after enforcement of IEGC 2023.

Further as per point 2 of clause 47, the detailed procedure to deal with USD has to be developed by NLDC.

Since till date no such procedure exists. Hence generating stations may be allowed to declare OFF Bar DC.

NTPC may update. Members may discuss.

Deliberation in meeting

ERLDC mentioned that in Suo-moto order from Hon'ble CERC in petition no. 14/SM/2023 it has been mentioned that "…..a generating station opting to go under shutdown due to requisitions less than the minimum turndown level, and if it retains its DC, the beneficiary shall be entitled to fill its scheduling request irrespective of whether generating station is under USD or on bar…..". Thus, to ensure that the beneficiaries are able to requisition power as per total DC (On Bar DC + Off Bar DC) in compliance of the above direction from Hon'ble CERC, generating stations are presently not bifurcating their DC into On bar and Off bar.

2.7 LILO arrangement/Power evacuation of IBEUL and implementation of SPS - IBEUL

This has reference to the discussions held during the meeting dated **8th November** convened by the **CEA** regarding interim connectivity and injection of power from 700 MW Ind Barath Utkal Energy Ltd(IBEUL)

The meeting was chaired by the CEA Chairperson and attended by representatives from CEA,CTU,JSW(Ind-Barath),GRIDCO,ERPC and OPTCL.

During this meeting it was directed by CEA that connectivity to IBEUL would be provided as a LILO between OPGC and ISTS Jharsuguda D/C Transmission line. Furthermore, the meeting concluded that LILO and SPS scheme(if required) should be finalized expeditiously to facilitate commissioning of Ind-Barath's 1st unit at the earliest.

In a bid to effectively meet the crucial timeline for commissioning, OCC is kindly requested to finalise the scheme, subsequent activities such as executing the connection agreement and procuring necessary equipment for the scheme shall take considerable time.

IBEUL may update. Members may discuss.

Deliberation in meeting

ERLDC representative shared a presentation on implementation of proposed SPS scheme outlining the various associated constraints in event of IBEUL power evacuation via carrying out load flow study of the associated transmission system. It was agreed for LILO of one circuit of 400kV-OPGC-Jharsuguda-DC at IBEUL along with one SPS to restrict the loading of 400kV-OPGC-Lapanga-DC by controlling generation in this complex. OPTCL & SLDC Odisha stated that line loading of any one circuit of 400kV-OPGC-Lapanga-DC should be restricted to 1000MVA. This factor has been considered in designing the SPS.

*The logic of SPS is attached in the **Annexure B.7.** Generation of only one unit of IBUEL will be allowed only for testing purposes. CoD of any unit will be permitted only after connecting the station with Jharsuguda through the dedicated D/C line.*

Subsequent to detailed deliberation on technical intricacies of SPS, OCC recommended installation of SPS as follows:

- *Line loading (400kV OPGC – Lapanga D/C line) reaching 950 MW alarm signal shall be sent to IBEUL for manual backdown of generation (subject to fulfilling Minimum turndown Level)*

- *Line loading exceeding 1000 MW, a trip signal shall be issued to IBEUL with an intentional time delay of 10 minutes.*
- *Line loading reaching 1050 MW, IBEUL unit shall be tripped instantaneously.*

OCC advised ERLDC to study and develop SPS logic in line with aforesaid recommendations at the earliest so that the same can be shared with IBEUL for implementation.

OCC, taking necessity of early power evacuation from IBEUL(U-1) as well as grid security into account, reaffirmed the decisions taken in the meeting held in CEA on 08.11.23 under chairmanship of Chairperson,CEA as follows:

(i) LILO of one circuit of OPGC-Sundergarh 400 kV D/C line at DTL

(ii) IBEUL shall complete DTL latest by March 2024 and submit monthly progress report to CEA,CTUIL,ERPC ,ERLDC and OPTCL.

(iii) The interim arrangement along with all protection, communication and other issues related to LILO of ISTS line for connection of 350 MW (Unit-1) of Ind-Barath Energy (Utkal) Limited shall be borne at own cost and risk as well as duly coordinated with M/S OPGC,M/S OGPTL(ISTS licensee for OPGC-Sundergarh line), Powergrid,Grid India and others , by M/S IBEUL .

(iv) Unit commissioning i.e commercial operation should be done on completion of DTL only and not through interim arrangement.

(v) The above proposed interim arrangement shall be allowed only till 30.03.2024 or completion of DTL by M/S IBEUL,whichever is earlier, subsequent to which original ISTS line at LILO point shall be restored by IBEUL.

SLDC Odisha representative apprised the forum that an expert technical committee has been constituted by Department of Energy, Govt. of Odisha to look into the feasibility of LILO arrangement of IBEUL without adversely affecting associated transmission system (ATS).

2.8 Non-Receipt of signals for remote monitoring from 220 kV Bays at Muzaffarpur Substation- Powergrid ER-I

Remote monitoring and operation of all sub-stations in Eastern region-I is being ensured from RTAMC Patna. For smooth operation/monitoring, proper data reporting of switchgear status, analog values and alarms to control center is essential. However, there is issue in reporting of few critical signals at Muzaffarpur due to issues in bays/equipment owned by BSPTCL:

a. 220kV bays 210 & 211(Amnour-2 & 1) at Muzaffarpur ::

The bays belong to BSPTCL and are being maintained by BSPTCL. Due to communication issue in few IEDs,the signals pertaining to the bays are reporting partially to RTAMC.

b. Non-reporting of GIS bus duct signals of 220 kV BUS-1&2 ::

There are 03 bays at Muzaffarpur Sub-station on 220 kV side i.e 212-Goroul-2 & 213(Goroul-1)-owned by BSPTCL and 214-(ICT-IV LV side) owned by POWERGRID.As per our signal monitoring policy for GIS,grouping of compartment wise signals is being done to optimize the number of signals reporting to local and remote SCADA. However, BSPTCL bay number 213

is under breakdown due to flashing in GIS module on 11th June 2022. BCU pertaining to Bay 213 has also become faulty. Further, BCU of Bay 212 goes into error mode frequently and thus needs to be replaced. Therefore, the grouped signals i.r.o 220 kV GIS BUS DUCT AT Muzaffarpur are not reporting to RTAMC for remote supervision.

Owing to the above, remote monitoring stands affected i.r.o Muzaffarpur Substation and we have to locally monitor for the same.

The matter has been persistent for long duration and thus needs to be deliberated in OCC forum for its time bound resolution.

Powergrid ER-I may update. Members may discuss.

Deliberation in meeting

BSPTCL representative updated that communication glitch in IEDs pertaining to 220 kV bays 210 & 211 (Anmour-2& 1) at Muzaffarpur has been resolved while BCU pertaining to bay 212 and 213 shall be replaced within two months after ensuring availability of spares.

2.9 Update on installation of 7th (Interim) 500 MVA ICT at 400 kVSubhasgram(PG)-WBSETCL

In a special meeting with higher authorities of WBSEDCL, WBSETCL in presence of authorities of CESC, ERLDC, ERPC, Power Grid, it was decided to use the reserve 500 MVA ICT at Maithon(PG) to install in Subhasgram(PG) as 6th ICT, to handle the urgency arose from the fact that the new 500 MVA ICT of CESC will not come before 2024 Summer. Detail discussion was held in 208th OCC meeting where WBSETCL (SLDC and CPD / STU) has requested Power Grid to inform the status and expected timelines in steps for progress of the transformer transportation and installation. Since last OCC meeting almost (17.10.23 to 23.11.23) one month one week time has elapsed in between. Within this period neither the 400 Kv reactor at Subhasgram(PG) has gone to shutdown, nor any further update of movement of the said ICT from Maithon (PG) is informed to WBSETCL. Under these circumstances, this may please be noted that every passing day will be expensive, if the ICT is not commissioned by March 2024 and huge network congestion will result around Subhasgram (PG) point.

Powergrid ER-II and WBSETCL may update. Members may discuss.

Deliberation in meeting

WBSETCL representative expressed serious concern over inordinate delay by M/S Powergrid in installation of 7th(interim) ICT(ought to be replaced from regional pool)at 400 kV Subhasgram(PG) S/S, which was supposed to be transferred from Maithon (PG) S/S as makeshift measure till commissioning of 6th ICT as CESC asset. He asserted that such unwarranted delay in ICT commissioning at Subhasgram(PG) S/S may bring about severe network congestion in and around the state capital of West Bengal leading to unforeseen power crisis and ultimately compromising commitment of reliable power supply to end

consumers. He further underlined the lack of progress from M/S powergrid in neither availing Bus reactor S/D nor commencing civil dismantling works at Subhasgram(PG). He further stated that failure in timely transportation of 500 MVA ICT at Subhasgram(PG) S/S may turn down possibility of its commissioning before March 2024(upcoming Summer).

Powergrid ER-II representative, acknowledging the concern raised by WBSETCL,apprised the forum of intricate bottlenecks involved in safe transportation of bulky 500 MVA ICT,weighing around 270 tonnes, via multimodal route whose single mode transport turned out practically non-feasible while at the same time LOA of other works relevant to ICT commissioning including foundation,erection,etc is in process. It was apprised that two offers for multi-modal transport of 500 MVA ICT shoots up total expenditure to 8-10 crores that far exceeds the initial estimated cost for the job thus inevitably Powergrid had to wait for receipt of 3rd offer for ICT transportation at more competitive rate to comply with original cost estimate. This was affirmed that on receipt of 3rd offer for ICT transportation, the updated progress status shall be shared with WBSETCL.

On enquiry by OCC, Powergrid ER-II representative accepted the technical feasibility of 500 MVA ICT transportation from Maithon(PG) to Subhasgram(PG) and affirmed commencement of final civil works for ICT(interim) installation by Feb 2024 so that the entire job gets concluded by March 2024 without fail.

WBSETCL representative urged M/S Powergrid to share a realistic plan cum schedule for completion of 500 MVA ICT(interim) commissioning at Subhasgram(PG).

After detailed deliberation OCC urged M/S Powergrid to expedite pending works with utmost urgency with submission of detailed progress bar chart (Gantt Chart) in this regard and opined in favour of convening weekly monitoring meeting (on Monday/Tuesday) via virtual mode comprising representatives from Powergrid ER-II, WBSETCL,SLDC West Bengal, WBSEDCL, CESC, ERLDC and ERPC, to facilitate routine supervision of pending works for 500 MVA ICT(interim) commissioning at 400 kV Subhasgram(PG) S/S.

2.10 Update on replacement of one 315MVA, 400/220KV ICT from Regional Pool for replacement of one no of defective 315 MVA ICT (4th) at Jeerat 400 KV S/S(WB)– WBSETCL

In view of extremely high growth of load in North Kolkata and associated districts including the state capital, Jeerat 400 kV sub-station is in need of one (400/220 KV) 315 MVA ICT to replace the damaged 4th ICT of Jeerat. Already huge difficulties faced in the summer of 2023. Hence the Company has requested Power Grid to give the 315 MVA ICT kept at spare in Malda to use in Jeerat (WBSETCL) sub-station as an immediate measure. WBSETCL will execute the required works including transportation of the ICT from Malda PG S/Stn.

This is the way to bring 4th ICT at Jeerat within shortest possible time, so that summer load on Jeerat can be handled. /Stn of WBSETCL In 208th OCC it was requested to Power Grid to inform WBSETCL on each step involved starting from the initiation of the official process needed for shifting of the ICT(transportation is on the part of WBSETCL) to commission the ICT before summer 2024. But no information received as yet since last OCC (more than 5 weeks time elapsed already). This may please be noted that if the said transformer is not

installed in Jeerat 400 kV sub-stn before summer 2024, then total north 24 parganas and associated districts including the state capital will face huge congestion and more power interruption may result even before and during the vital election 2024.

Powergrid ER-II and WBSETCL may update. Members may discuss.

Deliberation in meeting

WBSETCL representative underscored the pertinent challenges of mitigating network congestion around WB state capital as well as North 24 Parganas district amid high system demand in upcoming Summer (2024) in absence of timely replacement of 4th ICT at WBSETCL Jeerat(400 kV) S/S from regional spare pool with active cooperation from M/S Powergrid .

Powergrid ER-II representative assured sharing of final test results for 315 MVA spare ICT latest by 2nd December,2023 and the same may be availed for transportation from Malda(PG) to Jeerat(WBSETCL) latest by first week of December,2023.

OCC advised Powergrid to extend expeditious cooperation to WBSETCL in this regard and also opined to convene weekly meeting via virtual mode to review the progress of the same.

2.11 Update on installation of 3rd ICT at Rajarhat (PG)-WBSETCL

In view of the forthcoming New Town AA IIC 220 / 132 kV sub-station (will be commissioned shortly), the need of 3rd ICT at Rajarhat (PG) was agreed by WBSETCL in 21st CMETS-ER meeting held on 28.07.2023. But no headway is achieved afterwards on this count as yet. Power Grid may please update the status and / or may please inform, if anything to initiate further from WBSETCL end in this regard.

Powergrid ER-II and WBSETCL may update. Members may discuss.

Deliberation in meeting

WBSETCL representative expressed serious concern over practical network reliability constraints likely to be faced after commissioning of WBSETCL New Town AA IIC 220 / 132 kV S/S in absence of 3rd ICT at Rajarhat (PG),which was agreed to be commissioned in 21st CMETS-ER meeting dated 28.07.2023.

Powergrid ER-II representative apprised that open tender for commissioning 3rd ICT at Rajarhat is presently under process of floating, whose finalization and award of contract is expected within next 3 months, i.e by February 2024 and also affirmed 3rd ICT commissioning at Rajarhat (PG) S/S to be completed within 21 months.

Urging M/S Powergrid to finalize tendering process and award of work within shortest possible duration avoiding inadvertent delays, OCC opined to convene weekly meeting via virtual mode to review the progress of the same.

2.12 Replacement of conductor and earth-wire in 220kV Lines (more than 35 years in service) commissioned under CTS.- POWERGRID ER-II

The transmission network build under CTS scheme was commissioned in mid of 1980's. List of lines are tabulated below :-

Sl. No.	Name of TL	Total Length of Line (in KM)	Length of Line(in KM) under POWERGRID	Name of conductor	Yr of commissioning	Remarks
1	220kV D/C Birpara-Chukha TL	70	36	Zebra	1986	
2	220kV D/C Birpara-Alipurduar TL	57.5	57.5	Zebra	1987	
3	220kV D/C Siliguri-Kishanganj TL	108.26	108.26	Zebra	1986	
4	220kV D/C Dalkhola-Kishangnaj TL	30.96	30.96	Zebra	1986	
5	220kV D/C Malda-Gazole TL	18.41	16.49	Zebra	1986	
6	220kV D/C Dalkhola-Gazole TL	99.24	97.52	Zebra	1986	
7	220kV D/C Birpara-Binaguri TL	80	80	Zebra	1986	
8	220kV D/C Siliguri-Binaguri TL	6	6	Zebra	1986	
9	220kV S/C Birpara-Malabase TL	41	38	Zebra	1988	
10	220kV D/C Alipurduar-Salakati TL	101	101	Zebra	1987	Re-conductoring work is in progress under NERSS-XII

In most of the above mentioned lines, the conductor damage from VD, MSCJ and repair sleeve,jumper ,dead ends etc. have been noticed at several places. The damage might be occurring due to ageing of the conductors & earth-wire due to natural wear & tear. Also conductor and earthwire getting snapped during seasonal temperature changes. Some snaps of sections of lines where breakage has been reported are enclosed at **Annexure-B.12.1.**

The line tripping due to conductor & earth-wire snapping are gradually increasing. (2 Nos. conductor snapping incident occurred in 220kV Birpara-Binaguri Ckt-2 in the month of October-23 itself) In addition to the line outages which is severely deteriorating the transmission availability, it creates potential risk of any severe accident/hazard in the nearby area due to snapping of Conductor/Earth-wire. Further, any incident of conductor/earth-wire snapping at major crossings (Railway, NH X-ings) may lead to undesired safety hazard as well as damage to public/national property. List of tripping in said lines due to conductor & earth-wire breakage are enclosed at **Annexure-B.12.2.**

All the above mentioned lines are more than 35 years in service so have completed useful life as per CERC regulation.

Considering the increase in conductor & earth-wire snapping, it is proposed to consider the re-conductoring of 220kV Lines commissioned under CTS under the ADDCAP 2024-2029 tariff block of Chukha Transmission System. Technical approval in this regard may be approved by the OCC forum please. A tentative cost for carrying out the re-conductoring work with HTLS conductor in above mentioned 9(Nine) lines 470.73 KM route length is detailed at **Annexure-B.12.3.**

POWERGRID ER-II may update. Members may discuss.

Deliberation in meeting

Powergrid ER-II representative submitted that all the 10 lines, whose reconductoring is proposed, being more than 35 years old, are subjected to frequent tripping along with snapping of earth-wire due to seasonal temperature variations. This was substantiated with photos of damaged conductors for clarity. Besides these, it was intimated that among the proposed 10 lines, 220kV D/C Alipurduar-Salakati TL is already undergoing reconductoring at present.

OCC opined that detailed study should be conducted by CTU along with health assessment of the lines need to be carried out prior to any recommendation on reconductoring.

Powergrid ER-II representative apprised that health assessment of the transmission lines is presently being carried out by NSIC and regular follow-up is done to seek assessment report at the earliest.

OCC finally advised Powergrid to share health assessment report of the proposed lines from NSIC latest by 10th December 2023 and also submit a detailed survey report of the above in the next OCC meeting.

2.13 Reconstruction of Residential/Non-residential buildings at Durgapur S/S, Maithon S/S- POWERGRID ER-II

Durgapur S/S, Maithon S/S & Malda S/S of ER-II are more than 25 years in service as per details given below:-

Sl No.	Name of Sub-station	Seismic Zone	DOCO	Package
a	Maithon	3	1992	KTPS
b	Malda	4	1986	CTS
c	Durgapur	3	1987	FSTPP

Due to natural ageing/wear and tear the condition of Residential Quarters for employees and control room at above mentioned sub-station have got seriously damaged. Buildings in the locations mentioned are of load bearing type structure (non RCC frame) and are in use for 30

years. These buildings are in dilapidated and non-usable condition which may lead to accident any time. Any accident may cause damage / loss of manpower and equipment which may affect the stability and reliability of the Grid. With the passage of time, the said constructions have suffered severe structural and non-structural damage like cracks in wall, roof slab, spalling, differential settlement, seepages, scaling, popping out etc. Any accident due to such dilapidated condition will not only cause damage to stored materials / equipment but may also cause danger to the residing personnel. From last few years the buildings are somewhat kept under operation by time to time minor repair and painting works from inside and outside but now the condition of those buildings have deteriorated to such an extent that further repairing is not possible. Repairing of buildings at this stage will result in huge financial expenditure and will not provide any significant structural strength. Thus, repairing of these building at this stage is not viable. Also condition of associated services like roads, drains etc have also damaged due to ageing. Sample photographs showing the condition of the buildings are enclosed at **Annexure-B.13.1.**

As per schedule-II of the Companies Act 2013, the useful life of non-RCC framed structure is 30 years. Further, as per National Building Code Volume-1 (2016), the dilapidated or the civil structures whose useful/service life is over, are required to be demolished. Availability of residential/ non residential buildings in good condition is essential for healthy of employees.

Accordingly, health assessment studies of the buildings have been carried out through third party reputed institute NIT Patna at POWERGRID Durgapur SS, Maithon SS & Malda SS. Health Analysis Report of NIT Patna enclosed at **Annexure-B.13.2.**From the report it is evident that the condition of the buildings at the above mentioned sub-station is in very poor condition and based on the assessment, the institute indicated that repairing of said buildings is not feasible and recommended for demolition and re-construction of new buildings.

In view of above, it is proposed to OCC forum for according in-principle approval for incurring ACE during 2024-29 tariff block towards re-construction of residential / non residential buildings and associated services under clause © of sub-clause 2 of Regulation 25 of the expenditures (ACE and de -capitalization), if any, towards replacement of the said buildings. A tentative cost for carrying out the work is detailed at **Annexure-B.13.3.**

POWERGRID ER-II may update. Members may discuss.

Deliberation in meeting

Beneficiaries including West Bengal suggested Powergrid not to put up such issues in OCC forum for seeking in-principle approval in future as the same being a welfare activity necessary expenditure can't be borne by remaining constituents. Further, the costs involved in maintenance of quarters at respective substations should be incurred under O&M cost as per extant norms.

2.14 Outage of one pole in Talcher HVDC without prior information- ERLDC

The shutdown of HVDC Talcher-Kolar Bipole was taken on 29.10.2023 for execution of girders works on main carriageway in development of six lane of Korlam - Kantakapalle Section of NH-130CD Road by NHAI. However, Pole-2 could not be brought back in service after the

completion of shutdown as some maintenance work was done and problem found in OLTC of converter transformer of Pole-2 at Talcher end.

In this scenario, only 1000 MW could be transmitted through the remaining Pole-1 in metallic return mode. As an operational requirement, NLDC had decided to increase power order up to 1250 MW from ER to SR through this link for 10 hours as per its technical design. But there was no readiness from the site, despite several request from NLDC/RLDC, to increase power order up to 1250 MW citing the increased winding temperature of Y_ph converter transformer at Talcher end and aging of the assets.

Powergrid Odisha is requested to furnish the reason behind availing shutdown of Talcher HVDC pole-2 without informing ERLDC. It is also requested to furnish the action plan to restore the capability to carry 1250MW as per the design.

ERLDC and POWERGRID Odisha may update. Members may discuss.

Deliberation in meeting

ERLDC representative expressing serious concern on outage of one pole of HVDC Talcher-Kolar Bipole beyond the consented shutdown period, underlined non-receipt of timely intimation from Powergrid Odisha regarding the same.

Powergrid Odisha representative was absent in the Meeting. However, Powergrid Odisha vide mail dated 22.11.2023 apprised the following:

- *During blocking HVDC Pole-2 on 29.10.2023, abnormality in operation of OLTC of Pole-2 R-phase converter transformer was observed, as it did not come to start position. Anticipating problem in converter transformer and for ascertaining the healthiness of converter transformer, tests were carried out and result were found to be violating the permissible limits, indicating failure of the converter transformer. The same was conveyed to CC & Regional office and it was advised to replace the converter transformer.*
- *Action plan to restore the capability to carry 1250MW: Remedial action has been taken and now each Pole may be utilized to full capability of 1250MW.*

OCC advised Powergrid Odisha to formally intimate ERLDC in future in case of availing such emergency outage of vital inter-regional lines.

2.15 Winter preparedness plan- ERLDC

A Winter Preparedness meeting 2023 has been scheduled on 30th Nov 2023 from 10:30 hrs. onwards at ERPC hall, Kolkata. Various issues like Resource planning, Safe and secure operation of the grid, Outage planning and voltage management including tap optimization and generator reactive performances for the ensuing winter months will be discussed. Review will be taken in respect of performance of generating units for controlling network voltage during last winter.

You are requested to nominate representee from your organization.

ERLDC may update. Members may discuss.

Deliberation in meeting

ERLDC representative apprised the forum that a winter preparedness meeting 2023 has been scheduled on 30th Nov 2023 from 10:30 hrs where active participation from all SLDCs and GENCOs was earnestly solicited.

He further added that in a bid to boost morale of ER generating utilities, provision for felicitation of best performing generating units in terms of reactive power support and governor response has been introduced.

OCC, on lauding such an initiative, advised all SLDCs and GENCOs to attend the meeting.

2.16 Monitoring Day ahead resource Adequacy-ERLDC

Monitoring of resource adequacy at every time horizon is important for timely action. ERLDC has started monitoring day ahead resource adequacy for all the sate as well as for eastern region. Day ahead resource adequacy report is prepared by 16:00 hours of D-1. This report shows state wise shortage or surplus scenario. Based on which we can sensitize state to participate in RTM/ T-GNA market for purchasing of power (in case of shortfall) or sell (in case of surplus). This will help in better utilization of unused power in state generators as well. Real time DC of state generating units can provide acute picture. ERLDC already has taken up to integrate the real time DC & schedule data with Real Time Generation monitoring portal of GRID-INDIA. Bihar, DVC, Odisha & West Bengal are in process to develop a system to integrate the data. States may please continue to push the data to ERLDC and start preparing resource adequacy report on day ahead basis to handle the upcoming crunch period.

ERLDC may update. Members may discuss.

Deliberation in meeting

ERLDC has initiated preparation of resource adequacy on day-ahead basis for each state as well as for the Eastern Region as recommended in IEGC 2023.

OCC advised all SLDCs to develop a system to assess resource adequacy and share the generation availability data with ERLDC by 16:00hrs for next day.

2.17 Furnishing of data for interconnection study-ERLDC

As per new IEGC, interconnection study is to be performed at SLDC, RLDC and NLDC level which involves analyzing the impact of all elements to be commissioned within six months on a rolling basis each month and evaluating the impact these elements on the transfer capability of import/export of state, at interstate, intra and inter regional levels.

'**Procedure for carrying Out Inter-Connection Studies of New Power System Elements**' published by Grid-india inOctober,2023, lays down the guidelines for data submission and performing the interconnection studies for new power system elements to be integrated into the Indian grid.

All Users ,which may include, Concerned Transmission Licensee (s)/ Settlement Nodal Agency (SNA), ISTS Licensee, Intra- state (InSTS) Licensee through SLDC, Generation Entity/ Load Serving Entity / Connectivity Grantee responsible for providing the necessary data for first time integration of elements shall furnish the information each month on a rolling basis within the specified timelines in the table below to the concerned SLDCs/RLDCs/NLDC responsible for carrying out the inter-connection studies.

S. No.	Power System Element	Data Submission Responsibility	Data to be submitted to	Data/Information Submission Deadline
1.	Transnational links (including HVDC) and associated elements (irrespective of voltage level)	Concerned Transmission Licensee (s) / Settlement Nodal Agency (SNA)	NLDC	15th Day of "M-7" month (NLDC to share the consolidated information of all such elements with the concerned RLDCs by 20th Day of "M-7" month)
2.	Inter-regional transmission system (including HVDC) and associated elements (irrespective of voltage level)	Concerned Transmission Licensee (s)	Concerned RLDCs	15th Day of "M-7" month (RLDCs to share the consolidated information of all such elements with the concerned SLDCs and NLDC by 20th Day of "M-7" month)
3.	ISTS elements within the region including HVDC, FACTS devices, any other transmission element (irrespective of voltage level)	Concerned ISTS Licensee	Concerned RLDC	15th Day of "M-7" month (RLDC to share consolidated information of all such elements with the concerned SLDCs and NLDC by 20th Day of "M-7" month)
4.	Intra-state transmission system including HVDC, FACTS devices, any other transmission element	Concerned ISTS Licensee / Concerned Intra-state (InSTS) Licensee through SLDC	Concerned SLDC	15th Day of "M-7" month (SLDC to share consolidated information of all elements at 132 kV and above voltage level with the concerned RLDC by 20th Day of "M-7" month. RLDC to further share the information with NLDC)

5.	GeneratingPlants,Bulk Consumers or Load Serving Entities and Combined (Load & Captive) generation complex, Energy Storage Systems, and Synchronous Condensers connected to the ISTS network *(includingdetailsofassociated dedicated transmission lines)*	Concerned Generation Entity/ Load Serving Entity / Connectivity Grantee	Concerned RLDC	15th Day of "M-7" month (RLDC to share consolidated information of all such elements with the concerned SLDCs and NLDC by 20th Day of "M-7" month)
6.	Generating Plants, Bulk Consumers or Load Serving Entities and Combined (Load & Captive) generation complex, Energy Storage Systems, and SynchronousCondensers connected to the intra-state network *(including details of associated dedicated transmission lines)*	Concerned Generation Entity / Load Serving Entity / Connectivity Grantee	Concerned SLDC	15th Day of "M-7" month (SLDC to share consolidated information of all elements at 132 kV and above voltage level with the concerned RLDC by 20th Day of "M-7" month. RLDC to further share the information with NLDC.)

The role specified in the interconnection procedure for SLDCs, RLDCs and NLDC after receipt of the above data is as below.

- Respective SLDC, in consultation with respective RLDC and STU, shall carry out a joint study on the impact of new elements to be energized in the intra-state system within its jurisdiction in the next six (6) months and shall share the results of the studies with the concerned RLDC by 21st day of the "M-6" month where "M" is the month of expected first time energization of the new elements.

- Respective RLDC, in consultation with concerned SLDCs, STUs, NLDC and CTU, shall carry similar joint study in (a) the ISTS of the region and (b) the intra-state system on the inter-state system and shall share the results of the studies with NLDC by 26th day of the "M-6" month.

- NLDC, in consultation with concerned RLDCs and CTU, shall carry out similar study on the impact of new for (a) inter-regional system, (b) cross-border links and (c) intra-regional system on the inter-regional system and shall complete the inter-connection study by the end of "M-6" month.

The common all India case for this purpose shall be shared by RLDCs/NLDC with SLDCs (based on the inputs received from stakeholders including SLDCs by 15th day of "M-6" month. The format specified for submitting the data is given at **Annexure-I** of the interconnection procedure mentioned. The necessary technical and modelling data of all the elements expected to be energized in the "M" month shall be submitted in the formats specified in Grid-India/NLDC's procedure for ***"First Time Charging /Energization (FTC) and Integration of New or Modified Power System Element"***, as amended from time to time, for carrying out the necessary studies.

On 208th OCC, under ITEM NO. B.22, the timelines of submission of node-wise load and generation data & sharing of network simulation models for upcoming intrastate elements in the next six months and requirement of sharing their study results for evaluating the impact on transfer capability was highlighted, which is reproduced below along with timelines specified for RLDC and NLDC taken from **Procedure for transfer capability capability assessment methodology**.-

Purpose	Sl No	Action of Stakeholder	Responsibility	Submission to	Data/Information Submission Time line
2. Interconnection Studies for elements to be integrated in the month 'M'	2(a)	Submission of node-wise load and generation data & sharing of network simulation models for intra-state elements coming in the next six months	SLDC	RLDC	8th Day of 'M- 6' month
	2(b)	Sharing of inter-connection study results			21st Day of 'M-6' month
	2(c)	Updating state and regional load & generation & modelling of inter-state & intra-state elements coming in the next six months in the regional	RLDCs	NLDC	13th Day of 'M-6' month

		system base case			
	2(d)	Sharing of inter-connection study results			26th Day of 'M-6' month
	2(e)	Update the All-India network model for interconnection studies	NLDC	RLDCs	15th Day of 'M-6' month
	2(f)	Completion of inter-connection study for elements coming in the next six months			Last Day of 'M-6' month

ITEM NO. B.23 and annexure B.23 of 208th OCC dealt with changes in operating procedure in line with IEGC 2023 regulations, where the requirement of coordination between STU and SLDC for collection and studying the impact of upcoming elements in next six months, furnishing of those data, updation in the base case and sharing of study results to evaluate impact in TTC by SLDCs to RLDC was deliberated.

Previously, all state planning agencies(STUs) and SLDCs were requested to furnish such data on an email dated 6thOctober,2023 for facilitation of transfer capability assessment and interconnection study which will then be integrated at NLDC for evaluating the overall impact upto inter regional level. However, so far no inputs in form of raw data of upcoming elements upto six months, modelling such data for base case, sharing of study results of their impact in transfer capability and updated case incorporating them has been received from any of the agencies involved. A separate email to ISTS licensees and regional generation entities has also been sent.

In this context, it is requested to share these data at the earliest and then on a rolling basis every month as per the timelines mentioned in 208th OCC and in 'Procedure for Transfer Capability Assessment Methodology', 'Procedure for carrying Out Inter-Connection Studies of New Power System Elements' published by Grid India on October 2023 such that relevant provisions in IEGC are complied.

ERLDC may update. Members may discuss.

Deliberation in meeting

OCC advised all constituents especially SLDCs for timely sharing details of commissioning new ISTS as well as intra-state elements to the best possible extent so that necessary interconnection study may be carried out by ERLDC as per timelines mandated in IEGC 2023.

2.18 Outage Planning procedure- ERPC

As per clause No. 32(4) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023 under Operating Code, it has been envisaged "To facilitate coordinated planned outages of grid elements, a common outage planning procedure shall be formulated by each RPC in consultation with the NLDC, concerned RLDC and concerned users".

Accordingly, a draft outage procedure had been prepared . All stakeholders had been requested to go through the procedure and submit their views/comments/observations, if any, latest by 17th October'2023. The same had been shared vide mail dated 13.10.2023.

Comments have been received from NLDC vide mail dated 19.10.2023 suggesting some modifications in the Draft Outage procedure. The modified draft outage planning procedure incorporating alterations suggested by NLDC attached at **Annexure-B.18**

ERPC may update. Members may discuss.

Deliberation in meeting

ERPC representative submitted that Draft Outage Planning procedure was circulated vide mail dated 13.10.2023. Comments have been received from NLDC vide mail dated 19.10.2023 suggesting some modifications in the Draft Outage procedure.

Acceding to the modifications made in line with NLDC observations, OCC granted consent for finalizing the Outage planning procedure of ER.

2.19 Operating Procedure in compliance with IEGC-2023- ERLDC

Hon'ble commission has notified the Indian Electricity Grid Code-2023(IEGC-2023). IEGC 2023 clause no 28(4) mandates

QUOTE

Detailed Operating Procedures for each regional grid shall be developed, maintained.

and updated by respective RLDCs in consultation with NLDC, concerned RPC and regional entities and shall be kept posted on the respective RLDC's website.

UNQUOTE

Accordingly in compliance with the IEGC 2023 clause no 28(4), Operating Procedure for Eastern Region has been developed by ERLDC. The **operating procedure is available in the link:**

https://app.erldc.in/Content/Upload/System%20Study/Operating%20Procedure/Operating%20Procedure%20ERLDC%20290923.pdf

The annexures are available in the link:

https://app.erldc.in/Content/Upload/System%20Study/Operating%20Procedure/Annexures%201-%20Operating%20Procedure%20IEGC%202023.pdf

The same has been circulated among the stakeholders vide mail dated 29.09.23 and 02.11.23 respectively for comments. The draft procedure has been further discussed at 208th OCC meeting held on 7th October'2023 for stakeholders' consultations. The final operating procedure shall be sent to CERC for intimation by the end of November'23. Members may please note.

ERLDC may update. Members may discuss.

Deliberation in meeting

ERLDC representative intimated that drafted operating procedure for Eastern region in line with IEGC 2023 guidelines was shared with all constituents seeking respective views or comments.

In absence of comments received by any constituents on operating procedure drafted by ERLDC, OCC opined to finalize the same for Eastern Region and subsequently share with CERC as per prescribed timelines.

2.20 Digital proof of downward DC revision- ERLDC

As per CERC order no 14/SM/2023 dated 30.09.2023, ISGS are permitted to revise DC due to partial outage, twice in a day. Generating station may submit the digital proof to respective RLDC for verification of the proof independently to avoid any kind of misdeclaration. However, it is observed that the generators have provided digital proof only for few cases. Instances with & without digital proof have been tabulated below:

Row Labels	No	Yes	Grand Total
BARH	1		1
BARH-I	13	1	14
BARH-II	10		10
BRBCL	4		4
DARLIPALI	9	1	10
FSTPP-I&II	22	7	29
FSTPP-III	18	7	25

KHSTPP-I	24	9	33
KHSTPP-II	3	4	7
MPL	2		2
NPGC	11		11
TSTPP-I	11	1	12
Grand Total	128	30	158

It is also observed that proof submitted by generators are not adequate to identify the reason properly. All generators are requested to follow the CERC direction in this regard.

ERLDC may update. Members may discuss.

Deliberation in meeting

ERLDC representative, on emphasizing the importance of digital proof in case of partial outage as per CERC order no 14/SM/2023 dated 30.09.2023, shared a brief presentation depicting receipt of various digital evidences including SOE, photographs of equipment malfunctioning, etc. and further submitted that out of 36 such instances digital proof has been received in 28 instances.

NTPC representative submitted that providing digital proof against every such DC revision and its subsequent verification is a cumbersome task.

After deliberation, OCC opined that generating plants would submit digital proof for DC revision for partial outage on a weekly basis every Monday for the last week (Monday-Sunday). Data would be sent to ERLDC (mail: erldcso@grid-india.in) with a copy to ERPC. It was also suggested that in case of any discrepancy in any Digital proof received, the same may be highlighted in OCC forum for discussion.

2.21 Update- Status of pending augmentation/upgradation- ERLDC

Status of following transmission elements need to be updated:

1. 400/220kV 500MVA Subhasgram ICT -7
2. Upgradation of 220kV S'gram-S'gram-DC, 220kV- S'gram-Kasba-DC
3. 400/220kV 315MVA ICT-2 at New Patratu
4. 125MVAR Bus reactors at Kharagpur, New PPSP

Members may update.

Deliberation in meeting

OCC opined to put up the agenda in next OCC meeting for necessary deliberation.

2.22 Implementation of free governor mode of operation as per IEGC 2023 and PFR testing status of State generating units- ERLDC

IEGC-2023 has laid down detail provision of Primary frequency response ancillary services in clause 30.10.(a) to 30.10.(q). IEGC-2023 has come into effect from 1st October. As per the clause 30.10.(d), all generating units as per the eligibility under clause 30.10.(h) need to run in Free governor mode and they should have electronically controlled governing system.

All generating units are requested to share the status of implementation of provisions of IEGC-2023 and timeline for completing the implementation. Also, owner of generating units which are still run by mechanical governing system may share their plan for retrofitting the system with electronic governing system.

As per the provision of the IEGC-2010 (latest amendment) Primary frequency response testing was carried out for 240 ISGS Units. As per IEGC-2023 this test needs to be carried out periodically and therefore keeping track of last PFR testing of all units including state generating station is necessary. Also For preparing a comprehensive report at national level the status of PFR of State generating units is required, therefore you are requested to kindly share the latest status of the PFR testing in the prescribe format.

ERLDC may update. Members may discuss.

Deliberation in meeting

ERLDC representative highlighted the significance of Free governor mode of operation in all eligible Generators in line with IEGC clause no.30.10(h) and 30.10(d).It was confirmed that change in logic from RGMO to FGMO has already been received from MPL and also intimated that queries of DVC pertaining to FGMO operation have been addressed by NLDC.

OCC urged all concerned(both ISGS and State Generating units) to carry out periodic PFR testing and share details with ERLDC for comprehensive monitoring as mandated in IEGC 2023.

Additional Agenda for 209th OCC

1. Request for Declaration of Shut Down of Units on ground of FGD Connectivity works:

This is to inform that the work for hooking up of FGD with the existing system of BTPS 'A' (500 MW) DVC, has been completed on 11.07.2023. The job being first time for DVC as well as for the vendor also.

It may kindly be appreciated that to maintain SOx parameter, in compliance with the Environment (Protection) Amendment Rules, 2015 dated 7.12.2015 notified by Ministry of Environment and Forests and Climate Change ("MoEFCC"), Government of India, installation of FGD is essential. DVC has taken program to install FGD in its all units in phased manner to comply the above norms.

It is, therefore, requested ERPC to consider shutdown of BTPS 'A' for the period from 25.06.2023 to 11.07.2023 for the purpose of hooking up of FGD with the existing system in line with Change in law.

DVC also requests ERPC to approve shutdown for FGD installation works in all its other units for a tentative period of 15 (fifteen) days or actual time taken whichever is less. DVC has already completed FGD connectivity work in BTPS-A (500 MW), MTPS Unit#7 (500 MW), MTPS Unit#8 (500 MW) and KTPS U#1 (500 MW). FGD connectivity work is being taken up in KTPS U#2 (500 MW) during its ongoing overhauling.

It is requested to please approve the shutdown of the units for the units for the purpose of FGD installation works.

DVC may update. Members may discuss.

Deliberation in meeting

OCC advised DVC to submit proper evidence in favour of availing shutdown at BTPS A specifically for purpose of FGD works to comply with MoEFCC guidelines so as to consider the shutdown of BTPS A from 25.06.2023 to 11.07.2023 under requirement of FGD works.

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

3.1 ER Grid performance during October 2023.

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month October-2023 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)
507 MU	570 MU 11-10-2023	26208 MW, 11-10-2023 at 21:19 Hrs.	16614MW, 24-10-2023 at 03:49 Hrs.	3974	4554

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

Deliberation in meeting

The grid performance of ER for the month of October 2023 was highlighted.

3.2 Real time operational planning study using SCADA EMS tools-ERLDC

As per IEGC-2023, real time operation planning studies needs to be carried out by SLDC, RLDC and NLDC. If telemetry issue causes any error in such study, the same needs to be flagged in operational planning meeting and utility needs to update the progress in data restoration. If any issue remains pending for any quarter, the same may be reported to commission by RPC. ERLDC already used to do such study and used to highlight telemetry related issues in TEST meeting. However, as per IEGC-2023, the telemetry related issue is recorded specifically in regards non-satisfactory result of state estimator.

Issues observed during 1st 10 days of Oct-2023 are as follows:

Date	Name of the element going for S/D	Remarks	Reason
05-11-2023	400KV-FSTPP-KHSTPP-1	**Not Satisfactory**	Data Issue (Bad Quality Data) at FSTPP
08-11-2023	400KV/220KV 315 MVA ICT 1 AT LAPANGA	**NOT SATISFACTORY**	Lapanga data is highly intermittent, and it has already been flagged to Odisha.

10-11-2023	400KV-MEERAMUNDALI-MENDHASAL-II	**Flow is both circuits 0 in EMS**	Status Points are suspected at ERLDC END; Data is intermittent, and it has been flagged to ODISHA as well.
14-11-2023	765KV/400KV 1500 MVA ICT 1 AT NEW RANCHI	**ICT #2 FLOW IS ZERO IN EMS**	L1 isolator data (both 765KV end and 400KV end at New Ranchi) is Showing "OPEN" although there is a flow.

SLDC may also start similar studies and recording of telemetry issue causing error in SCADA EMS studies for discussion in monthly operational planning meeting.

ERLDC may update. SLDCs may respond and other members may discuss.

Deliberation in meeting

OCC opined to put up the agenda in next OCC meeting for necessary deliberation.

3.3 Ensuring the healthiness of ADMS

State	Criteria for ADMS operation	Number of instances for which ADMS criteria satisfied	Number of instances for which detail received	Discussion regarding previous month performance	Update in 206th OCC meeting
West Bengal	1. System Frequency < 49.7 Hz 2. WB over-drawl > 150 MW 3. Delay = 4 min	2	Nil	-	-
Jharkhand	1. System Frequency < 49.9 Hz 2. Jharkahnd over-drawl > 25 MW 3. Delay = 3 min	152	Nil	-	-
DVC	1. System Frequency < 49.9 Hz 2. DVC over-drawl > 150 MW 3. Delay = 3 min	55	Nil	-	-
Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. Delay = 3 min	26	Nil	-	-

Members may note.

Deliberation in meeting

Members noted.

3.4 Commissioning status of ADMS

Automatic demand management scheme (ADMS) has been already commissioned in West Bengal, DVC, Odisha and Jharkhand. However for Bihar it is yet to be implemented, the last status as confirmed in the earlier meeting is as follows.

Sl No	State/Utility	Logic for ADMS operation	Target Date
1	Bihar	F <49.7 AND deviation > 12 % or 150 MW	

Bihar may update the status of the implementation of ADMS scheme.

Members may note.

Deliberation in meeting

Members noted.

4. PART-D: OPERATIONAL PLANNING

4.1 Anticipated power supply position during December 2023

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of December 2023 were prepared by ERPC Secretariat (**Annexure D.1**) on the basis of LGBR for 2023-24 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc.

Members may update.

Deliberation in meeting

*The updated anticipated power supply position for December 2023 is provided at **Annexure D.1***

4.2 Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on 13-11-2023)

a) Thermal Generating Stations outage report:

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	KHSTPP	BIHAR	NTPC	7	500	Annual overhauling	14-Oct-2023
2	KODERMA	DVC	DVC	2	500	For enabling hooking of FGD, Combustion modification (De NOx system installation) along with AOH for 28 days	28-Oct-2023
3	SOUTHERN	WEST BENGAL	CESC	2	67.5	Unit survey	25-Oct-2023
4	DPL	WEST BENGAL	WBPDCL	7	300	Poor Coal Stock	22-Oct-2023
5	BARAUNI TPS	BIHAR	NTPC	6	110	Low vacuum	22-Jul-2023
6	BARAUNI TPS	BIHAR	NTPC	7	110	Poor condenser vacuum	19-Jul-2023

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

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

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	FSTPP	WEST BENGAL	NTPC	5	500	Reserve shutdown	12-Nov-2023
2	BARH	BIHAR	NTPC	5	660	Reserve shutdown	13-Nov-2023
3	MEJIA TPS	DVC	DVC	1	210	Earlier out due to boiler Tube Leakage. After that unit under reserve shutdown wef 22:00 hrs of 11/11/2023.	07-Nov-2023
4	SOUTHERN	WEST BENGAL	CESC	1	67.5	Reserve Shutdown	24-Oct-2023

c) Hydro Unit Outage Report:

S. NO	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	BALIMELA HPS	ODISHA	OHPC	2	60	Annual Maintenance	08-Nov-2023
2	BALIMELA HPS	ODISHA	OHPC	4	60	The unit taken out under R&M since 08/07/2022 for 18 months.	08-Jul-2022
3	BALIMELA HPS	ODISHA	OHPC	3	60	The unit taken out under R&M since 08/07/2022 for 18 months.	08-Jul-2022
4	U. KOLAB	ODISHA	OHPC	2	80	Rotar earth Fault	25-Aug-2023
5	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
6	TEESTA HPS	SIKKIM	NHPC	2	170		
7	TEESTA HPS	SIKKIM	NHPC	3	170		
8	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
9	DIKCHU Hep	SIKKIM	SKPPL	2	48		

10	TEESTA STG III Hep	SIKKIM	SUL	1	200	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
11	TEESTA STG III Hep	SIKKIM	SUL	2	200		
12	TEESTA STG III Hep	SIKKIM	SUL	3	200		
13	TEESTA STG III Hep	SIKKIM	SUL	4	200		
14	TEESTA STG III Hep	SIKKIM	SUL	5	200		
15	TEESTA STG III Hep	SIKKIM	SUL	6	200		

d) Long outage report of transmission lines (As on 12.10.2023):

Transmission Element / ICT	Outage From	Reasons for Outage
400 KV IBEUL JHARSUGUDA D/C	29.04.2018	As information gathered, around 40-50 nos of towers were collapsed and conductor theft more than 400Ckm and restoration work is in progress
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.
400/220KV 315 MVA ICT 4 AT JEERAT	09.04.2021	Due to Fire hazard ICT damaged and burnt. New Transformer procurement under pipeline and shall be replaced in the near future.

220KV-FSTPP-LALMATIA-I	21.04.2021	Conductor stringing 12.965 km has been completed and Stringing between Tower Loc. no. 152 to 159 is under progress. Transmission line is idle charged between Lalmatia GSS end to Tower Loc.no.169
220KV-MUZAFFARPUR(PG)-GORAUL(BH)-1	11.06.2022	To rectify the CVT voltage missing issue
220KV-WARIA-BIDHANNAGAR-1 & 2	08.06.2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
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)
220/132KV 160 MVA ICT 1 AT MALDA	04.01.2023	For 132 KV GIS Commissioning work (GIB erection of ICT-I)
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 Earthwire between tension tower no. 218-237 in same line.
132KV-NALANDA-BARHI(DVC)-1	25.03.2023	
220KV-TSTPP-MEERAMUNDALI-2	10.06.2023	Tower collapse at loc no 41, 42 (from Meramundali end). Ckt1 charged through ERS.
400KV-KHSTPP-BARH-1	04.08.2023	Upgradation of Bay equipments at KHSTPP
400/220KV 315 MVA ICT 1 AT TSTPP	09.08.2023	Acetylene violation in ppm during routine DGA analysis
400KV/220KV 315 MVA ICT 3 AT BIDHANNAGAR	31.08.2023	FOR JUMPERING OF 220KV DROPPER FROM STRUNG BUS AT 315MVA ICT-3
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

400KV-TEESTA-III-DIKCHU-1	04.10.2023	FED LOHNAK LAKE FOLLOWED BY HUGE INRUSH OF WATER IN TEESTA RIVER AND DAMAGE OF TEESTA III DAM & DOWNSTREAM POWERHOUSES
400KV-RANGPO-DIKCHU-1	04.10.2023	
400KV JHARSUGUDA-ROURKELA-1 &3	26.10.2023	RECONDUCTORING WORK
400KV/220KV 315 MVA ICT 1 AT INDRAVATI HEP	06.11.2023	PAINTING WORK OF THE ICT

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 meeting

Members noted.

4.3 Commissioning of new units and transmission elements in Eastern Grid in the month of October -2023.

The details of new units/transmission elements commissioned in the month of October -2023 based on the inputs received from beneficiaries:

NEW ELEMENTS CHARGED DURING OCTOBER, 2023							
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	PVUNL	400/11.5/11.5 kV 144 MVA ST-3 along with associated bay number 416 at PVUNL SS.	ST-03	400/11.5/11.5 kV	144	08-10-2023	
TRANSMISSION LINES							
SL. NO.	**Agency/Owner**	**LINE NAME**		**Length (KM)**	**Conductor Type**	**DATE**	**Remarks**
1	JUSNL	400KV-TENUGHAT-PVUNL-1		64	ACSR Twin Moose	06-10-2023	
LILO/RE-ARRANGEMENT OF TRANSMISSION LINES							

SL. NO.	Agency/Owner	Line Name/LILO at	Length (KM)	Conductor Type	DATE	Remarks
NIL						
BUS/LINE REACTORS						
SL. NO.	**Agency/Owner**	**Element Name**	**SUB-STATION**	**Voltage Level (kV)**	**DATE**	**Remarks**
1	PVUNL	400 kV 125 MVAR Bus Reactor #2 along with associated bay number 415 at PVUNL SS	PVUNL SS	400	10-10-2023	
HVDC /AC Filter bank / FACTS DEVICE associated System						
SL. NO.	**Agency/Owner**	**Element Name**	**SUB-STATION**	**Voltage Level (kV)**	**DATE**	**Remarks**
NIL						
BAYS						
SL. NO.	**Agency/Owner**	**Element Name**	**SUB-STATION**	**Voltage Level (kV)**	**DATE**	**Remarks**
1	JUSNL	400 kV Main Bay of Latehar-2 (Bay Number 401)	PVUNL SS	400	26-10-2023	
2	JUSNL	400 kV Main Bay of Latehar-1 (Bay Number 404)	PVUNL SS	400	26-10-2023	
3	JUSNL	Tie bay of [Latehar-2 and 400/220 kV 315 MVA ICT-1] (Bay Number 402) at Patratu SS (PTPS)	PVUNL SS	400	26-10-2023	
4	JUSNL	Tie bay of [Latehar-1 and 400/220 kV 315 MVA ICT-2] (Bay Number 405) at Patratu SS (PTPS)	PVUNL SS	400	26-10-2023	
5	PVUNL	400 kV Main Bus I	PVUNL SS	400	07-10-2023	
6	PVUNL	400 kV Main Bus II	PVUNL SS	400	07-10-2023	
7	PVUNL	400KV MAIN BAY OF 400KV 125MVAR B/R-2 AT PVUNL	PVUNL SS	400	10-10-2023	
8	PVUNL	400KV MAIN BAY OF 400/11.5KV 144MVA ST 3 AT PVUNL	PVUNL SS	400	08-10-2023	
9	PVUNL	400KV MAIN BAY OF 400KV 125MVAR B/R-2 AT PVUNL	PVUNL SS	400	07-10-2023	
10	PVUNL	400KV MAIN BAY OF TENUGHAT 1 AT PVUNL	PVUNL SS	400	06-10-2023	

Members may note.

Deliberation in meeting

Members noted.

4.4 UFR operation during the month of October 2023.

Frequency profile for the month as follows:

MONTH	MAX (DATE/TIME)	MIN (DATE/TIME)	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
Oct, 2023	50.30 Hz on 27-10-2023 at 16:03 hrs	49.47 Hz on 16-10-2023 at 14:56 hrs	8.9	74.4	16.7

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

Members may note.

Deliberation in meeting

Members noted.

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Participants in 209th OCC Meeting

Annexure A

Venue: ERPC Conference Hall, Kolkata **Time: 10:30 Hrs.** **Date: 23.11.2023 (Thursday)**

Sl. No.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
1	N.S.Mondal	Member Secretary	ERPC	9958389967	mserpc-power@gov.in	
2	R. Sutradhar	Executive Director	ERLDC	9436302714	rajibsutradhar@posoco.in	
3	S. KEJRIWAL	SE	ERPC	9831919509	shyam.kejriwal@gov.in	
4	A. De	DD	ERPC	9681932906	dik.erpc@gov.in	
5	P.K. DE	SE	ERPC	9433125844	Secomml.erpc@gov.in	
6	GAGAN KUMAR	E.Ex.E.	SLDC, BSPTCL	7992486100	gagankmishra@gmail.com	
7	Saurabh Jain	AGM	JSW Energy Ltd	9983996373	saurabh.jain@jsw.in	
8	Sunil Dave	AVP	JSW Energy	8875029103	sunil.dave@jsw.in	
9	Preetam Banerjee	Addl. C.E.	WBSEDCL	7003871189	preetam72@gmail.com	
10	Rita Chakraborty	CE	SLDC:WB	9434910030	ceSldc@gmail.com	
11	Shouvik Banerjee	ACE, SLDC.	SLDC:WB.	9434910379	srkbanerjee@yahoo.com	
12	Manoj Podder	DGM(OS)	WBPDCL	8336904077	mpodder@wbpdcl.co.in	
13	Debdas Mukherjee	Sr. Mgr.(OS)	WBPDCL	9830052830	d.mukherjee@wbpdcl.co.in	
14	S.M.S. Sahoo	DGM (El.)	OPTCL, Bhubaneswar	9438908353	ele.smsahoo@optcl.co.in	
15	Aniseedha Sethy	A.G.M(Elec)	Gridco	9438506854	ele.assethy@gridco.co.in	
16	Debarshi De	SM	CESC	9163312742	debarshi.de@rpsg.in	
17	Boplab Chatterjee	AGM-OPS	MPL	9204857190	boplab.chatterjee@tatapower.com	
18	P.V.RAUT	AGM OPN	MPL	9223501513	rautpv@tatapower.com	
19	Rabisankar Jeti	Sr. Manager	MPL	9204855211	jetir@tatapower.com	
20	Bibhu Prasad Bhatagat	DGM(El)	OHPC	7328840025	bibhu.bg@gmail.com	

Participants in 209th OCC Meeting

Venue: ERPC Conference Hall, Kolkata **Time: 10:30 Hrs.** **Date: 23.11.2023 (Thursday)**

Sl. No.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
21	S.K. Bag	ACE	SLDC, WB	7980098826	sajalkbag74@gmail.com	
22	P. Sen	Manager(E)	DPL	8013843947	Palash-239@rediffmail.com	
23	S Mondal	Sr DGM	ERLDC	9433041955	saugato@grid-india.in	
24	B. Achari	DGM	ERLDC	7003472016	bikash.achari@grid-india.in	
25	Rimil Topno	Sr. Manager	SLDC, JUSNL	9835715518	sldcranchi@gmail.com	
26	D.P. PUITANDI	Sr GM	SLDC, DVC	9434745905	deliprasad.pyitandi@dvc.gov.in	
27	Debabrata Kar	GM	NTPC, Farakka	9650990401	debabratakar@ntpc.co.in	
28	Sumeet Narang	Sr Mgr	NTPC, ERI (Patna)	8005493953	Sumeetnarang@ntpc.co.in	Sumeet Narang
29	Sanjaya Ku Mishra	DGM (EL)	SLDC, ODISHA	9438907414	sanjayasld@gmail.com	skmis
30	Debi Prasad Kar	DGM(El.)	SLDC ODISHA	9438907416	ele.dpkar@sldcorissa.org.in	Dpkar
31	M. Prasad	CE/Head, PMD	DGPC CO	+975-17610621	m.prasad1900@drukgreen.bt	
32	N.K. Shrivastava	CGM	POWERGRID	9425409614	~~nitinks31@gmail.com~~ nkshrivastava@powergrid.in	
33	Chandan Mallick	manager,	ERLDC GRID-INDIA	9007059660	chandan.mallick@grid-india.in	
34	Agniva Chatterjee	AEE	ERPC	8100307502	agniva.cea@gov.in	
35	Saibal Ghosh	Manager	ERLDC	8584072079	Saibal@grid-India.in	Saibal Ghosh
36	D.K. Khaitan	Assistant Director	ERPC	7683889161	dilip.khaitan.cea@gov.in	
37	Sourav Mandal	Manager	ERLDC	9402103353	sourav.mandal@grid-india.in	
38	Jit Bahadur Limbu	SO-SV.	DGPC, CHP	+97517777618	j.limbu02305@drukgreen.bt	
39	Tenzin Wangda	JE	DGPC, KHP	+975 17597374	t.wangda1772@drukgreen.bt	
40	Lebi Phuntsho	SSO	DGPC/THP	+975 17905484	l.phuntsho@drukgreen.bt	

Participants in 209th OCC Meeting

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Sl. No.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
41	P.K. Mallik	CM	PGCIL	9434713582	prosun.mallik@powergrid.in	
42	C. Mallick	DGM	NTPC	7044474792	cmallick@ntpc.co.in	
43	AWN HAIDER RIZVI	DGM	NTPC	9415113724	ahrizvi@ntpc.co.in	
44	S.K. Panda.	Manager	DVC	6370184794	santosh.panda@dvc	
45	H.S. Sarkar	Sr. Manager	DVC	8337019396	himadri.sarkar@dvc.gov.in	
46	Pritam Mukherjee	Manager	ERLDC	8584072090	pritam@gridindia.in	
47	Anwesh Kumar	A. Exe. E.	TVNL	8789580343	anwesh.harsh2@gmail.com	
48	Soumya Mukherjee	Additional Manager	HEL	9051482663	soumya.mukherjee@rpsg.in	
49	Diptikanta Panda	Manager	GMR	8114918762	Diptikanta.Panda@gmrgroup.in	
50	Sourabh Joshi	Assistant Director	ERPC	7078397028	sourabhjoshi.cea@gov.in	
51	Himanshu Kumar	EEE	BSPTCL	7763817734	himanshu.nitt@gmail.com	Himanshu Kumar
52	P. P. Jena	EE	ERPC	9776198991	ppjena.erpc@gov.in	
53	V.N. Sharma.	Sr. GM	DVC	7001471184	vijaya.sharma@dvc.gov.in	23/11/23.
54	S K Pandey	CGM	DVC	9471959119	Sunil.pandey@dvc.gov.in	
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Annexure B.3

Approved Maintenance Schedule of Thermal Generating units in the month of December '2023

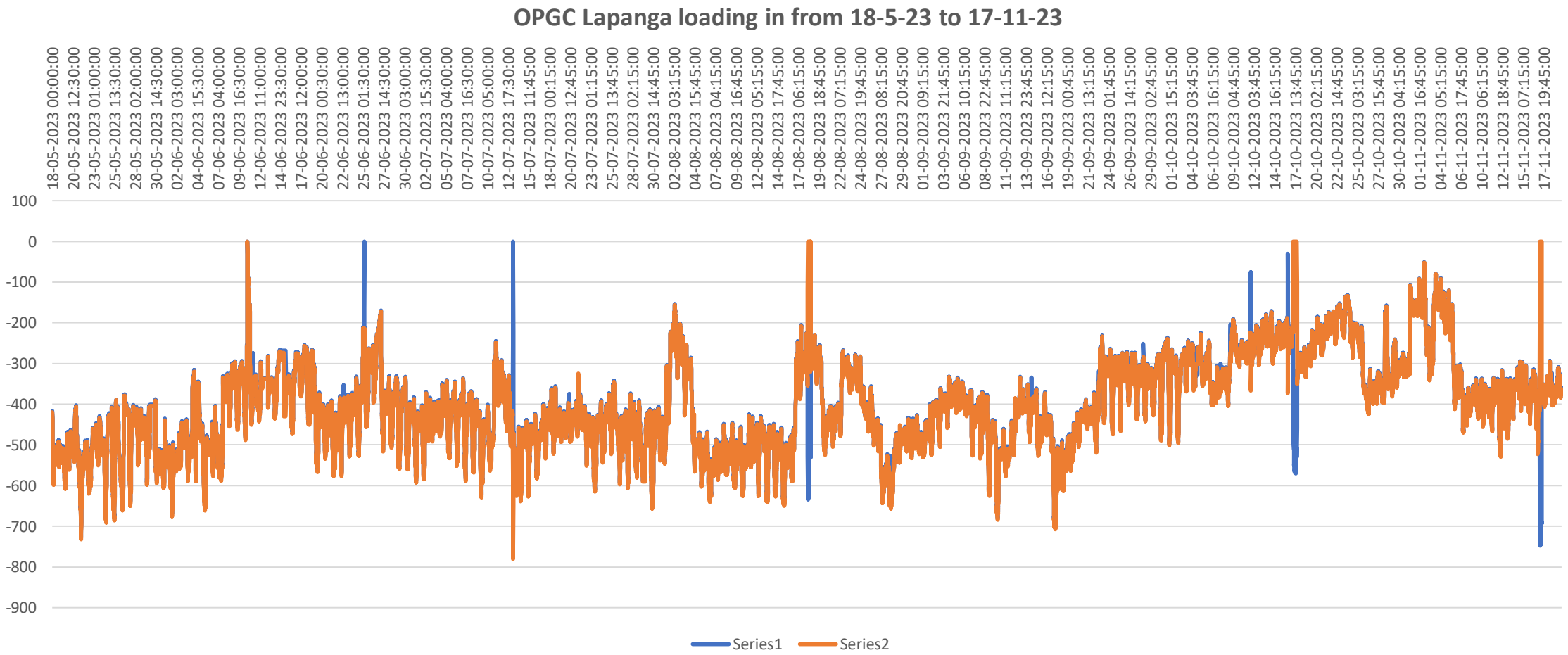
System	Station	Unit No.	Capacity(MW)	Period (as per LGBR 2023-24)		No. of Days	Reason	Approved period		No of days	Whether as per LGBR or not	Remarks
				From	To			From	To			
DVC	DSTPS	2	500	01.12.2023	28.12.2023	28	FGD & BOH	16.12.2023	13.01.2024	28	NO	**APPROVED**
DVC	DSTPS	1	500	_	_	_	FGD	08.12.2023	12.12.2023	5	NO	**APPROVED**
DVC	RTPS	1	600	_	_	_	FGD	24.11.2023	30.11.2023	5	NO	**APPROVED**
CESC	BUDGEBUDGE	1	250	15.11.2023	21.11.2023	7	Boiler Checking	21.12.2023	27.12.2023	6	NO	**APPROVED**
CESC	BUDGEBUDGE	2	250	23.11.2023	19.12.2023	27	Boiler certification and Turbine OH	04.01.2024	30.01.2024	26	NO	**APPROVED**
CESC	BUDGEBUDGE	3	250	21.12.2023	27.12.2023	7	Boiler Checking	28.12.2023	03.01.2024	6	NO	**APPROVED**
HEL	HEL	1	300	06.01.2024	20.01.2024	15	AOH & De-NOx modification	02.12.2023	20.12.2023	19	NO	**APPROVED**
NTPC	KhSTPP	4	210	01.12.2023	04.01.2024	35	BLR +HP+IP +Gen +LPT FGDdamperinstallation	01.12.2023	04.01.2024	35	YES	**APPROVED**
NTPC	KhSTPP	5	500	01.12.2023	14.01.2024	45	Blr+LP+Gen+Combustion modification	_	_	_		**NOT AVAILED**
NTPC	Barh-I	1	660	22.10.2023	25.11.2023	35	Boiler Tube leakage	21.11.2023	05.01.2024	45	NO	**APPROVED**
BRBCL	NabinagarTPS	1	250	01.07.2023	14.08.2023	45	Boiler License Renewal +LPT OH+NOx	01.12.2023	09.01.2024	40	NO	**APPROVED**
NPGCL	Nabinagar STPS	2	660	01.07.2023	18.09.2023	80	AOH & Boiler modification	16.12.2023	05.03.2024	80	NO	**APPROVED**
GMRKEL	GMR	2	350	_		_	COH	16.12.2023	24.01.2024	40	NO	**APPROVED**
WBPDCL	Bakreshwar TPS	2	210	16.11.2023	05.12.2023	19	AOH/BOH	08.12.2023	27.12.2023	19	NO	**ALREADY APPROVED IN 208th OCC**
WBPDCL	Bakreshwar TPS	3	210	23.11.2023	02.12.2023	10	PG Test/ Boiler & BLR	_	_	_	_	**NOT AVAILED**
MPL	MPL	2	525	17.12.2023	25.01.2024	40	AOH/COH	_	_	_	_	**Postponed**
DPL	DPL	7	300	01.08.2023	30.09.2023	61	AOH	10.12.2023	31.01.2024	52	NO	**APPROVED**

Annexure B.7

IBEUL injection and SPS study

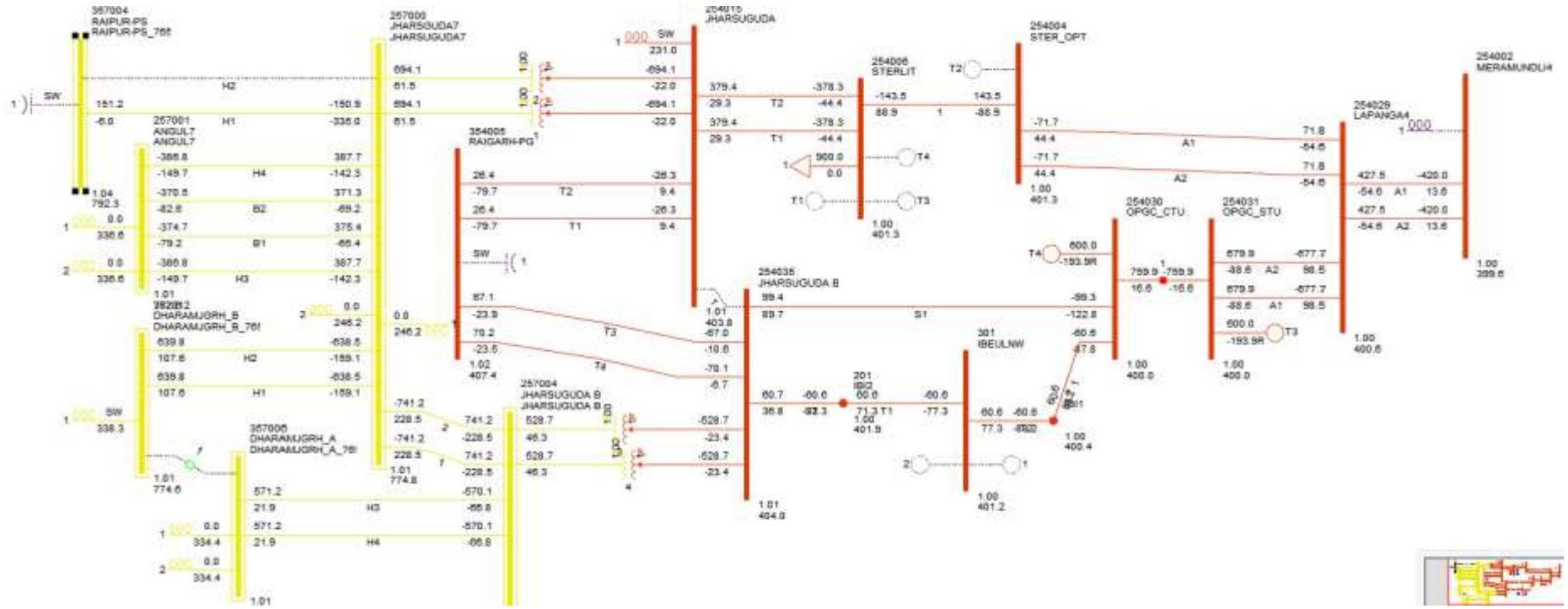
November 2023

OPGC Lapanga loading in last 6 months



Case details

- Base case is as follows where 680 MW per ckt in 400 KV OPGC LAPANGA d/c is kept.
- WR ER receipt 3830 MW, Er -NR 2155, ER-SR 4543 MW, Odisha demand 6500 MW,OPGC generation 600x2



Recommendation when one IBEUL unit is in service

SPS shall be based on current value
Signal transmission from OPGC to Ind Bharat shall be preferably through OPGC

Line rating considered	Triggering criteria(Current based)	SPS effect
1000 MVA	950 MVA	Alarm Ringing
	1000 MVA	Trip one unit of Ind Bharat with a delay of 10 mins
	1050 MVA	Trip one unit of Ind Bharat instantaneously (10 seconds)

*Manual Backdown of OPGC as per system requirement

Annexure D.1

Updated Anticipated Peak Demand (in MW) of ER & its constituents for December 2023

1	**BIHAR**	**Demand (MW)**	**Energy Requirement (MU)**
	NET MAX DEMAND	5339	3175
	NET POWER AVAILABILITY- Own Sources	595	372
	Central Sector+Bi-Lateral	4615	3738
	SURPLUS(+)/DEFICIT(-)	-129	935
2	**JHARKHAND**		
	NET MAXIMUM DEMAND	1800	1129
	NET POWER AVAILABILITY- Own Source	470	189
	Central Sector+Bi-Lateral+IPP	1272	540
	SURPLUS(+)/DEFICIT(-)	-58	-400
3	**DVC**		
	NET MAXIMUM DEMAND	3250	2156
	NET POWER AVAILABILITY- Own Source	5500	3308
	Central Sector+MPL	305	151
	Bi- lateral export by DVC	2500	1221
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	55	81
4	**ODISHA**		
	NET MAXIMUM DEMAND (OWN)	4200	2736
	NET MAXIMUM DEMAND (In Case of CPP Drawal)	4700	2897
	NET POWER AVAILABILITY- Own Source	2700	1843
	Central Sector	1570	893
	SURPLUS(+)/DEFICIT(-) (OWN)	70	0
	SURPLUS(+)/DEFICIT(-) (In Case, 600 MW CPP Drawal)	-430	-161
5	**WEST BENGAL**		
	WBSEDCL		
5.1	NET MAXIMUM DEMAND	5550	3260
	NET MAXIMUM DEMAND (Incl. Sikkim)	5815	3264
	NET POWER AVAILABILITY- Own Source (Incl. DPL)	5302	2686
	Central Sector+Bi-lateral+IPP&CPP+TLDP	2248	1155
	EXPORT (To SIKKIM)	5	4
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	1995	577
5.2	**CESC**		
	NET MAXIMUM DEMAND	1400	695
	NET POWER AVAILABILITY- Own Source	400	312
	IMPORT FROM HEL	540	313
	TOTAL AVAILABILITY OF CESC	1000	625
	DEFICIT(-) for Import	-460	-70
			-70
	WEST BENGAL (WBSEDCL+CESC+IPCL)		
	(excluding DVC's supply to WBSEDCL's command area)		
	NET MAXIMUM DEMAND	7260	3955
	NET POWER AVAILABILITY- Own Source	5762	2998
	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	2788	1468
	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXPORT	1290	511
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXPORT	1285	507
6	**SIKKIM**		
	NET MAXIMUM DEMAND	127	64
	NET POWER AVAILABILITY- Own Source	2	1
	Central Sector	77	19
	SURPLUS(+)/DEFICIT(-)	-48	-44
	EASTERN REGION		
	NET MAXIMUM DEMAND	23207	13480
	NET MAXIMUM DEMAND (In Case of CPP Drawal of Odisha)	23207	13376
	BILATERAL EXPORT BY DVC (Incl. Bangladesh)	1874	1221
	EXPORT BY WBSEDCL TO SIKKIM	5	4
	EXPORT TO B'DESH & NEPAL OTHER THAN DVC	642	478
	NET TOTAL POWER AVAILABILITY OF ER	25218	14583
	(INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)		
	SURPLUS(+)/DEFICIT(-)	2006	1099
	SURPLUS(+)/DEFICIT(-) (In Case, 600 MW CPP Drawal of Odisha)	2006	1203