AGENDA

FOR

222nd OCC MEETING

Date: 23.12.2024

Eastern Regional Power Committee

Contents

EASTERN REGIONAL POWER COMMITTEE

AGENDA FOR 222nd OCC MEETING TO BE HELD ON 23.12.2024 (MONDAY) AT 11:00 HRS

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 221st OCC Meeting held on 27th November 2024 physically at ERPC Secretariat, Kolkata

The minutes of 221st Operation Coordination Sub-Committee meeting held on 27.11.2024 was circulated vide letter dated 03.12.2024.

Members may confirm the minutes of 221st OCC meeting.

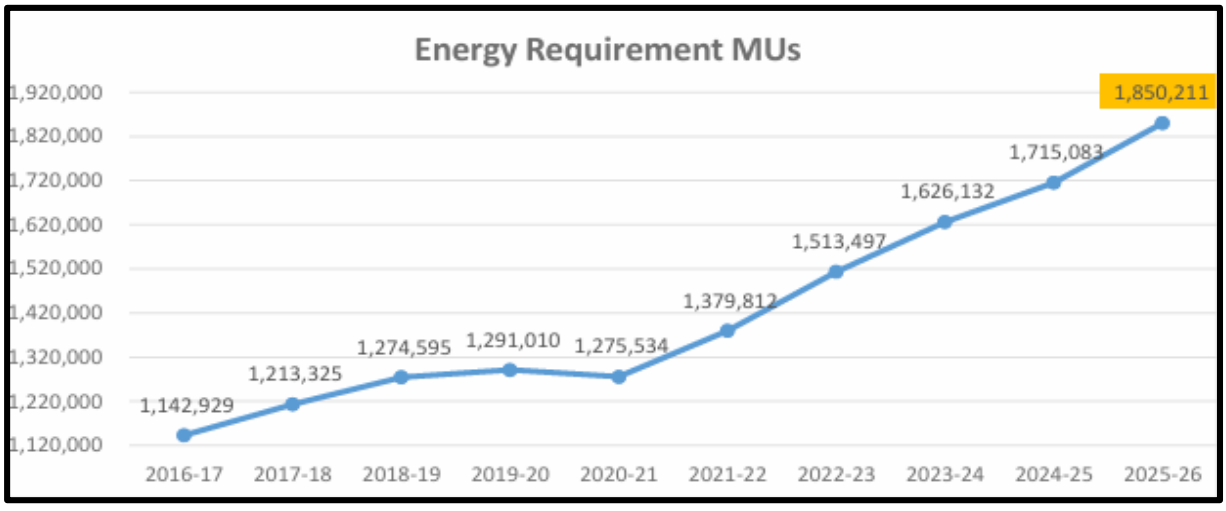
2. PART-B: ITEMS FOR DISCUSSION

2.1 Anticipated demand of electricity during FY 2025-26: CEA

The details of All India Power Supply Position in terms of Energy (MU) during the period 2021-22 to 2024-25 with the respective growth on year-to-year basis, have been furnished below. It may be mentioned that the figures cited herein are Actual for the years 2021-22 to 2023-24, Actual cum Anticipated Energy Requirement for 2024-25 (Actual upto October,2024 and anticipated thereafter).

Energy						
	Energy Requirement		Energy Supplied		Energy Not Supplied	
Year	(MU)	% Growth	(MU)	% Growth	(MU)	% Growth
2021-22	13,79,812	8.2	13,74,024	8.1	5,787	0.4
2022-23	15,13,497	9.7	15,05,914	9.6	7,583	0.5
2023-24	16,26,132	7.4	16,22,020	7.7	4,112	0.3
2024-25	17,15,083	5.5	_	_	_	_

*data from October onwards are anticipated



The All India Anticipated Energy Requirement for FY 2025-26 furnished as per 20th Electric Power Survey (EPS) (Ex-bus) and as forecasted after optimization of data received from Regional Power Committees (RPCs) are hereunder:

Anticipated Energy Requirement for FY 2025 -26		Ex Bus Figures in MU (A)	State periphery figures in MU (B) [(A)-2% losses]	% Growth C
20th EPS	2024-25	16,99,041	16,65,060	-
	2025-26	17,96,627	17,60,694	5.74
	2025-26 (Revised)	18,04,067	17,67,986	6.18
GM Division	2024-25	-	17,15,083	7.88
	2025-26	-	18,50,211	7.88

It may be seen from above figures that as per Revised 20th EPS there is only growth of 6.18% in All India Energy Requirement for FY 2025-26 as compared to last year projected in Revised 20th EPS. But the average growth in Actual Energy Requirement during last 3 years has been around 8% as per All India Power Supply Position in term of Energy. Considering this trend also the forecasted figures of 1,850 BU from GM Division are
indicating the growth of 7.88%.

The annual energy requirement and peak demand has been forecasted by GM Division as:

Region/ State	Total Energy Requirement in MUs for 2025-26 (As per GM Division)	Peak Demand in MW for 2025-26 (As per GM Division)
Bihar	49,068	9056
Damodar Valley Corporation	29,794	4146
Jharkhand	15,746	2619
Odisha	51,399	7623
West Bengal	74,430	13541
Sikkim	674	158
Eastern Region	**2,21,568**	**35781**

Month wise details of ER states (peak demand and energy requirement) attached at **Annex_B.2.1**

All concerned states may update on the projected demand pattern. Members may discuss.

2.2 Amendment in CERC approved methodology for computation of Average Monthly Frequency Response Performance in terms of Beta 'β' factor: NLDC

In compliance with the provisions of Regulation 62(5) and 65(4) of the CERC (Terms and Conditions of Tariff) Regulations, 2024, NLDC had prepared a draft methodology for computation of Average Monthly Frequency Response Performance, Beta 'β'.

CERC approved "Methodology for computation of Average Monthly Frequency Response Performance, Beta 'β'" was **received vide letter dated 23.10.2024**, The scope of the methodology was enlarged to cover intra-state generating stations, whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs. *Clause 4.4 (b) of the CERC approved methodology states that "FRO of generating stations, whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs (in accordance with the control area jurisdiction as per Regulation 43 of CERC (EGC) Regulations, 2023), as assessed by concerned SLDC shall be considered for computation of Beta by the SLDC."*

Clauses 4.7 and 4.9 mention about computation and certification of Beta. The clauses have been mentioned below:

Clause 4.7: *The concerned LDC shall compute Average Monthly Frequency Response Performance, Beta 'B' (truncated up to 2 decimal places)..."*

Clause 4.9: *The concerned LDC would furnish Average Monthly Frequency Response Performance, Beta* 'β' *computed for a billing month to respective RPC along with all relevant supporting documents latest by 15th day of the following month, The* Beta 'β'*, furnished by concerned LDCs will be certified and issued by the RPC through publication on its website to make it a part of commercial accounting."*

The communication from NLDC attached at **Annexure B.2.2**
Members may discuss.

2.3 Establishment of Kunkuri 400/132 kV S/S by LILO of both circuits of 400 kV Sipat - Ranchi D/c: CSPTCL

A meeting convened by **CEA** on **13.11.2024** to discuss the establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of **400 kV Sipat - Ranchi D/c line**.

- **Background:**

CSPTCL vide **letter dated 24.09.2024** has informed that it is planned to establish 400/132 kV S/s under Intra-state by LILO of both circuits of 400 kV Sipat - Ranchi D/c line which is an ISTS line. It was also informed that a meeting was held among CTUIL, Grid-India, WRLDC, ERLDC and CSPTCL to discuss the same.

In view of the above, CSPTCL has requested to grant the permission of establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line. As per deliberation

✓ CSPTCL informed that establishment of 220/132 kV S/s by connecting it to nearby 220 kV S/s involves transmission line passing through forest area and also the length of the 220

kV lines to proposed Kunkuri S/s is about 135 km, however, establishment of 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line involves no forest and the length of the proposed LILO is also about 8 km.

- ✓ CTUIL presented the study and informed that due to the proposed LILO of both circuits of 400 kV Sipat - Ranchi D/c line, there is no additional loading observed in the network in 2028-29 timeframe. Also, reconductoring of the 400 kV Sipat - Ranchi D/c line may be done, if overloading would be observed in future. Accordingly, CSPTCL's proposal for establishment of Kunkuri 400/132 kV S/s may be agreed with a condition that CSPTCL has to do reconductoring of the LILO portion in future (commensurate with the reconductoring of 400 kV Sipat - Ranchi D/c line), if needed. CSPTCL agreed for the same.
- ✓ Grid-India stated that as the angular difference between Sipat and Ranchi buses is observed to be on the higher side, an additional corridor might be planned instead of reconductoring of the existing line.
- ✓ CEA stated that since CSPTCL's proposal includes the LILO of an Inter-Regional line (WR-ER), the proposal should also be presented before both the RPCs i.e. WRPC and ERPC for their concurrence.

In the meeting, it was envisaged that possibility of establishment of 220/132 kV S/s (by interconnecting it with nearby 220 kV S/s) instead of 400/132 kV S/s at Kunkuri may be explored by CSPTCL. Accordingly, CSPTCL has carriedout the survey and main findings of the same are given below:

S. No.	**Particular**	**220 kV DCDS from existing 220 kV Gerwani S/s at proposed Kunkuri S/s**	**LILO of 220 kV Raigarh – Tamnar (JPL) line atproposed Kunkuri S/s**	**LILO of 400 kV Sipat – Ranchi line At proposed Kunkuri S/s**
1.	Tentative Route length	150 km	135 km	08 km
2.	Forest involvement	30 km	29 km	NIL
3.	EHV line crossing	29 Nos.	12 Nos.	03 Nos.
4.	River crossing	04 Nos.	04 Nos.	01 Nos.

CSPTCL's proposal of LILO of establishment of Kunkuri 400/132 kV (Intra-state) S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line (an ISTS line) was agreed with the condition that the proposal should be presented before both the RPCs i.e. WRPC and ERPC by CSPTCL.

The details have been attached in **Annexure B.2.3**

Members may discuss.

2.4 Approval for HTLS Project implementation in Jharkhand: JUSNL

The DPR of the said project was first submitted and deliberated in 207th OCC dated 15.09.2023.

207th OCC deliberation:

- ✓ JUSNL representative apprised the forum about the proposal for reconductoring of existing 132kV Line by HTLS Conductor for relieving congestion in JUSNL.
- ✓ After detailed deliberation, OCC opined that a special meeting may be convened to look into the intricate technical aspects of the project. OCC further opined that Jharkhand may forward the agenda to PSPA division of CEA for further approval.

Following clarifications were sought by ERPC Secretariat in the special meeting:

Updated Power map of JUSNL system with clear demarcation of present and future/planned system shall be submitted.
The following information also need to be submitted:

1. Basis of demand data that was considered for load flow study in present as well as for future case. The data has to be certified by SLDC or any competent dept of JUSNL.
2. Present peak loading(in percentage) observed for the lines.
3. Commissioning time line for already approved projects/substations/lines of JUSNL system. Is the future systems/elements which are going to be commissioned have been incorporated in the load flow study results?
4. Base case file of the load flow study results.

Further NPC has made recommendations on the various lines of JUSNL regarding the HTLS project:

Sr no:	Name of Line	Suggestions/ Recommendations/ Queries	Reply to Suggestions/ Recommendations/ Queries
1	Adityapur(Gamariya) to Ramchandrapur 132 KV D/C	JUSNL to submit SCADA snapshot of single line diagram from SLDC control room.	Attached SCADA snapshot of Single Line Diagram of Adityapur GSS and Ramchandrapur GSS from SLDC Control Room as Annexure - A (Page No. 1 & 2)
		Present MW flow in the lines along with its ampere capacity to be ascertained.	Present peak load during N-1 Contingency is 128MW (Approx. 500Amp). Refer Annexure - A (Page No. 3-6)

2	Namkum - Sikidri 132 KV	In the D/C line, JUSNL to explain why one ckt was upgraded to HTLS while the other was not.	There are 2 separate 132 kV Transmission Lines from Namkum GSS to Sikidri Substation via separate tower, i.e.: a) 132kV D/C Sikidri – Namkum Transmission line has already been reconcductored through HTLS conductor in 2017. b) 132kV S/C Sikidri – Namkum Transmission line is being proposed for reconductoring to HTLS Conductor from ACSR Panther conductor. Refer Annexure - A (Page No. 7) **Now, the said T/L may be withdrawl from reconductoring with HTLS due to availabilty of more T/Ls to the NAMKUM GSS .**
		Previous DPR of the line commissioned in 2017 may be submitted.	This project was executed by PGCIL under Jharkhand Consultancy Project (JCP) and DPR was not submitted to JUSNL by PGCIL.
		Age of the transmission line and conductor need to be confirmed.	This Transmission Line was commissioned in the year of 2017 with ACSR Panther Conductor.
3	Hatia old - Hatia new 132 KV D/C	Line loading at the time of study as well as present loading in peak period to be submitted.	There is total 3 Circuit Transmission Line between Hatia (I) old GSS and Hatia (II) new GSS as follows:1. 132 kV D/C Transmission Line consisting of Circuit 1 & 2 of length (0.6 + 0.6 = 1.2 KM) presently connected with ACSR Panther Conductor with present load of (50 + 40 = 90MW), which is being proposed for reconductoring which will be overloaded in N-1 condition.2. 132 kV S/C Twin Zebra Transmission Line (3rd Circuit - Connected via Main Bus) with present load 160 MW.Refer Annexure - A (Page No. 8)
4	Dumka 220/132 to Dumka/Maharo 132KV DC	Detailed feeder loading pattern along with proper justification to be submitted.	At present, Average load of 132kV D/C Dumka Madanpur (220/132 kV) to Dumka Maharo (132/33 kV) Transmission Line is approx. 70 MW and Peak load is approx. 90MW, which will be overloaded in N-1 condition.Refer Annexure - A (Page No. 9)
		Previous DPR of the line commissioned in 2015 to be submitted.	This project was executed by PGCIL under Jharkhand Consultancy Project (JCP) and DPR was not submitted to JUSNL by PGCIL.

5	Adityapur - Rajkharsawa 132 KV S/C	Since existing towers of the line are more than 50 years old, tower health assessment report carried out by experts needs to be submitted to ascertain healthiness of towers for reconductoring. The minimum residual life of the tower shall be ensured as 25 years before going for reconductoring.	Tower Health Assessment of the said Transmission Lines with total 112 Nos. of Towers was conducted by JUSNL on sampling basis, i.e. for 27 Nos. of Towers. As per the report, Some of the Towers needed few preventive measures before reconductoring. Also, All Towers needed Tower Health Assessment.
6	Rajkharsawa - Chandil line via kandra 132 KV S/C	Since existing towers of the line are more than 50 years old, tower health assessment report carried out by experts needs to be submitted to ascertain healthiness of towers for reconductoring. The minimum residual life of the tower shall be ensured as 25 years before going for reconductoring.	Tower Health Assessment of the said Transmission Lines with total 118 Nos. of Towers was conducted by JUSNL on sampling basis, i.e. for 28 Nos. of Towers. As per the report, Some of the Towers needed few preventive measures before reconductoring. Also, All Towers needed Tower Health Assessment.
7	Jadugoda - Ramchandra pur LILOed at Sundarnagar 132 KV D/C	JUSNL to justify power flow in the lines exceeding rated capacity within 5 years of commissioning and reason behind sudden load growth. JUSNL to ensure reliability of supply to Jaduguda substation with proper justification substantiated with load flow study by	Due to availability of alternate source for Dhalbhumgarh GSS, the proposal for reconductoring of LILO of 132 kV D/C Jadugoda - Ramchandrapur T/L at Sundarnagar GSS is no more required.**Therefore, the said Jadugoda - Ramchandrapur LILOed at Sundarnagar 132 KV D/C T/L may be withdrawl from reconductoring with HTLS due to availabilty of alternate source.**

		PRDC. Alternate source to Jadugoda may be explored. Previous DPR of the line commissioned in 2019 may be submitted.	
8	132kV D/C Chandil - Golmuri Transmission Line S/C LILOed at 132/33 kV Mango GSS (32 kM)		At present, Average load on 132kV S/C Chandil - Golmuri T/ Line (30kM), and 132kV S/C Chandil - Mango T/L (32kM) is approx. 100 MW and Peak load is approx. 128 MW, which will be overloaded in N-1 condition.Average Load of Golmuri GSS is approx 70 MW and Peak Load is approx 90 MW.And, Average Load of Mango GSS is approx 35 MW and Peak Load is approx 40 MW.As per current need of load in both GSS, recommendation for installation of 50MVA Power Transformer in both GSS has been submitted by Distribution Company of Jharkhand, i.e. JBVNL.In view of the above, There is need of reconductoring of ACSR Panther Conductor with HTLS Conductor in 132kV D/C Chandil - Golmuri Transmission Line S/C LILOed at 132/33 kV Mango GSS as this transmission line is at it's maximum capacity.Refer Annexure - A (Page No. 10)

SLD as well as Load flow study resul,.ts enclosed at **Annex_B.2.4**

JUSNL may update. Members may discuss.

2.5 Approval for WAMS Project implementation: JUSNL

The DPR of the said project was first submitted and deliberated in **207th OCC** dated 15.09.2023.

207th OCC deliberation:

- ✓ OCC was of the view that DPR should be self-certified by respective state rather than forwarding to RPC for examination of technical details.
- ✓ Representative of ERPC submitted that the DPR may be prepared in line with the latest PMU guidelines as finalized in the 13th NPC Meeting held on 05.07.2023 at Kolkata

Further, NPC Observations on WAMS Project of JUSNL for various substations (132kV, 220kV and 400kV) are listed as follows:

- **Adherence to NPC Guidelines regarding PMUs:** PMUs need to be installed at all locations to ensure standardization across the national grid according to NPC Guidelines finalized in the 13th Meeting of NPC held on 05.07.2023.
- **OPGW Necessity:** Many locations in Jharkhand lack Optical Ground Wire (OPGW) installations. Before considering PMU installations, it is essential that OPGW is installed and operational to support PMU data requirements.
- **Cost Implications:** PMU installations come with substantial capital costs for equipment, installation, and ongoing maintenance. Installing PMUs at the 132 kV level might not provide commensurate benefits relative to the expenditure.
- **Data Management Concerns:** Introducing PMUs at 21 nos. 132 kV substation would result in a vast amount of data Handling this influx can be challenging and might strain existing data management and analytics systems.
- **Focus on Higher Voltage Levels:** The higher voltage levels (220 kV and above) are more critical junction points in the grid, carrying significant power flows. Concentrating resources and efforts on enhancing the observability and stability of these levels should be prioritized.
- **Detailed Cost Implications:** Jharkhand was requested to provide a comprehensive breakdown of the costs associated with PMU installations, including equipment, installation, data management infrastructure, and ongoing operational costs.

JUSNL may update. Members may discuss.

2.6 Agenda Points: PVUNL

2.6.1 Synchronization of Unit 01 of 3X 800MW Thermal Power project

Background:

1. Start-up Power of PVUNL was envisaged through 400kV Patratu-Patratu Line (PVUNL-JUSNL GSS Katia).
2. As above line was not made available Start up power was arranged through 400kV Tenughat-PVUNL line.
3. Synchronization of Unit#01 of PVUNL was also envisaged through 400kV Patratu-Patratu Line.

Current Scenario:

1. Synchronization of Unit#01 of PVUNL is scheduled in January 2025.
2. 400kV Patratu-Patratu Line or any other ATS line are not available as on date and it will take time for its readiness.

Consequences:

1. In view of unavailability of ATS, Synchronization of Unit#01 in Jan-2025 is planned through start up power line 400kV through TVNL(Tenughat)-PVUNL S/C line.

Appeal:

1. Technical, Commercial and other statutory requirements for Synchronization of Unit#01 in Jan-2025 is planned through start up power line 400kV through TVNL(Tenughat)-PVUNL S/C line are to be finalized.

2.6.2 ATS of 3X 800MW Thermal Power project

Background:

1. Designated ATS of PVUNL is as follows:
   i) 400kV QM D/C PVUNL-Patratu Line
   ii) 400kV QM D/C PVUNL-Koderma Line
   iii) 400kV QM D/c PVUNL-Chandil Line
2. 400kV QM D/C PVUNL-Koderma Line and PVUNL-Chandil Line are at initial stage, and it will not be available till 2025.
3. PVUNL-Patratu Line –
   - Status – Foundation – 12/27, Tower Erection – 11/27
   - Work in Forest area is still to be taken up.

Current Scenario:

1. PVUNL-Patratu Line –
   - Stage I Forest Clearnce granted on 16.05.2024
   - Stage I Forest Clerance is pending.
2. No ATS is available for Power Evacuation of PVUNL.
3. COD of Unit #01 of PVUNL is scheduled in Feb 2025.

Consequences:

1. In view of unavailability of any ATS line, Power Evacuation PVUNL is not possible.

Appeal:

1. Early Resolution for availability to be ensured for Power Evacuation PVUNL.

2.6.3 Sustainable Power Evacuation through Katia Substation for COD of Unit 1 and subsequent Continuous operation

Background:

- Power Transfer from PVUNL is via Patratu-Patratu 400 kV line connecting Katia Sub-Station.
- Power transfer capability of various lines connecting 400 kV Katia Sub-Station area as follows:

➢ Two Nos of lines connecting Katia & Hatia at 220 kV level with a capacity of power transfer of 200 MW each.
➢ Two Nos of lines connecting Katia & Burmu at 220kV level with a capacity of power transfer of 200 MW each.
➢ Two nos of lines connecting Katia & Bero at 400kV level with a capacity of power transfer of 800MW each (ISTS lines).
➢ Two nos of lines connecting Katia & Latehar at 400 kV level and power transfer capacity of 800MW each (lines are under construction).

Current Scenario:

1. Present loading of Katia 400 kV BUS is around 350 to 380 MW which includes loads of Hatia, & Burma.
2. COD of Unit #01 of PVUNL is scheduled in Feb 2025 and continuous running of unit thereafter.

Conclusion:

1. Power transfer of 800 MW from Unit#1 PVUNL to Katia via state network is not possible

Appeal:

1. Methodology for sustainable power evacuation through Katia sub-station via its connected state/ISTS network may be detailed.

2.6.4 Discrepancies in Start-up bill for the month of October 24

Background:

- Agreement was to provide start up power through Patratu-Patratu line that is ATS line of PVUNL, however, due to delay in ATS by JUSNL, the TVNL-PVUNL line was made with modification of Towers for 400kV line, and this was erected at additional cost of INR 13.72 Cr(approx.) which was borne by PVUNL.
- This line was dedicated line for PVUNL to provide Start up Power with an agreement of minimum contract demand of 20.05 MVA by JBVNL even though the actual requirement of power for commissioning was approx. 2-3 MVA.
- Every month PVUNL was paying approximately 60 lakhs towards contract demand of 20 MVA even though actual consumption was 2-3 MVA.
- Details of Energy Bill payment of Last six months:

Month	Actual kVAh Consumed	Actual kWh Consumed	Payment done(INR	Remarks
May-2024	0		6030920.00	actual consumption =2 MVA(approx.)
Jun-2024	0		5895361.00	actual consumption =2 MVA(approx.)
Jul-2024	0		5899355.00	actual consumption =2 MVA(approx.)
Aug-2024	0		6030920.00	actual consumption =2 MVA(approx.)
Sept-2024	481245	408512	9035555.00	
Oct-2024	30366822	1126134		Bill of INR 27 Cr(approx..) received.

- JBVNL employs a billing methodology based on kVA and kVAh, instead of the traditional kW and kWh approach. Despite separate agreement for drawl of Start up power in other projects, JBVNL here insisted for agreement for HT Consumer basis which is yet to signed and pending at JBVNL end.
- Grid Code categorize reactive power support provided for grid stability and quality as an “Ancillary Service”. Also, entities that draw reactive power when system voltage exceeds 103% are eligible for incentives. The current billing approach by JBVNL contradicts these established regulations and results in an exorbitant charge to maintain grid stability.

Events:

- During October 2024, due to light loading condition on the transmission line, the voltage at our end increased due to Ferranti effect causing the line to trip couple of times. With critical project commissioning milestones underway, this frequent tripping of the line was hampering availability of Start-up power.
- To ensure grid stability and prevent voltage fluctuations, 125MVAr Bus Reactor at PVUNL end was taken into service in consultation with ERLDC/ SLDC. The reactor was in service for over 11 days (from 17.10.2024 to 29.10.2024) during the month.

Consequences:

- PVUNL has been significantly penalized for the reactive power consumed by the bus reactor, a critical measure taken solely to maintain grid stability and power quality.

Appeal:

- Reactive power does not contribute to real power consumption, which is measured in kWh. By penalizing us for reactive power consumption, JBVNL is essentially penalizing PVUNL for providing a service that benefits the entire power system.
- Immediate intervention is required to address this issue and ensure a fair resolution as PVUNL believe that the billing methodology used in this case is not equitable and does not accurately reflect the actual energy consumption of our facility

PVUNL may explain. Members may discuss.

2.7 Update on Patna Islanding scheme: ERPC

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

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

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

221st OCC Decision:

- ERLDC was advised to form a joint committee with SLDC Bihar,NTPC and Bihar DISCOMs for regular monitoring of implementation of Patna islanding scheme.A joint study on feasibility of this islanding scheme may also be carried out. The status of the same may be updated in the subsequent OCC meetings.
- OCC also advised that Patna islanding scheme must get implemented before Summer 2025

In view of the 221st OCC Decision an **online meeting was conducted on 05-12-24** (Minutes attached with **Annexure B.2.7.**) to expedite the implementation of Patna islanding scheme, members from NTPC, SLDC BIHAR, ERPC, and ERLDC were present. The points discussed in this meeting are:

- NTPC apprised that nonlinearity test of governor has not been conducted.
- SLDC Bihar mentioned that there is cost implication for Bihar islanding implementation. It was advised to discuss the matter in OCC forum with estimated budgetary cost by SLDC Bihar. Based on the discussion following action points were finalized:
- SLDC Bihar to submit:
  - load details (Maximum and minimum) of Patna Island in current scenario.
  - Feeder list which will be tripped for island formation.
  - Feeders and load quantum in MW for installing UFR within Island.

- NTPC to communicate within a week via letter that NPGC unit is capable of islanding operation and there is no requirement of non-linearity test, (Action point-NTPC). Following details to be submitted within a week, (Action Point- SLDC Bihar).
  - Submit load details (Peak and minimum) of Patna Island in current scenario.
  - Updating list of Feeders which will be tripped for island formation.
  - Identification of feeders and loads along with quantum in MW for installing UFR within Island.

➢ Post receipt of the above details further meeting will be conducted for finalizing Islanding logic, other operational issues. Accordingly, action plan will be finalized for implementation of scheme as early as possible.

➢ NTPC to confirm NPGC's islanding capability with no further requirement for a non-linearity test via letter within a week.

NTPC and SLDC Bihar may update the present status along with future action plan.

2.8 Bus split operationalization at NTPC Kahalgaon: ERPC

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

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

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

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

In compliance to 221st OCC decision, NTPC has submitted status (as on 20th December 24) i.r.o implementation of Committee recommendations as follows:

As per **221st OCC** Deliberation

NTPC Submitted:

- Layout of the existing cables has been mapped and the interface points between the old and new cabling systems have been identified.
- Excavation process is presently being undertaken to route the new cables. Due to considerable angular difference between individual 400 kV sections upon opening of

sectionalizer breakers and consequent threat to equipment safety in 11 kV auxiliary network, this proposed interim arrangement could not be explored.

- Procurement of new control cables or sourcing them from in-house spares is being explored.

221st OCC Decision:

- OCC advised NTPC to expedite the overall process of excavation, laying of new cables and procurement of control cables for timely completion of the bus splitting arrangement.
- NTPC was advised to share the monthly report on progress i.r.o bus splitting activities at 400 kV switchyard of NTPC Kahalgaon to ERPC/ERLDC.

✓ **Healthiness of Bus CVTs:**

Based on daily monitoring results , secondary side voltages (110VAC) are indicated within acceptable range.

Testing Progress:

- Testing of all 400KV Lightning Arresters (LAs) and Current Transformers (CTs) has been completed.
- Testing of 132KV Lightning Arresters (LAs) is completed.
- Testing of 400KV CBs-4 Nos., 132KV Circuit Breakers-10 Nos., 132KV Current Transformers (CTs- 22/30 completed), and Capacitive Voltage Transformers (CVTs)-12 Nos. have been planned and is in progress.

Isolator Status:

- All 400KV/132KV Siemens make HCB isolators (36 Sets) were found in jammed condition.
- Post-maintenance, some 132KV isolators were revived. CRM testing done for the serviced
- 132kV Isolators and the test results are found beyond acceptable limits.
- The issue has been escalated to M/s GE for urgent action.

Earthing Work:

- Earthing work for ICT-3, ICT-4 and associated bay equipment is in progress and is scheduled for completion by **15/01/2025.**

Control Cable Arrangement:

- NTPC is arranging the required control cables through internal resources and through the agency.

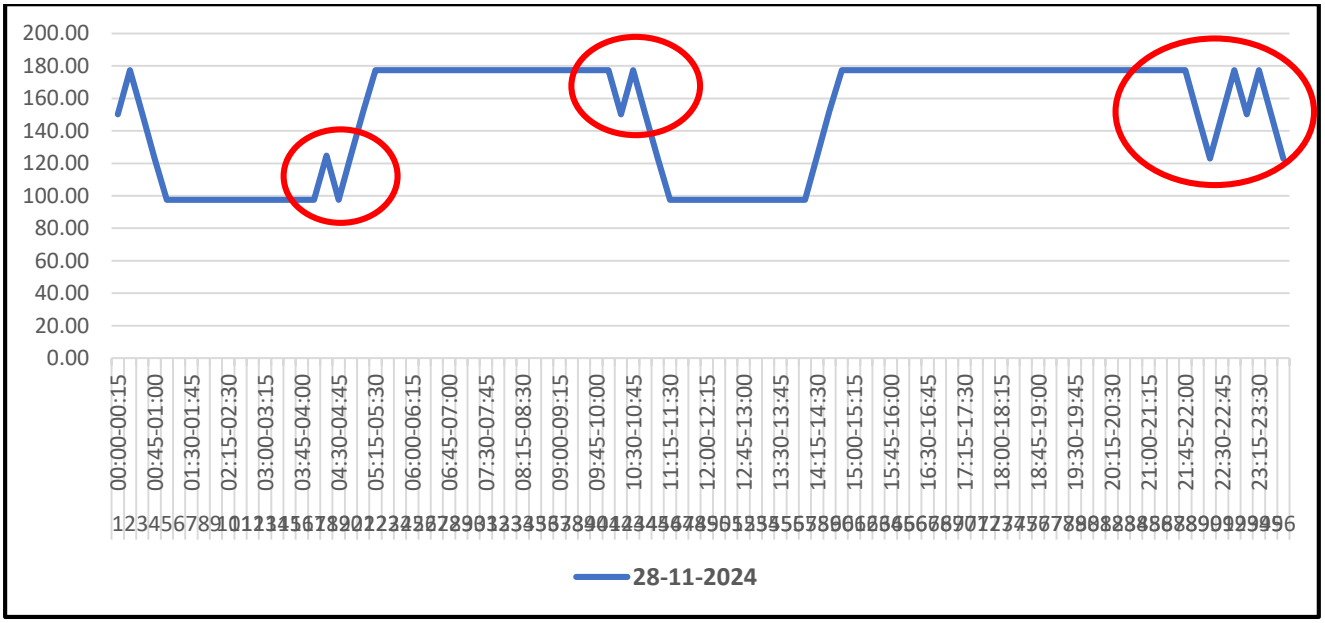
NTPC may confirm timeline and feasibility of Bus splitting with current configuration. Member may discuss.

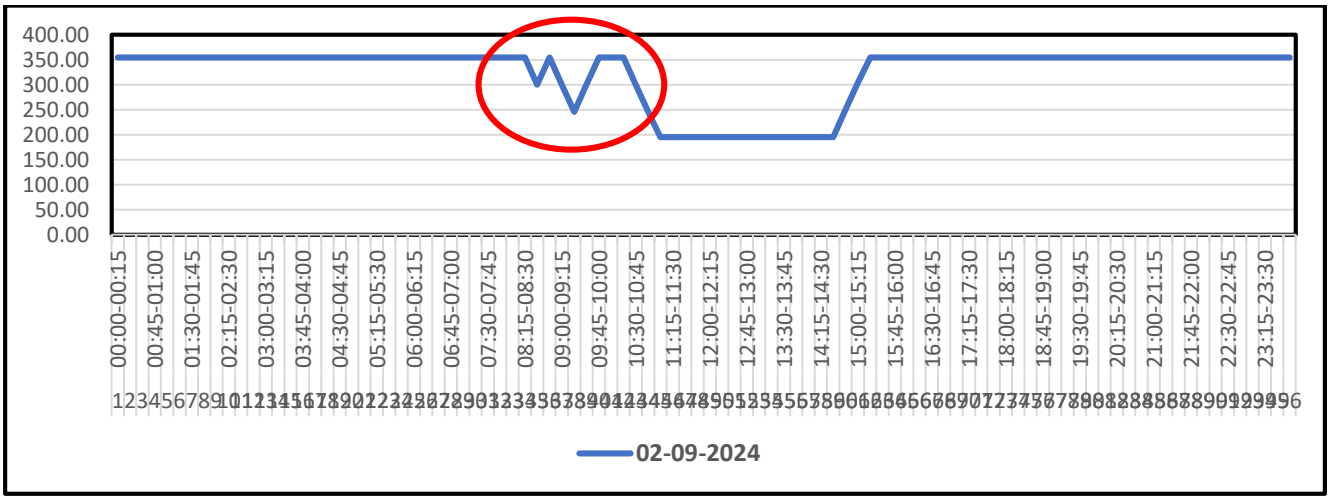
2.9 Frequent Cyclic Ramp up and Ramp down of MTPS-II units: NTPC ER-1

- It has been observed that **frequent cyclic ramp up and ramp down schedule is being given to MTPS-II on multiple occasions**.
- It is to mention that such frequent change in ramping direction is not desirable to generating machines barring some occasional emergency requirement.

- Often/block-to-block cyclic ramping is needlessly stressing our generating unit, as it is very difficult for mechanical systems of the unit to manage change in electrical system of the grid, this is severely increasing the stress on Boiler and Turbine.
- Moreover, such frequent variations in schedule lead to huge losses for the station on account of DSM.

- Detailed cases of Sept'24 & Aug'24 have already been communicated to ERLDC (Copy of detailed cases & mail communications dt. **10.10.2024 & 20.08.2024** attached in **Annex B.2.9**).
- In these cases, frequent cyclic ramp up and ramp down schedule was given mainly on account of combination of AS & SCED. Similar instances have been observed in Nov'24 also (Detailed cases of Nov'24 also attached in **Annex B.2.9**).
- On **28.11.2024** , there were multiple cases observed of such cyclic scheduling pattern, details is as below :





Such frequent schedule variations to be avoided which are mainly due to combination of AS & SCED schedules.

NTPC ER-1 may please explain. Members may discuss.

2.10 Scheduling related issues: NTPC ER-1

- At present SG data is being fetched from ERLDC site every 5 minutes due to restriction by ERLDC after launching of new API. (Earlier in previous software frequency was 1 min). In a block, first revision data is fetched at 3 min 30 sec, considering that ERLDC posts its revision at 3rd minute after starting of block. The next ping to ERLDC website is placed at 8th min 30 sec.
- It is obeserved that from 14th Dec onwards, data is not being updated at ERLDC server before 3 min 30 sec of block starting. This is causing first ping to be unsuccessful and data is not updated till next ping.
- The above problem is causing non availability of data for monitoring in real time for plant operators.

NTPC ER-1 may explain. Members may discuss.

2.11 Report on No Load Charging of R-Y phase of 220kV Rajarhat-New Town-II Cable: ERLDC

220kV Rajarhat-New Town (AA-II)-2 has been out of service since 11:40hrs of 10th July'2024. The line was taken under emergency shutdown by WBSLDC for rectification of gas leakage problem in B-Ph breaker pole and charging attempt failed at the time (18:05hrs) of line charging on the same day. Thereafter, it was declared that the line is under breakdown since the said date.

As per **221st OCC** deliberation:
WBSLDC Apprised:

- Repair of the faulty cable (B phase) is getting delayed due to non-availability of the imported cable jointing kit.
- Neither charging the cable at low voltage nor charging from WBSETCL end is feasible.

Powergrid ER-II Apprised:

- Due to leading charging current drawn by the cable at no load, unbalance may be observed in Rajarhat ICTs between predominantly lagging load and cable charging current (leading).
- Earth fault setting of Rajarhat ICT may be required to be changed.

221st OCC Decision:

- OCC consented to the proposal of no-load charging of R and Y phases of the Rajarhat (PG)-New Town II C (circuit II) on interim basis. In this regard, relay settings of Rajarhat ICTs may be reviewed and modified based on the charging current in two healthy phases of the cable.

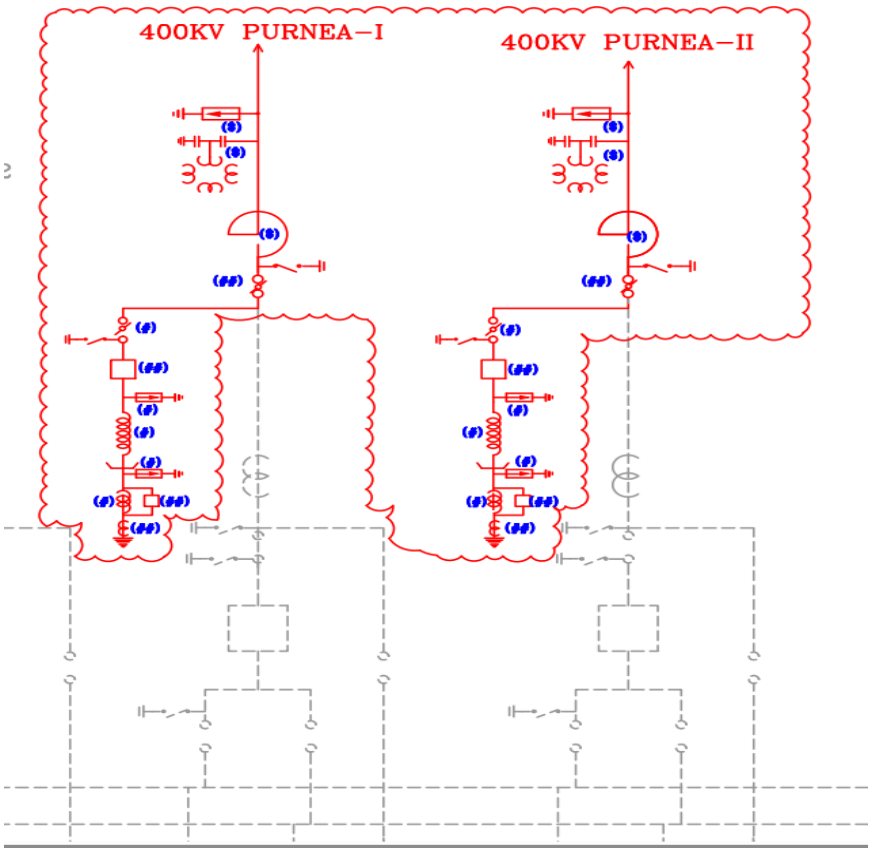
- OCC requested WBSETCL to expedite the cable repairing works and to share progress status of the same with ERPC.

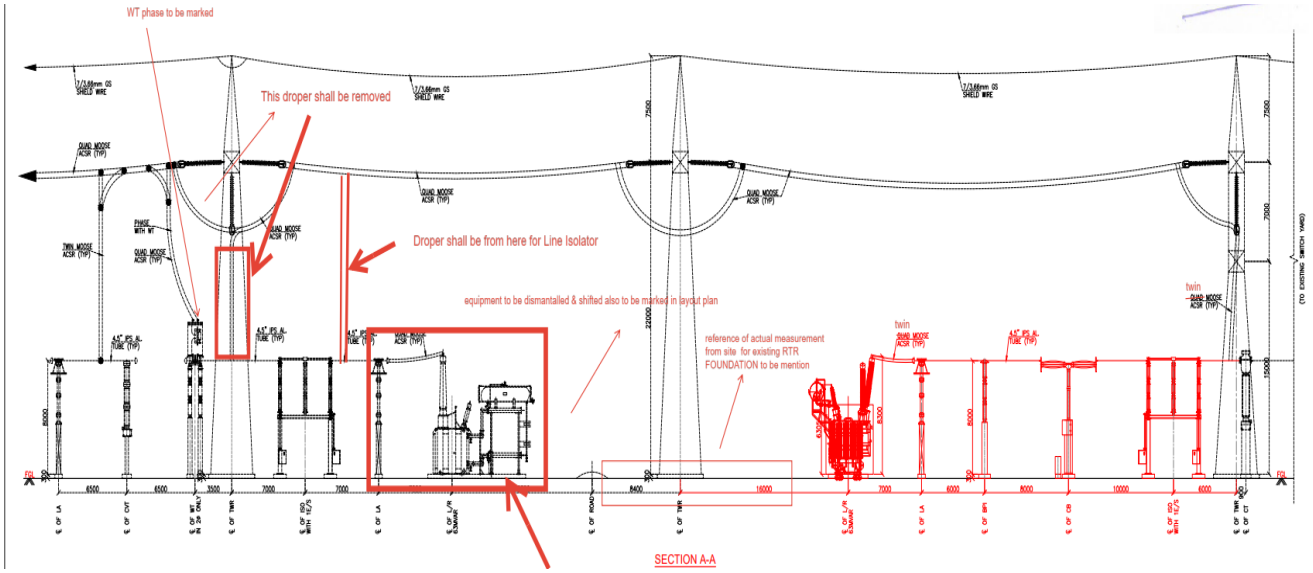
The matter was discussed in 221st ERPC OCC meeting dated 25.11.24 and forum was advised to charge the line (two phases) as requested by WBSLDC to keep the UG cables in healthy condition. Subsequently, R-Y phase of the line was charged on 28.11.2024. Detail report is enclosed in **Annx-B.2.12**

ERLDC may respond. Members may discuss.

2.12 Modification switchable L/R scheme for 400kV Malda-Purnea D/C at Malda SS under project ERSS-XL: Powergrid ER-II

- Under ERSS-XL scheme, existing 400 KV 63 MVAR L/R of 400kV Malda-Purnea D/C at Malda SS will be replaced.
- Further, NGR bypass arrangement along-with additional line isolator is proposed to be introduced in the system for taking the same switchable L/R as B/R whenever required.





- Malda SS is having DMT scheme at all voltage levels.
- Further, 400KV pantograph type bus isolators are used in existing layout for space constrain.
- For this type of layout in DMT scheme, 2 nos. line isolators will be available for a single line if such arrangements of making switchable L/R to B/R are required.
- Using 2 nos. of line isolators for switching of single line is not as per any standard as well as it will cause operational hazards from safety aspect.
- It is therefore proposed that switching arrangements for taking the L/R as B/R will be removed from project scope. However, reactor CB will be available for switching on/Off the standalone L/R.

Powergrid ER-II may explain. Members may discuss.

2.13 Upgradation of Substation Automation System at Rangpo 400/220/132KV Substation: Powergrid ER-II

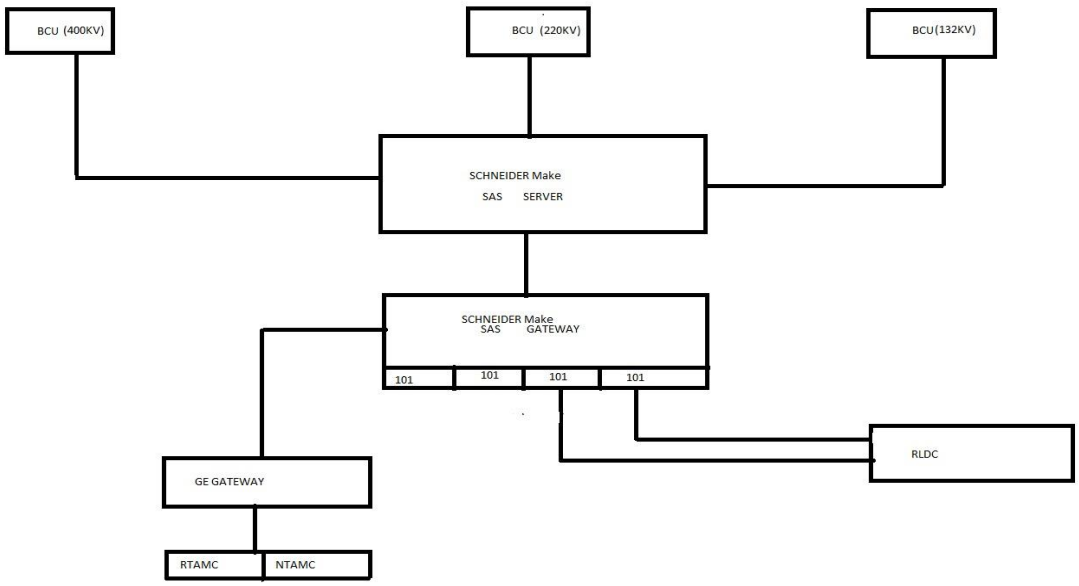
- 400/220/132KV Rangpo is a pooling station located at Sikkim is the most critical substation in Sikkim. Substation Automation System (Schneider Make) was commissioned at Rangpo S/s in 2014.
- Realtime data communication from POWERGRID Rangpo sub-station to ERLDC is done through 101 protocol as there is no provision of 104 protocol in the existing SAS.
- However, for NTAMC/RTAMC communication, additional gateway has been installed for reporting in 104 protocol. Present SAS Architecture is enclosed for reference.
- Now considering present, standard of communications it is prudent to go for complete 104 communication protocol & existing system required to be upgraded for Smart solution based on ethernet communication, ease of maintenance and troubleshooting, easy expandability in future etc.
- The upgradation of the present SAS is also very essential for reporting of SAS in 104 protocol for dual reporting philosophy. The life of the SAS items/IT items has been defined as 7 years as per CERC 2024-29 and the present SAS at Rangpo has already elapsed its life.

- The Cost for the above work is proposed to be booked under **ERBS-II (Schedule completion-July-2026) for all commercial purpose**.
- However, as similar LOA is already placed to M/S. Siemens for ULDC scheme, the rate/Scope will be taken from the same and also work is proposed to be carried out through LOA placed to SIEMENS for "package-Y for RTU replacement/ SAS upgradation package for Eastern region under upgradation of SCADA/RTUs/SAS in POWERGRID" where similar work is ongoing at various substations.

Powergrid ER-II may explain. Members may discuss.

2.14 Proposal for keeping SAS at Durgapur S/S under Package-Y as spare at SAS Lab of Rajarhat: Powergrid ER-II

- Upgradation/Replacement of SCADA/RTUs/SAS in POWERGRID Stations in Eastern Region has been carried out in package-Y by M/s. Siemens under the Project - Upgradation of SCADA/RTU/SAS in Central Sector Stations and strengthening of OPGW in Eastern Region. Under this project, SAS upgradation was envisaged at Durgapur S/S.
- However, during detail engineering stage it is observed that merely upgrading, the communication equipment will not serve the purpose as life of other associated items for data reporting (MFTs/transducers/BCU etc) which are installed in the existing system have also come to an end and also there are many operational challenges as this is an old conventional substation. Therefore, only upgradation of SAS part will not accomplish the desired aim.
- In view of the same, Upgradation of entire Durgapur Substation into a SAS based station (Distributed control) is being undertaken under ADDCAP 2024-2029 tariff block and it is expected that the work will be completed by March-2026.



- Further in Rajarhat Sub-station, POWERGRID, has already developed inhouse SAS Lab, which are used for training/learning/bench testing of various SAS items.

- It is proposed to keep the SAS supplied at Durgapur Substation at SAS Lab, Rajarhat Substation, as ready spare for all Siemens make SAS system of ER-II.
- Regular health monitoring can be done as well same can be used for training & development work.
- Only Supply and F&I cost of the SAS item will be booked in ongoing project and the erection cost will deleted from this project.

Powergrid ER-II may explain. Members may discuss

2.15 Update on AMR Phase-5 Completion: Powergrid ER-II

AMR Phase project was awarded in Mar-24 with scope of integration of additional 320 number of Meters in the AMR system. The schedule completion of the project scope was within Sep-24.

Scope	LOA Qty	Completed within Sep-24	Balance Qty
Integration of new SEM with AMR system	320	209	111

- All Meters that were available for AMR integration have been completed within the stipulated timeline.
- However, the remaining quantity of Meters were being informed after Sep-24 month and those have been informed to ERLDC in a phased manner.
- The requests have been coming from different constituents at different time (all after Sep-24) which is beyond the control of PGCIL/ERLDC.
- Team is working on integration of the remaining Meters, and it is expected to compete the entire scope within 31-Jan-2025, subjected to receipt of balance locations from ERLDC/Utilities.

Powergrid ER-II may explain. Members may discuss.

2.16 Conducting VAPT assessment for AMR Asset in ERLDC (in Compliance of Cyber security guidelines): Powergrid ER-II

- AMR system Data Centre hardware & software was refreshed in Jun-23. New Servers, Networking Devices and the new AMR application are currently being used in AMR system.
- ERLDC using the system for getting the SEM data on weekly basis. Current System is completely isolated from ERLDC IT Network, and the entire data communication is happening over LAN network.
- No public IP based data communication is present, and the AMR application is only accessible at ERLDC LAN Network.
- ➢ However, considering the upcoming requirements and the recent testing/POC of new type of Meters, new set of data requirements etc. it is recommended to conduct a complete VA/PT assessment of the system.
- ➢ This assessment will help to locate the necessary process improvement (If any) areas in order to make the system more robust and eliminate the security vulnerabilities (if any). The VA/PT assessment will be conducted once in every six months, as per the guidelines.

Count of the AMR Hardware as below:

Server	07	AMR Application	01
Managed Switches	02		
Firewall	01		
Router	01		

VA/PT will be conducted on both the Hardware and the Application. Cost estimation has been received from a CERT-IN certified vendor to conduct one round of VAPT. The existing AMR system Contract is valid till Mar-2026, hence VAPT will be needed for upcoming 04 cycles starting from Dec-24 month. Cost involvement will be as below:

Description	**Unit Price (without GST)**	**No. of Cycle**	**Total Price (without GST)**
VAPT of Hardware	40,000	04	1,60,000
Security testing of AMR Application	25,000	04	1,00,000
Total Cost of ownership (without GST)			**2,60,000**

PGCIL will initiate the necessary tendering (Limited tendering among CERT In certified vendors) processes subject to approval.

Powergrid ER-II may explain. Members may discuss.

2.17 List of feeders to be disconnected as a physical regulatory measure to control over drawl by constituents: ERLDC

- It has been observed that All India frequency is going below IEGC band for a considerable period with minimum frequency touching around 49.5 Hz.
- A number of measures are taken by NLDC, RLDCs and SLDCs to control overdrawal in case of sustained low frequency.
- In case non-compliance of RLDC's deviation message, physical disconnection of feeders is also undertaken as a measure of last resort to minimize the over-drawl.
- The list of feeders identified by Eastern region constituents is attached as **Annex B.2.17.1,** which was ratified in the **184th OCC(Annex B.2.17.2)**meeting. However, in the meantime, there is a change in load distribution with the growth of network interconnection and demand. There is a need to review the feeder list.

All constituents are requested to review the following-

I. **Identification of feeders (Addition/modification)**
II. **Feeders-wise Load distribution.**

Members may discuss.

2.18 Review of AUFLS in Eastern region: ERPC

- A Task Force was constituted by NPC vide letter dated 25.08.2023 on Implementation of AUFLS and df/dt scheme under the chairmanship of Member Secretary, SRPC and comprising members from NPC, RPCs and Grid-India.

- The Task force after convening meeting on 11.09.2023 submitted its report to NPC in 14th NPC meeting on 05.02.2024, wherein certain recommendations were made.
- Accordingly, as per decision of 214th OCC meeting, a special meeting was convened on **10.07.2024** to deliberate on successful implementation of Automatic Under Frequency Load Shedding (AUFLS) in Eastern region wherein following course of action was delineated to all constituent ER states.
- **Action points:**

➢ All SLDCs were instructed to shift the load quantum from Stages –III & IV to stage-I & II respectively as an interim measure till new feeders for additional load relief gets identified by individual state DISCOMs.
This must be implemented at the earliest with necessary changes in frequency settings of the existing UFRs and the same shall be reviewed in upcoming OCC meeting.

➢ All SLDCs were advised to share the identified feeders list for revised load relief quantum within a month. The status shall be reviewed in monthly OCC meetings.

➢ Curtailment of critical loads should be avoided. However , in stage-III and stage-IV, as it operates only in severe threat to grid stability, industrial loads may also be considered. Accordingly DVC and IPCL (having dominant industrial consumers) were urged to identify industrial feeders for load relief in stage-III and stage-IV.

➢ All SLDCs were urged to expedite and ensure SCADA visibility of existing as well as newly identified feeders under AUFLS for effective supervision of load relief quantum.

- Based on submission by DVC, revised load relief quantum as follows:

(Figs in MW)

Constituent	Stage-1	Stage-2	Stage-3	Stage-4	Total
Bihar	315	379	442	442	**1577**
Jharkhand	87	105	122	122	**437**
DVC	172	207	241	241	**861**
Odisha	306	367	428	428	**1530**
West Bengal	497	597	696	696	**2486**
Sikkim	5	6	7	7	**25**
Total	**1383**	**1660**	**1937**	**1937**	**6916**

Constituent wise	Annual Consumption	Consumption factor	Demand met	Peak demand factor	Demand contribution
Bihar	40952	0.220	7578	0.236	0.228
Jharkhand	12391	0.067	1923	0.060	0.063
DVC	26214	0.141	3476	0.108	0.125
Odisha	41142	0.221	7104	0.221	0.221
West Bengal	65009	0.349	11868	0.370	0.359
Sikkim	526	0.003	137	0.004	0.004
Total Consumption	**186234**	1.000	**32086**	1.000	1.000

52nd TCC Decision:

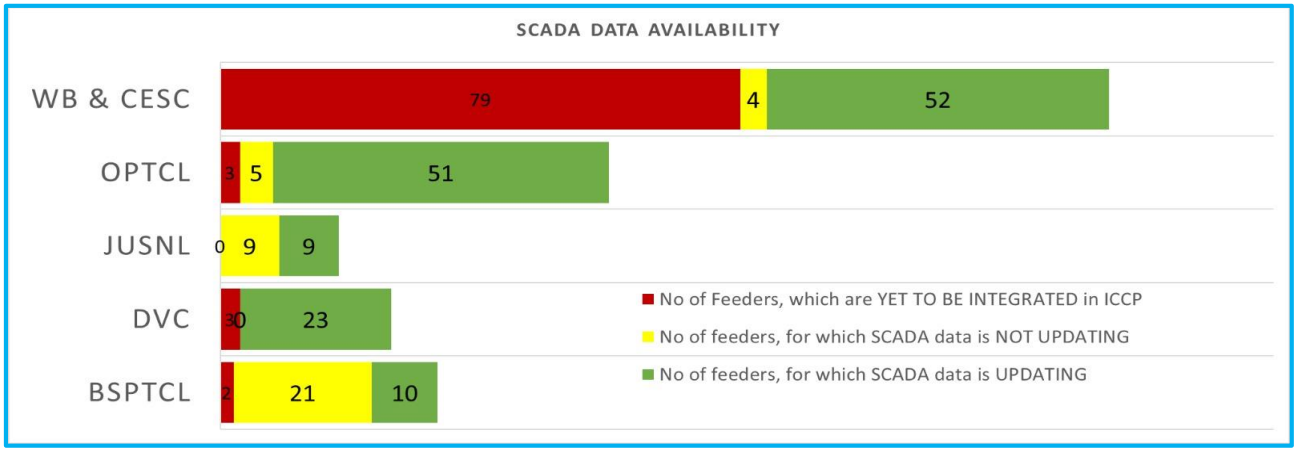
- SLDC, Odisha was directed to take up the matter with DISCOM to identify the feeder list and shifting of load at the earliest to implement AUFLS.
- Director, SLDC Odisha agreed to coordinate with concerned DISCOM and **update in next OCC.**

TCC advised all SLDCs :

- To expedite the process of implementation of AUFLS in stage I & II by shifting load quantum from stage III & IV at the earliest time possible.
- Explore the identification of new feeders to incorporate AUFLS in stage III & IV who have successfully implemented AUFLS in stage I & II by shifting load quantum from stage III & IV.
- To share the list of newly identified feeders with ERPC Secretariat within One Month for information.
- To ensure SCADA data mapping from newly identified UFR feeders at ERLDC level & In case of non-availability of SCADA data, anticipated timelines for making availability of SCADA data must be communicated for all applicable UFR feeders.

Status of shifting AUFLS stage 3 & 4 feeders to **AUFLS Stage 1 and 2** and identification of additional feeders for all stages of AUFLS (as per information received by ERLDC) is attached at **Annex-B.2.18**

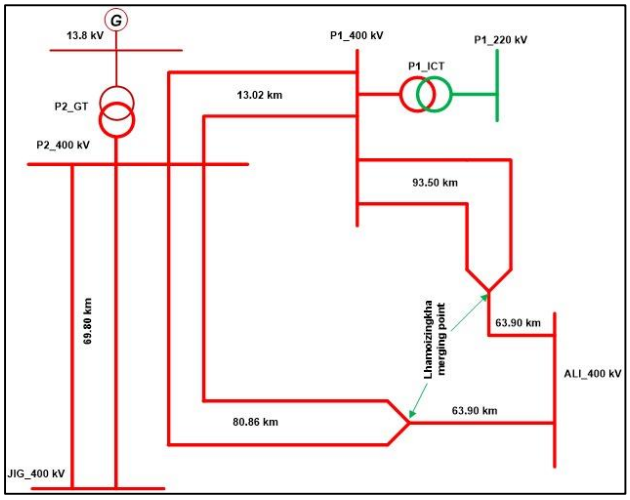
Latest SCADA data availability of feeders identified for AUFLS (as per information available at ERLDC SCADA data) is shown below:



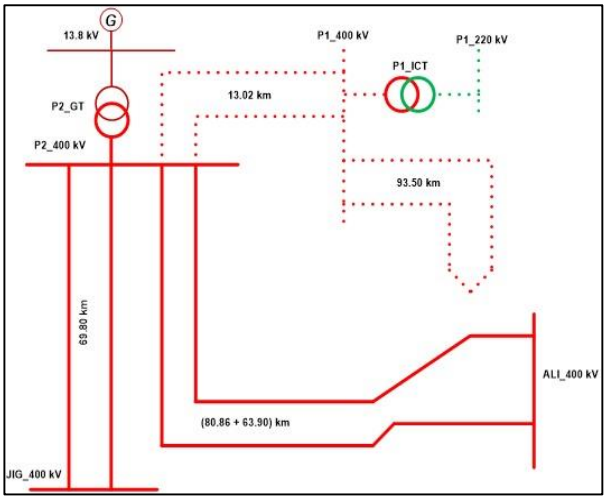
All SLDCs/STUs and individual state DISCOMs may update action taken/future plan w.r.t AUFLS. Members may discuss.

2.19 Status of Interim arrangement 400kV Alipurduar-Punatsangchu – Jigmelling: ERLDC

In the **43rd CCM** of ERPC dated **21.09.2020**, it was decided that Mangdechhu power generation would be evacuated through the interim arrangement of 400 kV Mangdechhu – Jigmeling - Punatsangchhu II – Alipurduar link. Accordingly, interim arrangement of 400kV Alipurduar - Jigmelling D/C through Punatsangchu was agreed.



Original approved configuration



Interim configuration

Bhutan has taken shutdown of 400kV-Alipurduar(PG)-Punasangchu-Jigmelling I & II from 10/12/24 to 25/12/24 to carry out the jumper connection and interconnection removal at Kamichu to facilitate the evacuation of upcoming Punatsangchu-II power generation. As information received from NLDC Bhutan, Punatsangchu-II (170x6 = 1020MW) has started power generation from 16/12/24 and evacuated power through 400kV Punatsangchu-Jigmelling D/C link.

Bhutan is requested to confirm the following:

1. Restoration of original network configuration plan.
2. Generation commissioning schedule.

ERLDC may elaborate.Members may discuss and Bhutan may update.

2.20 Shutdown proposal of generating units for the month of March'2025-ERPC

Maintenance Schedule of Thermal Generating Units of ER during 2024-25 for the month of March'2025							
System	**Station**	**Unit No.**	**Capacity (MW)**	**Period (as per LGBR 2024-25)**		**No. of Days**	**Reason**
				From	**To**		
DVC	Mejia TPS	4	210	07-03-2025	31-03-2025	25	AOH- Boiler, LPT & De-Nox burner
	RTPS	2	600	01-02-2025	07-03-2025	35	AOH- Boiler,Turb, Gen.& De-Nox burner
WBPDCL	Kolaghat TPS	3	210	03-03-2025	12-03-2025	10	PG Test/ Boiler license Renewal

OCC May Approve

Members may discuss.

2.21 Defernent of Planned outage of Thermal generating units scheduled in April to June 2025: CEA

- ✓ Consequent to review meeting by Ministry of Power dated 12.12.2024 wherein minimization of planned outages during April 2025 to June 2025 was reiterated, CEA(GM division) has estimated shifting of around 1000-2000 MW outage planned in Apr-Jun 2025 to Oct-Nov 2025.
- ✓ Accordingly ER GENCOs are requested to consider postponement of following planned outages:

SYSTEM	CAPACITY (MW)	STATION NAME	UNIT NO	FROM	TO	DURATION (DAYS)	PROPOSED OUTAGE REASON
NPGC	660	NABINAGAR STPP	1	21-Jun-25	19-Aug-25	59	AOH(Boiler+Turbine + Gen)
DVC	500	BOKARO TPS `A` EXP	1	25-Mar-25	28-Apr-25	35	COH-Blr, Turb, Gen & HMI upgradation
	210	MEJIA TPS	2	1-Apr-25	28-Aug-25	149	ESP Augmentation
NTPC	500	TALCHER STPS	3	5-May-25	9-Jun-25	35	BOH
	800	DARLIPALI STPS	2	1-Apr-25	10-May-25	39	AOH (Main Turbine Thrust bearing temperature is high(110 deg C)
WBPDCL	210	KOLAGHAT TPS	4	27-Jun-25	21-Jul-25	24	_
	500	SAGARDIGHI TPS	4	1-Apr-25	10-Apr-25	9	Boiler Lic Renewal

Concerned thermal GENCOs may update.Members may discuss.

2.22 Shutdown Program of Generating Units at NKSTPP: NTPC

Unit 1 Annual OH from **23.02.2025** for **35** days to address the following issues:

- Boiler overhauling and boiler license renewal
- Turbine bearing and valve inspection
- LP turbine overhauling
- Generator rotor thread out

OCC may approve.

NTPC may explain. Members may discuss.

2.23 Postponement of overhauling BRBCL units: BRBCL

- Capital Overhaul of Unit-2 is scheduled from 8th Jan 2025 for 45 days. Being a major Overhaul HP, IP, LP Turbine and Generator will be opened and inspected. But in case of Unit 2 Overhaul spare Rotor will not be available at site before commencement of Rotor thread out and inspection activities as per present schedule.
- In unit 3 Capital overhauling in July 2024 crack was found in Generator Rotor during inspection and the same was replaced with spare Rotor. Therefore, it was decided that during Capital Overhauls a spare Rotor should be available at site before Rotor thread out.
- Therefore, it is requested that Unit 2 overhaul be rescheduled from 15th March 2024 onwards.
- This will give us sufficient time to arrange spare Rotor and there by timely complete the Overhauling as per Schedule

OCC may approve.
BRBCL may update. Members may discuss.

2.24 Proposal for Shutdown of units at Rangit HPS (3*20MW): NHPC

Planned outage requested for NHPC for generating units at Rangit HPS(3*20MW) is as follows:

Name of Power Station: RANGIT (3x20MW), SIKKIM

Sl. No.	Unit	IC (MW)	Shutdown Period		Reason
			From	To	
1	I	20	23 December 2024	26 December 2024	Replacement of MIV Seal of all the three Units
2	II	20	23 December 2024	26 December 2024	
3	III	20	23 December 2024	26 December 2024	

OCC may approve.
NHPC may explain. Members may discuss.

2.25 Annual Shutdown of 113 MW Rongnichu HEP: MBPCL

- MBPCL is anticipating the reduction in river inflow in coming months, particularly during the leanest period in February and are planning the annual maintenance activities for the Rongnichu HEP to coincide with this opportunity.
- Accordingly, the plant will undergo a complete shutdown from **15th February 2025 to 28th February 2025** to facilitate the required annual maintenance work.
- The primary activities during this period will include **the replacement of both units' runners and maintenance of the barrage gates**.

OCC may approve.
MBPCL may update. Members may discuss.

2.26 Requirement of AGC Implementation Before COD: SJVN

- As per to Clause 24.2 of the IEGC: *"All thermal generating stations having a capacity of more than 200 MW and hydro generating stations having a capacity of more than 25 MW*

shall submit documents confirming the enablement of automatic operation of the plant from the appropriate load despatch centre by integrating the controls and tele-metering features of their system into the automatic generation control in accordance with the CEA Technical Standards for Construction and the CEA Technical Standards for Connectivity."

- As per the Ministry of Power, Government of India, order dated 18/09/2024, power from the 2 x 660 MW BTPP has been allocated as 85% to Bihar and 15% as Unallocated (UA), effective from the date of commercial operation (COD).
- BTPP, Buxar, will transmit its power through the State Transmission Utility (STU) lines of Bihar at 400 kV and 220 kV.
- As per the Bihar Electricity Grid Code, mandate for Automatic Generation Control (AGC) for COD is not required.
- In this context, deliberation is sought on whether implementing AGC at BTPP, Buxar, is mandatory before COD based on the above provisions.

SJVN may explain. Members may discuss.

2.27 Power Evacuation of BTPP through Buxar-Naubatpur 400 kV Lines: SJVN

- During the 206th OCC meeting held on 31.08.2023, consent was granted for the provision of startup power to the 2x660 MW Buxar Thermal Power Project (BTPP), Chausa, Buxar, through a temporary arrangement at the 400 kV through Naubatpur until the 220 kV system is operational.
- At present, BTPP, Buxar, is drawing startup power from SBPDCL via the 400 kV Buxar—Naubatpur Circuit-2, as per the temporary arrangement suggested in the 206th OCC meeting.
- The 220 kV GIS in BTPP is expected to be commissioned by January 2025, following which STPL plans to transition the startup power supply from the 400 kV line to the 220 kV line.
- In this context, STPL is seeking approval to allow evacuating the power through 400 kV Buxar—Naubatpur D/C lines till the readiness of the bay at Naubatpur for smooth Evacuation of Power.

SJVN may explain. Members may discuss.

2.28 Power restoration plan for NKSTPP in case of total collapse of eastern region grid: NTPC

In Case of Total Collapse of Eastern Region Grid, Black Start & Restoration Procedure like Pre-define Black Start Source, Power route and associated Substations for Startup power for NTPC North Karanpura" is not available. ERLDC to provide the detailed Black Start & Restoration plan/procedure for NTPC North Karanpura.

NKSTPP and ERLDC may please explain. Members may discuss.

2.29 Discrepancies in SG and DC for NKSTPP: NTPC

Discrepancies in SG and DC for NKSTPP:

- SG was more than DC for **Block No.13,17,89,93 & 94** on **15.12.2024** and **Block No.89 & 95** on **14.12.2024**. OCC is requested to deliberate.

NTPC may please explain. Members may discuss.

2.30 Periodic Testing of power system elements: ERPC

As mandated in **IEGC 2023**, **40.1** & **40.2,** periodic tests shall be carried out on power system elements to ascertain the correctness of mathematical models used for simulation studies as well as ensuring desired performance during an event in the system.

Relevant portion of clause is as below:

Quote:

"

40. PERIODIC TESTING

……..

40.2 (a) *The owner of the power system element shall be responsible for carrying out tests as specified in these regulations and for submitting reports to NLDC, RLDCs, CEA and CTU for all elements and to STUs and SLDCs for intra-State elements*."

40.2 (b) "*All equipment owners shall submit a testing plan for the next year to the concerned RPC by 31st October to ensure proper coordination during testing as per the schedule. In case of any change in the schedule, the owners shall inform the concerned RPC in advance*.

……"

Unquote

In 217th OCC Meeting held on 24.07.2024, the matter was discussed in detail and OCC advised all the generators & owners of HVDC/FACTS devices to strictly adhere to the IEGC 2023 guidelines & submit the required testing data & plan to ERPC at the earliest (as per clause 40.2.(b).

None of the generators or owners of HVDC/FACTS devices have submitted the testing plan yet. All are requested to submit the testing schedule at the earliest.

Power System Elements	***Tests***	***Applicability***
Synchronous Generator	*(1) Real and Reactive Power Capability assessment.* *(2) Assessment of Reactive Power Control Capability as per CEA Technical Standards forConnectivity* *(3) Model Validation and verification test for the complete Generator and Excitation System model including PSS.* *(4) Model Validation and verification of Turbine/Governor and Load Control or Active Power/ Frequency Control Functions.* *(5) Testing of Governor performance and Automatic Generation Control.*	*Individual Unit of rating 100MW and above for Coal/lignite, 50MW and above gas turbine and 25 MW and above for Hydro.*

HVDC/FACTS Devices	*(1) Reactive Power Controller (RPC) Capability for HVDC/FACTS* *(2) Filter bank adequacy assessment based on present grid condition, in consultation with NLDC.* *(3) Validation of response by FACTS devices as per settings.*	*To all ISTS HVDC as well as Intra-State HVDC/FACTS, as applicable*

221st OCC Meeting:

- All GENCOs of ER were advised to furnish the testing plan i.r.o individual synchronous generators within a week positively.
- ERLDC was requested to maintain a consolidated database on testing schedule of all generating utilities of ER.

ERLDC had already shared a Google sheet link to update the testing schedule and circulated the link to Gencos. Link of the Google sheet is as below:
Periodic testing - Google Sheets:
https://docs.google.com/spreadsheets/d/1m6KCkONdObMhre9-1me1kvHTEBYUdXUOISYdn5FR4fM/edit?gid=0#gid=0
NTPC, CESC, MPL, Bihar & DVC submitted the tentative schedule for testing. **All other Gencos are requested to submit schedule in the Google sheet.**

All GENCOs and HVDC/FACTS owners may update.

2.31 Periodic Mock Drill Exercises in areas of generation, transmission and distribution of the power sector: ERPC

In compliance to **Disaster Management Plan for Power Sector (2022**) as drafted by **CEA**(as per Disaster Management Act 2005) and approved by Ministry of Power (Govt. of India) as well as in order to be prepared for any eventuality, periodic mock drill exercises are to be undertaken in various areas of generation, transmission and distribution of the power sector by considering various crisis and disaster situations like an earthquake, floods etc. Depending on the vulnerability of the installations/plant, mock drills to handle such situations need to be undertaken. The utilities are also required to ensure that at least one mock drill exercise for every crisis/disaster situation to which the installation/plant is vulnerable is undertaken in each quarter. The adverse observations made on each event of Mock drill should be taken into account and it should be ensured to prevent occurrence of such undesirable events in the future.

In this regard, Secretary (Security) , Cabinet Secretariat, Govt of India has stressed on undertaking the following measures:

- ✓ Availability of details pertaining to local district authorities, revenue authorities, law enforcement, fire management authorities, etc., across the townships
- ✓ Adequate vetting of personnel/organisation responsible for township security by local law enforcement agencies.
- ✓ Regular conduct of mock drills in the townships, especially evacuation drills with
- ✓ ambulance and drills for handling major fire accidents.

Letter from Joint Secretary(MOP) to all power/energy secretaries (states) enclosed at **Annex-B.2.19**.
Till now quarterly mock drill reports have been received from NHPC and WBPDCL. Mock drill reports regularly received from WBPDCL. NTPC has shared mock drill reports for ER thermal generating units for Q2 of FY 2024-25

☐ **Action points:**

As per deliberation of **1st MEETING ON REGIONAL DISASTER MANAGEMENT** (EASTERN REGION) dated **09.07.2024(**MOM at **Annex-B.2.19** :

- At least one mock drill exercise for every crisis/disaster situation to which the installation/plant is vulnerable must be undertaken in each quarter and quarterly report by the utilities to be shared with CEA for review and onward submission to Ministry of Power (Govt of India) . (Action: All thermal GENCOs (Central,IPP), all hydro generating stations, all ISTS licensees . SLDCs to coordinate with respective GENCOs,STUs and DISCOMs within their jurisdiction)
- Utilities are requested to share the experience on the mock drill exercises and scope for improvements.

221st OCC Decision:
OCC advised all the utilities to:

- Conduct periodic Mock Drills i.e. at least one mock drill exercise in each quarter to which the installation/plant is vulnerable in order to be prepared for any unforeseen eventuality.
- Share Quarterly mock drill reports with ERPC which will then be sent to CEA for review & finally report will be submitted to Ministry of Power (Govt of India).This is in compliance to Disaster Management Plan in Power sector and Disaster management Act 2005.
  All concerned utilities may update action plan.

2.32 Training on working principle of Energy Meters and vis-a-vis the AMR system for data retrieval: Powergrid ER-II

- In Eastern Region, all the constituents, ERLDC, ERPC have been dealing with different type of Meters, different protocols, and the subsequent automated system for Meter data collection. Also, the system is going through periodic upgradation, process improvements, various security aspects in order to be prepared for the upcoming regulations of Renewable Energy accounting.
- In this regard, PGCIL is planning to organize a training session for all the constituents of ER along with ERLDC, ERPC to give a detailed understanding of the process. The proposed date will be finalized in consultation with ERPC/ERLDC. Mainly Online training training session will be conducted for various OEM,s and first will be done for M/S. Secure make meters in Jan-2025.

Members may discuss.

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

3.1. ER Grid performance during November 2024.

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month November-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)
452.1 MU	526.1 MU, 01.11.2024	25883 MW, 02.11.2024 at 17:45 Hrs.	15055 MW, 25.11.2024 at 03:48 Hrs.	5904	6067

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

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

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

Name of the scheme	Implementation timeframe	Implementation mode	Implementing agency	Estimated Cost (Rs. in Cr)

ERES-44	18 months (15 months on best effort basis) from the date of allocation	RTM	Powergrid	385.77

WBSETCL works associated with reconductoring of ISTS lines

- In the NCT(National Committee on Transmission) meeting dated 23.10.2024 , the following were decided:
- WBSETCL shall reconductor their following lines sections under intra-state scheme matching with completion of ISTS scheme namely ERES-44:
- ✓ About 4 km intra-state portion of Alipurduar (POWERGRID) Falakata (WBSETCL) 220 kV D/C line at Falakata end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Falakata (WBSETCL) end commensurate with rating of HTLS (1250 A).
- ✓ About 4 km intra-state portion of Birpara (POWERGRID) - Falakata (WBSETCL) 220 kV D/C line at Falakata end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Falakata (WBSETCL) end commensurate with rating of HTLS (1250 A).
- ✓ About 2 km intra-state portion of Dalkhola (POWERGRID) - Gazole (WBSETCL) 220 kV D/C line at Gazole end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Gazole (WBSETCL) end commensurate with rating of HTLS (1250 A).
- ✓ About 2km intra-state portion of Gazole (WBSETCL) - Malda (POWERGRID) 220 kV D/C line at Gazole end with HTLS conductor of ampacity 1250 A along with necessary upgradation of associated 220 kV bay equipment at Gazole (WBSETCL) end commensurate with rating of HTLS (1250 A).
- WBSETCL will LILO the Dhalkola - Gazole 220 kV D/C line with 1250 A HTLS under their intra-state scheme for establishment of 220 kV level at their existing 132/33kV Raiganj (WBSETCL) S/S.
- ISTS licensee and WBSETCL shall coordinate for reconductoring of their respective portion of the lines matching with completion schedule of this scheme.
- It is kindly requested that WBSETCL may note the scope of works (as provided in the minutes of NCT) and coordinate with POWERGRID for matching implementation of their works.
- The **progress report** may be shared on **monthly** basis to **CEA**, **ERPC** and **CTU**.
- MOM of NCT meeting dated 23.10.2024 along with CTU letter attached at **Annex-B.3.2**

As per **221st OCC** Deliberation:

- OCC was apprised of the decision in the NCT meeting (23.10.2024) on reconductoring of 220 kV network of Chukha Transmission system (CTS).
- Powergrid ER-II intimated:
  - Tendering process of reconductoring works shall commence soon and NIT will be floated within a month.Award of contract shall take around 7-8 months

- BOQ for reconductoring works is currently under progress wherein provision of TLA is included in view of increased incidents of autoreclosure and tripping in the thunder prone area of North Bengal.
- Most of the end-equipment connected to Chukha Transmission system have been upgraded.
- Shutdown requirement of the critical in-service 220 kV lines was highlighted.
- In absence of WBSETCL representative, the modalities of reconductoring works to carried out on part of WBSETCL matching with the timeframe of ISTS lines, could not be finalized.

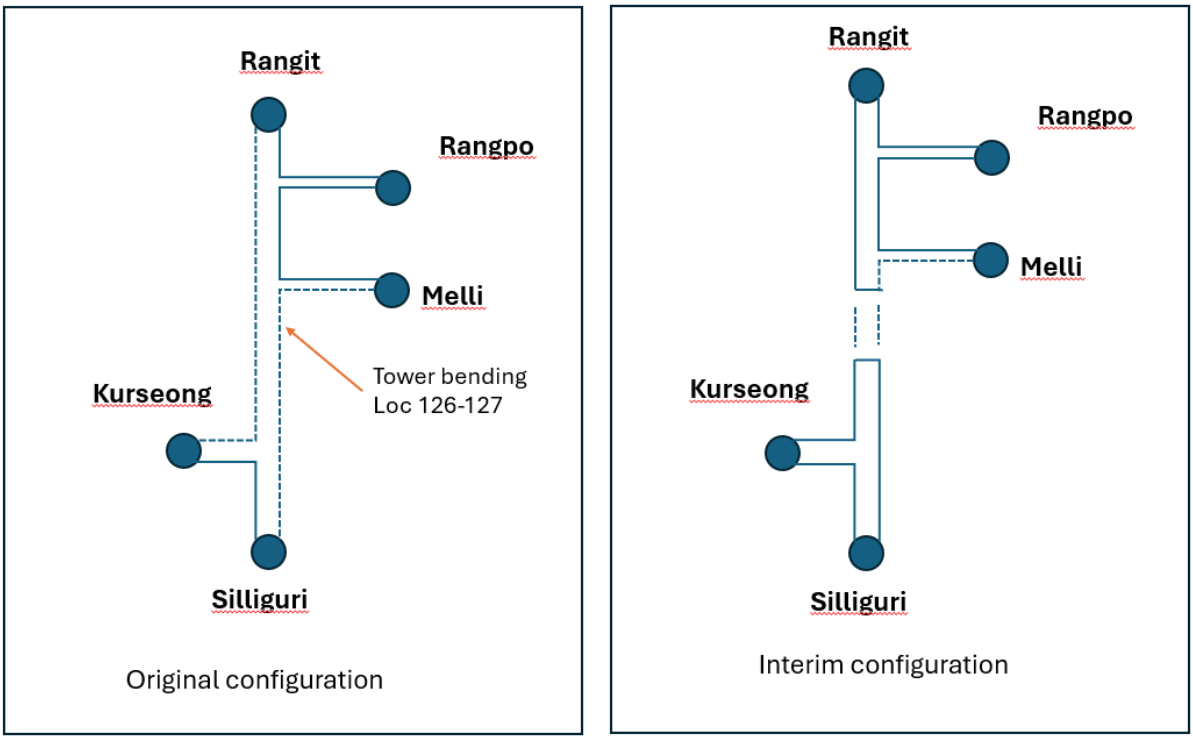
221st OCC Decision:

- OCC advised Powergrid ER-II to expedite the reconductoring works of CTS as per timeline approved in 24th NCT meeting (MOM attached at **Annex-B.3.2**) and share monthly progress report of the same with CEA, CTU and ERPC.
- Powergrid was also advised to conduct a bilateral meeting with Bhutan authorities to streamline the reconductoring plan in portions of 220 kV lines within the territory of Bhutan. This has to be done prior to proceeding with the tendering process of reconductoring works.
- OCC opined that shutdown requests pertaining to reconductoring of CTS shall be treated on priority and to be approved to the best feasible extent so that reconductoring of CTS gets completed as per timeline approved in 24th NCT meeting.
- WBSETCL was advised to coordinate with Powergrid ER-II for carrying out reconductoring works on intra-state portions of 220 kV lines under CTS matching with the timeframe of ISTS lines. This is in compliance to decisions of 24th NCT meeting.

WBSETCL and Powergrid may respond. Members may discuss.

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

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



220th OCC Decision

- OCC expressed serious concern on total generation loss of Chuzachen HEP due to multiple trippings of 132 kV Chuzachen-Rangpo D/C line.
- OCC advised Sikkim to expedite in implementation of Committee recommendations i.r.o increasing ground clearance by construction of new tower(between loc. 28-29) and hill cutting (around tower no. 27). Update on the same needs to submitted to ERPC/ERLDC every week.

As per **221st OCC** deliberation:

- Powergrid ER-II updated that there were persistent ROW issues in tea garden adjoining the damaged tower location. Also Hill shanking observed around the affected area.
- Excessive tension of the conductor in vicinity of damaged tower no-127 due to power line crossing the span. Dismantling of Tower No-127 is under progress and would be completed by 07.12.2024.
- Soil testing and piling works are presently being carried out. Based on soil testing results, new foundation works as well as rectification of Tower No-126 shall be taken up.
- Erection works shall commence from 1st week of January 2025.Tower No-127 to be erected by 06.01.2025 while rectification of Tower No-126 to be completed by 16.01.2025.
- Re-stringing in spans :127-128 and 126-127 to be completed by 25.01.2025 and 29.01.2025 respectively.
- Modification of jumpering to make original ckt of 132 KV Siliguri-Melli Ckt and may be tentatively taken into service by 30.01.2025.

- Modification of jumpering to make original ckt of 132 KV Siliguri-Kursioung Ckt and may be tentatively taken into service by 31.01.2025.

221st OCC Decision:

- OCC requested Powergrid ER-II to expedite restoration activity of original configuration of 132 KV D/C Siliguri-Melli & Rangit-Kurseong Lines to the best feasible extent.
- OCC urged Govt. of Sikkim to extend all possible assistance to Powergrid ER-II in resolving the ROW issues and restoring damaged towers at the earliest.

WBSETCL and Powergrid may update. Members may discuss.

3.4. Update on actions taken to prevent repeated tripping of 132 kV Chuzachen-Rangpo D/C: ERPC

- **132 kV Chuzachen-Rangpo D/C** tripped more than **10 times** since **May'24** causing total generation loss occurred at Chuzachen HEP (110 MW) due to sequential tripping of both lines in three instances.
- In most of the trippings, **phase to phase** fault was reported with a distance of around **12 km** from **Rangpo**.
- A joint committee with members from Powergrid, Chuzachen HEP and Sikkim transmission wing, Dept. of Power (Sikkim) was constituted for joint site inspection. The committee submitted its report after visiting the site on 01.10.2024.
- Committee observations during the visit were as below:

✓ Critical tree infringement and bamboo trees between loc. 27-29 along the corridor.
✓ Severe infringement along with several flashover marks on the conductor and burnt trees along the corridor.
✓ Less ground clearance b/w loc. 28-29 for Ckt-1 (4.1 meter instead of minimum requirement of 6.1 meter).

- **The Committee recommended two new towers to be constructed between loc. 28-29 and 35-36 (one each) and hill cutting along the periphery of tower no. 27 to improve ground clearance.**
- Considering the severity of less ground clearance and potential of damage to human life, the recommended measures need to be implemented on an immediate basis.

- As per **221st OCC** Deliberation:
  In absence of Sikkim representative, the latest status could not be updated

The same matter was discussed in the **220th OCC** Meeting wherein **OCC advised Sikkim to expedite in implementation of Committee recommendations i.r.o increasing ground clearance by construction of a new tower(between loc. 28-29) and hill cutting (around tower no. 27). OCC also advised to update the same to ERPC/ERLDC every week**. However, the update has yet not been received.

Sikkim may update. Members may discuss.

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

- HVDC Talcher-Kolar Pole-2 was operated at reduced capacity from March 24, 2024, due to problem with the R-phase converter transformer at the Talcher end. There was no spare converter transformer at Talcher and subsequently, it was decided to shift the spare converter transformer from HVDC Kolar to Talcher (PG)
- 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-Meeramundali D/C and generation backdown was done either manually or through operation of SPS.
- Meanwhile, power order of Talcher-Kolar poles was reduced to 1500MW from 2000MW due to which other critical lines of the region were getting overloaded. **Accordingly, Talcher generation was curtailed in the range of 800-900MW during peak hours for approximately 50 days in the summer, impacting both Eastern Region (ER) and Southern Region (SR) beneficiaries.** Later on, with decrease in ambient temperature HVDC Talcher-Kolar power order was restored and generation back down was withdrawn.
- **To mitigate the risk of similar power supply challenges experienced during summer 2024, Odisha (PG) may share the replacement plan of existing Converter Transformer.**

As per **221st OCC** Deliberation.:
Powergrid Odisha apprised:

- The Converter transformer has arrived at Talcher(PG) in the first week of October 2024 and presently oil filtration is under process.The same shall be ready for charging by end of November 2024.
- If this converter transformer is put into service, no spare will be available at HVDC Talcher or HVDC Kolar stations to deal with any contingency. So it is proposed to keep this converter transformer as hot spare (ready for service) that may be replaced within 5-6 days as per grid requirement.

ERLDC submitted:
If the converter transformer is kept as hot spare as propsed bt Powergrid Odisha, it shall lead to backing down of generation at NTPC Talcher for at least one week.Consequently NTPC Talcher as well as ER beneficiaries will be adversely affected.

221st OCC Decision
OCC recommended Powergrid Odisha to keep the existing converter transformer as spare and put the new one into service at HVDC Talcher station. Powergrid Odisha agreed to propose the same to Powergrid Corporate for obtaining necessary clearance at the earliest.

Powergrid Odisha may update.Members may discuss.

3.6. Update on Implementation of AGC in Intra-state generating units: ERLDC

- AGC is now operational at most ISGS plants across India, which together have a total installed capacity exceeding 70 GW. However, the dispatchable margin provided through AGC and Secondary Reserve Ancillary Services (SRAS) remains insufficient for maintaining frequency within the IEGC band. With the increasing penetration of renewable

energy, managing frequency is expected to become more challenging in the future. Therefore, it is crucial to enhance frequency control and stability through increased participation from intra-state AGC.

- In response to this need, efforts are underway to encourage more intra-state generators to join the SRAS scheme. Feasibility reports have been prepared, and stakeholder meetings have been held with DVC, West Bengal, and Bihar to explore potential solutions and address any concerns.
- Present status of **Intra-state AGC integration** process is as follows:

SLDC/State	Generator name	Unit Capacity (MW)	Status
Bihar	Barauni unit # 8 & 9	2x250	Pending discussion between NTPC Barauni, SLDC Bihar and its DISCOM for mutually agreeing to Mechanism for recovery of one-time cost of AGC implementation and Mechanism for Sharing of gains which is to be fixed bilaterally.
DVC	Mejia-B, DSTPS and Koderma	(2x500) (2x500) (2x500)	Final procurement order was awarded to Siemens on **7th August 2024** with timeline of completion of **4 months.**
West Bengal	Units of WBPDCL	-	West Bengal SERC notified WBERC (Ancillary Services) regulation, 2023 dated 26th December 2023. M/s WBPDCL refers to WBSERC for implementing the AGC server at WBSLDC after which plants will be connected to SLDC one by one.

As per deliberation in **52nd TCC:**

- DVC apprised that final procurement order was awarded to Siemens on 7th August 2024 for all identified six Units & it is expected that within 4 months AGC implementation will be completed.

- NTPC representative informed that NOC for implementing AGC in its Barauni unit # 8 & 9 is yet to be received from SLDC, Bihar & also discussion is pending between NTPC Barauni, SLDC Bihar and its DISCOM for mutually agreeing to cost recovery and gain sharing mechanism.

- RED, NTPC mentioned that since the need for AGC Implementation in its Barauni unit # 8

& 9 is principally agreed & for this, a formal clearance from Bihar is required. They will resolve the issue by joint meeting.

- ED, ERLDC requested SLDC, Odisha to organize a meeting with OPGC to formulate a methodology so that OPGC units can be integrated with AGC.

- SLDC, Odisha submitted that attempt has been made by OPGC but OEM has not yet responded.

- OPGC suggested to have a special meeting with M/S BHEL & SLDC, Odisha to finalize the modalities of Implementation of AGC & will update the status within one month.

- WB SLDC submitted that another meeting shall be convened with WBPDCL to resolve contractual issues and decide next course of action.

TCC Decision:

- TCC appreciated efforts of DVC in initiating AGC implementation process
- SLDC Bihar and Bihar DISCOMs were advised to resolve the pending issues with NTPC bilaterally for AGC implementation at the earliest.
- SLDC Odisha was advised to organize meeting with OPGC and ERLDC to resolve AGC implementation in OPGC units.
- WB SLDC was advised to resolve contractual issues with WBPDCL bilaterally for expediting AGC implementation.
- TCC advised all the concerned utilities to expedite the execution process & complete the AGC Implementation as early as possible.
- Status of AGC implementation to be updated regularly in OCC meetings.

As per **221st OCC** Deliberation:

- DVC updated that final procurement order for AGC has been placed.
- WBPDCL informed that the modalities of procurement are yet to be finalized with WBSLDC.

221st OCC decision

- OCC advised NTPC and Bihar to convene joint meeting for obtaining formal clearance from Bihar i.r.o AGC implementation.
- WBPDCL was advised to coordinate with WB SLDC and update the status in next OCC meeting.

All concerned may update the status. Members may discuss.

3.7. LAN integration & Port Opening status of AMR Phase-5 :Powergrid ER-II

In reference to the agenda discussed previously in OCC, the following locations are yet to be connected through LAN connection to ERLDC:-

SNO	STATE	UTILITY	SUBSTATION

1	WB	WBSETCL	KLC BANTALA
2	BIHAR	BGCL	DUMRAO NEW
3	JHARKHAND	JSEB	LATEHAR (**)

It may be noted that, TCS/ERLDC team has requested many times for port opening but till now no confirmation received from respective utilities.

** **- integration request received on 19th Dec 2024.**

It is requested to enable LAN for these locations as early as possible. LAN port details may be shared with PGCIL/ERLDC.

Powergrid ER-II may explain. Members may discuss.

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

221ST 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.
- OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC in specified format as well as uploading of forecasting error on their respective websites.
- SLDCs who are submitting day ahead forecast were advised to also share the forecasting data for their respective control areas on weekly as well as monthly basis with ERLDC.
- All SLDCs were also urged to regularly furnish resource adequacy data besides demand forecast.
- SLDC Odisha was advised to expedite implementation of the demand forecasting software and positively update the status in next OCC.

Latest Forecast receipt as 15.12.24 status is shown below:

DATA RECEIPT STATUS BY 5th DAY FOR THE MONTH OF	JAN 25 FORECAST
Bihar	NO
DVC	YES
Jharkhand	YES
Odisha	NO
Sikkim	YES
West Bengal	NO

Weekly Resouce Adequacy:

DATA RECEIPT STATUS BY 1ST WORKING DAY FOR THE WEEK OF	25.11.24 TO 01.12.2024_FC	02.12.2024 TO 08.12.2024_FC	09.12.24 TO 15.12.24_FC	16.12.2024 TO 22.12.2024_FC	23.12.2024 TO 29.12.2024_FC
Bihar	NO	NO	NO	NO	NO
DVC	NO	NO	NO	NO	NO
Jharkhand	NO	NO	NO	NO	YES
Odisha	NO	NO	NO	NO	NO
Sikkim	YES	YES	YES	YES	YES
West Bengal	NO	NO	NO	NO	NO

Weekly Forecast:

DATA RECEIPT STATUS BY 1ST WORKING DAY FOR THE WEEK OF	25.11.24 TO 01.12.2024_FC	02.12.2024 TO 08.12.2024_FC	09.12.24 TO 15.12.24_FC	16.12.2024 TO 22.12.2024_FC	23.12.2024 TO 29.12.2024_FC
Bihar	NO	NO	NO	YES	YES
DVC	YES	YES	YES	YES	YES
Jharkhand	NO	YES	NO	YES	YES
Odisha	NO	NO	NO	NO	NO
Sikkim	YES	YES	YES	YES	YES
West Bengal	NO	NO	NO	NO	NO

Resource adequacy Data Receipt Status

DATA RECEIPT STATUS BY 5th DAY FOR THE MONTH OF	JAN 25 RA
Bihar	NO
DVC	NO
Jharkhand	YES
Odisha	NO
Sikkim	YES
West Bengal	NO

Daily Resource Adequacy:

DATE	Bihar RA	DVC RA	Jharkhand RA	Odisha RA	Sikkim RA	West Bengal RA
01-12-2024	NO	NO	NO	NO	YES	NO

02-12-2024	NO	NO	NO	NO	YES	NO
03-12-2024	NO	NO	NO	NO	YES	NO
04-12-2024	NO	NO	NO	NO	YES	NO
05-12-2024	NO	NO	NO	NO	YES	NO
06-12-2024	NO	NO	NO	NO	YES	NO
07-12-2024	NO	NO	NO	NO	YES	NO
08-12-2024	NO	NO	NO	NO	YES	NO
09-12-2024	NO	NO	NO	NO	YES	NO
10-12-2024	NO	NO	NO	NO	YES	NO
11-12-2024	NO	NO	NO	NO	YES	NO
12-12-2024	NO	NO	NO	NO	YES	NO
13-12-2024	NO	NO	NO	NO	YES	NO
14-12-2024	NO	NO	NO	NO	YES	NO
15-12-2024	NO	NO	NO	NO	YES	NO
16-12-2024	NO	NO	YES	NO	YES	NO
17-12-2024	NO	NO	YES	NO	YES	NO
18-12-2024	NO	NO	YES	NO	YES	NO
19-12-2024	NO	NO	YES	NO	YES	NO
20-12-2024	NO	NO	YES	NO	YES	NO
21-12-2024	NO	NO	YES	NO	YES	NO
22-12-2024	NO	NO	YES	NO	YES	NO
23-12-2024	NO	NO	YES	NO	YES	NO
24-12-2024	NO	NO	YES	NO	YES	NO
25-12-2024	NO	NO	YES	YES	YES	YES
26-12-2024	NO	NO	YES	YES	YES	YES
27-12-2024	NO	NO	YES	YES	YES	YES
28-12-2024	NO	NO	YES	NO	YES	YES
29-12-2024	NO	NO	YES	YES	YES	YES
30-12-2024	NO	NO	YES	YES	YES	YES

Daily Forecast:

DATE	Bihar Forecast	DVC FC	Jharkhand FC	Odisha FC	Sikkim FC	West Bengal FC
01-12-2024	NO	YES	YES	YES	YES	YES
02-12-2024	NO	YES	YES	YES	YES	YES
03-12-2024	NO	YES	YES	YES	YES	YES
04-12-2024	YES	YES	YES	YES	YES	YES
05-12-2024	YES	YES	YES	YES	YES	YES
06-12-2024	NO	YES	YES	YES	YES	YES
07-12-2024	YES	YES	YES	YES	YES	YES
08-12-2024	YES	YES	YES	YES	YES	YES

09-12-2024	NO	YES	YES	YES	YES	YES
10-12-2024	NO	YES	YES	YES	YES	YES
11-12-2024	YES	YES	YES	YES	YES	YES
12-12-2024	YES	YES	YES	YES	YES	YES
13-12-2024	YES	YES	YES	YES	YES	YES
14-12-2024	YES	YES	YES	YES	YES	YES
15-12-2024	YES	YES	YES	YES	YES	YES
16-12-2024	YES	YES	YES	YES	YES	YES
17-12-2024	YES	YES	YES	YES	YES	YES
18-12-2024	YES	YES	YES	YES	YES	YES
19-12-2024	YES	YES	YES	YES	YES	YES
20-12-2024	YES	NO	YES	NO	YES	YES
21-12-2024	NO	YES	YES	YES	YES	YES
22-12-2024	YES	YES	YES	YES	YES	YES
23-12-2024	YES	YES	YES	YES	YES	YES
24-12-2024	NO	YES	YES	YES	YES	YES
25-12-2024	NO	NO	YES	YES	YES	YES
26-12-2024	NO	NO	YES	YES	YES	YES
27-12-2024	NO	YES	YES	YES	YES	YES
28-12-2024	YES	YES	YES	NO	YES	YES
29-12-2024	YES	YES	YES	YES	YES	YES
30-12-2024	YES	YES	YES	YES	YES	YES

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.

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

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

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

221st OCC decision:

All generators were advised to regularly share high resolution data against each reportable frequency event with ERLDC on time to facilitate accurate assessment of FRP for respective control areas.

The latest data receipt status is given below: (as on **15.12.2024)**

STATIONS	03.04.2024	06.04.2024	19.04.2024	23.04.2024	02.05.2024	10.05.2024	28.05.2024	04.06.2024	04.06.2024	11.06.2024	17.06.2024	19.06.2024	16.07.2024	23.08.2024	13.09.2024	21.10.2024
	05:29	11:24	10:28	20:15	14:41	19:35	19:45	10:26	10:34	14:10	13:53	12:42	22:10	12:34	13:15	16:49
FSTPP #STG 1 & 2	Pending	Pending	Pending	Pending	Pending	Received	Pending	Received	Received	Received	Pending	Pending	Received	Received	Received	Received
FSTPP # STG 3	Pending	Pending	Pending	Pending	Pending	Received	Pending	Pending	Pending	Received	Pending	Pending	PLANT OUT	Received	Received	Received
KhSTPP #STG 1	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
KhSTPP #STG 2	Pending	Received	Received	Received	Received	Received	Pending	Received	Received	Pending	Received	Received	Received	Received	Received	Received
TSTPP #STG 1	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received
Barh stage-1	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Received	Received	Received	Received	Received	Received 29.07	Received	Received	Received
Barh stage-2	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Received	Received	Received	Received	Received	Received	Received	Received	Received
BRBCL	Pending	Pending	Received	Received	Received	Received	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Received	Received	Received
Darlipalli	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received
North Karanpura	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received
NPGC	Received	Received	Received	Received	Received	Received	Received	Received	Received	Pending	Received	Received	Received	Received	Received	Received
GMR	Received	Received	Received	Received	Received	Received	Received	Pending	Received	Received	Received	Pending	Received	Received	Pending	Received
MPL	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received
ADHUNIK	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received
JITPL	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Pending	Pending	Pending	Received
INDBHARAT	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
TASHIDING	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
Bihar	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
Jharkhand	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DVC	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Received	Received	Pending	Pending	Pending	Pending	Pending	Pending	Pending
OPTCL	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received	Received
WB	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

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

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

ERLDC may explain. Members may discuss.

3.10. Mock Black Start: ERLDC

- As per IEGC Reg. 34.3: A mock trial run of the 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.
- Also, diesel generator sets and other standalone auxiliary supply source to be used for black start shall be tested on a weekly basis and the test reports are to be shared to the concerned SLDC, RLDC and NLDC on a quarterly basis.
- As per IEGC Reg. 34.4: Simulation studies are to be carried out by each user in coordination with RLDC for preparing, reviewing and updating the restoration procedures considering the following:

(a) Black start capability of the generator;
(b) Ability of black start generator to build cranking path and sustain island;
(c) Impact of block load switching in or out;
(d) Line/transformer charging;
(e) Reduced fault levels;
(f) Protection settings under restoration condition

As per intimation received in Winter Preparedness 2024 dated 12.11.2024 hosted by ERLDC, a tentative date was received from each user regarding the mock drill of black start of generating units under their jurisdiction. The same is listed below:

Sl. No.	Name of Hydro Station	Schedule of Mock Black Start	Tentative date as on 12.11.2024	2024 Actual Date of Test
1	U. Kolab	Jun-24	Jan-24	
2	Balimela	Jul-24	Nov-24	
3	Rengali	Jun-24	Nov-24	
4	Burla	Jul-24	Jan-24	
5	U. Indravati	May-24	N/A	Sep-24
6	Maithon	Dec-24	2nd week of Dec-24	
7	TLDP-III	Oct-24	Nov-24 – Dec-24	
8	TLDP-IV	Oct-24	Nov-24 – Dec-24	
9	Subarnarekha	Sep-2024 4th week	1st week of Dec-24	3rd December 2024
10	Teesta-V	N/A	N/A	N/A
11	Chuzachen	Oct-24	Yet to be informed	
12	Teesta-III	N/A	N/A	N/A
13	Jorethang	Dec-2024 3rd week	Yet to be informed	
14	Tashiding	2nd week of Dec 2024	Yet to be informed	
15	Dikchu	N/A	Yet to be informed	N/A
16	Rongnichu	Mar-24	Test already conducted	18th March and 20th March 2024
17	Mangdechu		Yet to be informed	

All the users are requested to confirm dates for mock drill of black start of each generating unit. Also, the users are requested to share the data required simulation studies before the scheduled date of mock drill.

4. PART-D: OPERATIONAL PLANNING

4.1. Anticipated power supply position during January-2024

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of January 2024 is 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.

4.2. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on as on 15-12-2024)

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	MEJIA TPS	DVC	DVC	3	210	Tube leakage in economiser	14-Dec-2024
4	IB.TPS	ODISHA	OPGC	2	210	Boiler Tube Leakage	14-Dec-2024
5	Sterlite	ODISHA	SEL	4	600	Ash evacuation problem	14-Dec-2024
6	MEJIA TPS	DVC	DVC	6	250	Boiler Tube Leakage	15-Dec-2024
7	Sterlite	ODISHA	SEL	2	600	APH problem	15-Dec-2024
8	FSTPP	WEST BENGAL	NTPC	4	500	Boiler tube leakage	14-Dec-2024
9	SANTALDIH TPS	WEST BENGAL	WBPDCL	6	250	Annual Overhauling	23-Nov-2024
10	HALDIA ENERGY LTD	WEST BENGAL	HEL,CESC	1	300	Yearly maintenance activities	15-Dec-2024
11	CHANDRAPURA TPS	DVC	DVC	8	250	Annual overhauling	15-Dec-2024
12	KHSTPP	BIHAR	NTPC	5	500	Annual overhauling	14-Nov-2024

13	KBUNL	BIHAR	NTPC	2	195	Capital overhauling	15-Nov-2024
14	MPL	JHARKHAND	MPL	2	525	Annual Overhauling	22-Nov-2024
15	FSTPP	WEST BENGAL	NTPC	1	200	Capital Overhauling	01-Dec-2024
16	NABINAGAR(NPGC)	BIHAR	NTPC	3	660	Annual Overhauling	06-Dec-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
1	SOUTHERN	WEST BENGAL	CESC	1	67.5	Low system demand	14-Dec-2024
2	SOUTHERN	WEST BENGAL	CESC	2	67.5	Low system demand	11-Dec -2024

c) Hydro Unit Outage Report:

S. NO	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	TEESTA STG III Hep	SIKKIM	TUL	1	200	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
2	TEESTA STG III Hep	SIKKIM	TUL	2	200		
3	TEESTA STG III Hep	SIKKIM	TUL	3	200		
4	TEESTA STG III Hep	SIKKIM	TUL	4	200		
5	TEESTA STG III Hep	SIKKIM	TUL	5	200		
6	TEESTA STG III Hep	SIKKIM	TUL	6	200		
7	DIKCHU Hep	SIKKIM	SKPPL	2	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
8	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge	04-Oct-2023

9	TEESTA HPS	SIKKIM	NHPC	2	170	inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	
10	TEESTA HPS	SIKKIM	NHPC	3	170		
11	CHIPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15-Dec-2023
12	BURLA HPS/HIRAKUD I	ODISHA	OHPC	2	49.5	Capital Maintainance	26-Nov-2024

d)Long outage report of transmission lines (As on 15.12.2024):

Transmission Element / ICT	Outage From	Reasons for Outage
220/132KV 100 MVA ICT II AT LALMATIA	22.01.2019	220/132KV, 100MVA Transformer (NTPC side) is charged on 07.02.2024 from HV side on no load. Now, it is in idle charged condition
220KV-FSTPP-LALMATIA-I	21.04.2021	Two nos. of tower collapsed on 29.05.2024 near to Lalmatia GSS in the Loc. No. 246 & 247. Presently 220 kV Farakka-Lalmatia line is charged(from loc no 241 to loc 84) at 132 kV voltage level for anti-theft purpose by tapping at loc. No. 100-101.
220KV-WARIA-BIDHANNAGAR-1 & 2	08.06.2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
132KV-BARHI-RAJGIR-1	25.03.2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destringing of conductor of both circuits and Earth wire between tension tower no. 218-237 in same line.
132KV-NALANDA-BARHI(DVC)-1	25.03.2023	
400KV-RANGPO-TEESTA-V-1 & 2	04.10.2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-TEESTA-III-RANGPO-1	04.10.2023	Hand tripped from Teesta-III end due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-TEESTA-III-DIKCHU-1	04.10.2023	
400KV-JHARSUGUDA-ROURKELA-4	01.04.2024	Reconductoring work
132KV-RANGPO-SAMARDONG-1	22-05-2024	Rangpo:Y-n fault with fault distance 0.157 kM 14.562kA Samardong: NA
220KV-RAJARHAT-NEW TOWN(AA-II)-2	10-07-2024	Initially line out due to rectification of gas leakage problem from B-Ph breaker pole. Line declared under breakdown after charging attempt after return of shutdown. After that fault found in b-phase cable.
132KV-RANGPO-SAMARDONG-2	02-08-2024	132/66/11kV Samardong ss have become inaccessible due to continuous raining and landslides. It is very difficult for round the clock deployment of shift manpower due to road non-accessibility

400KV/220KV 315 MVA ICT 2 AT INDRAVATI.	09-09-2024	Tripped due to Over Flux protection operated
400KV/220KV 315 MVA ICT 1 AT NORTH KARANPURA	12-09-2024	Tripped on Differential protection
132KV-MADHEPURA (BH)-SAHARSA(PMTL)-1	23.09.2024	To control loading on 132kV Madhepura-Saharsa line
132KV-MELLI-SILIGURI-1	05-10-2024	S/d for inspection of tower of Loc.127 found twisted due to heavy landslide & heavy continuous rainfall in Soom Tea Garden under Darjeeling section. Line charged as 132 KV Siliguri-Melli II (Interim arrangement) at 19:20 hrs on 09-10-2024. This interim arrangement is obtained by horizontal jumpering at Loc-129 after disconnecting main jumper for both Rangit & Melli side.
132KV-RANGIT-KURSEONG-1	05-10-2024	S/d for inspection of tower of Loc.127 found twisted due to heavy landslide & heavy continuous rainfall in Soom Tea Garden under Darjeeling section. Line charged as 132 KV Siliguri-Melli II (Interim arrangement) at 19:20 hrs on 09-10-2024. This interim arrangement is obtained by horizontal jumpering at Loc-129 after disconnecting main jumper for both Rangit & Melli side..
400KV/220KV 315 MVA ICT 1 AT INDRAVATI	05-10-2024	Erection, testing & commissioning work of fire fighting system
400KV/220KV 315 MVA ICT 1 AT TSTPP	01-11-2024	Tripped on PRD protection
400KV-JHARSUGUDA-ROURKELA-2	04-11-2024	Reconductoring Works in 400 KV Sundargarh-Rourkela Ckt-2
132KV-RANGPO-GANGTOK-2	04-11-2024	Reconductoring work by HTLS Conductor
132KV-RAXAUL(NEW)-PARWANIPUR-1 & 2	14-11-2024	The loop in loop out work at Nepal side
132KV-PATRATU-PATRATU-1 & 2	16-11-2024	Diversion/Heightening of line due to inadequate clearance from under construction railway Line by PVUNL
400KV-NEW PURNEA-MUZAFFARPUR-1 & 2	21-11-2024	Facilitating Errection of New Tower on Pile foundation, De-Stringing, Dismantlling of old tower & Stringing Works
400KV-BINAGURI-TALA-1	25-11-2024	Voltage Regulation, converted to s/d for AMP Work from 09.12.2024
132KV-CHUZACHEN-RANGPO-1	29-11-2024	Rangpo : B-N ,Z-1, 7.8 KA, 5.61 KM
400KV-DURGAPUR-KAHALGAON-2	30-11-2024	Shifting of line bay equipment under installation of 63 MVAR line reactor at NTPC Kahalgaon
400KV-ALIPURDUAR (PG)-PUNASANGCHUN-JIGMELING-2	02-12-2024	SD Availed by Bhutan for rectify/Replace the LA for 400kV Jigmeling _Puna_ALI-1.
400KV/220KV 500 MVA ICT 1 AT SAHARSA	05-12-2024	To attend OLTC leakage present in ICT

400KV-KHSTPP-BARH-2	07-12-2024	Uprating of bay & line equipments
220KV-KISHANGANJ(PG)-DALKHOLA (PG)-2	08-12-2024	Replacement of isolators
220KV/132KV 160 MVA ICT 1 AT SILIGURI	08-12-2024	Replacement work of C&R
400KV-RANCHI-SIPAT-1	08-12-2024	Construction activity- NHAI Diversion work under Bharatmala Pariyojana

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)

4.3. Commissioning of new units and transmission elements in Eastern Grid in the month of November -2024.

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

NEW ELEMENTS COMMISSIONED DURING November, 2024

उत्पादन इकाइयाँ / GENERATING UNITS

क्र. Sl. No.	स्थान Location	मालिक/यूनिट का नाम OWNER/UNIT NAME	यूनिट संख्या/स्रोत Unit No/Source	संकलित क्षमता (मेगावाट) Capacity added (MW)	कुल/स्थापित क्षमता (मेगावाट) Total/Installed Capacity (MW)	दिनांक DATE	टिप्पणी Remarks
1	Dikchu	Sneha kinetic power projects Pvt ltd	1	48	48	20-11-2024	*Post-Restoration following Flash Flood in Sikkim on 4th Oct 2023*

आई.सी.टी/जी.टी/एस.टी / ICTs/ GTs / STs

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	उप-केन्द्र SUB-STATION	आईसीटी संख्या ICT NO	वोल्टेज (केवी) Voltage Level (kV)	क्षमता (एमवीए) CAPACITY (MVA)	दिनांक DATE	टिप्पणी Remarks
1	Sneha kinetic power projects Pvt ltd	DIKCHU HEP	ICT 1	400KV/132KV	270 MVA	20-11-2024	*Post-Restoration following Flash Flood in Sikkim on 4th Oct 2023*
2	NTPC	NTPC Kaniha	Tie Transformer-1	220KV/33KV	100 MVA	08-11-2024	For FGD Projects
3	NTPC	NTPC Kaniha	Tie Transformer-2	220KV/33KV	100 MVA	22-11-2024	For FGD Projects

प्रेषण लाइन / TRANSMISSION LINES

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	लाइन का नाम LINE NAME	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks
1	BSPTCL	132 kV Chandauti (PMTL)-Barachatti ckt 1	29.251	ACSR Panther	13-11-2024	

2	BSPTCL	132 kV Chandauti (PMTL)-Barachatti ckt 2	29.251	ACSR Panther	13-11-2024	
3	WBSETCL	132KV-MALDA (PG)-MANIKCHAK-1	24.0	ACSR Panther	19-11-2024	first time idle charged from Malda end only at 18-11-2024 16:42 Hrs
4	WBSETCL	132KV-MALDA (PG)-MANIKCHAK- 2	24.0	ACSR Panther	19-11-2024	first time idle charged from Malda end only at 18-11-2024 16:46Hrs
5	BSPTCL	220KV-BANKA (PG)-Havelikharagpur-1	92.8	ACSR Zebra (32.617 kms) + HTLS Zebra(60.22Kms)	05-11-2024	

लिलो / प्रेषण लाइन की पुनर्व्यवस्था / LILO/RE-ARRANGEMENT OF TRANSMISSION LINES

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	लाइन का नाम / लिलो पर Line Name/LILO at	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks
NIL						

बस/लाइन रिएक्टर / BUS/LINE REACTOR

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
NIL						

बस / BUS

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
NIL						

एच.वी.डी.सी/ए.सी फिल्टर बैंक/फैक्ट्स डिवाइस संबद्ध प्रणाली / HVDC /AC Filter bank / FACTS DEVICE associated System

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
NIL						

बे / BAYS

क्र. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
1	WBSETCL	132 KV Bus Coupler Bay at MANIKCHAK	MANIKCHAK	132	19-11-2024	
2	NTPC	220KV MAIN BAY OF 100 MVA TIE TRANSFORMER-2 AT TSTPP	TSTPP	132	22-11-2024	
3	DVC	220KV MAIN BAY OF ICT-2 AT RTPS	RTPS	220	19-11-2024	400 / 220 kV ICT at RTPS charged after LILO of 220KV D/C CTPS-Kalyaneswari T/L at RTPS
4	DVC	220KV MAIN BAY OF ICT-1 AT RTPS	RTPS	220	19-11-2024	400 / 220 kV ICT at RTPS charged after LILO of 220KV D/C CTPS-Kalyaneswari T/L at RTPS
5	BSPTCL	132KV MAIN BAY OF CHANDAUTI (PMTL) -2 AT BARACHATTI	BARACHATTI	132	15-11-2024	
6	BSPTCL	132KV MAIN BAY OF CHANDAUTI (PMTL) -1 AT BARACHATTI	BARACHATTI	132	15-11-2024	

7	BSPTCL	132KV MAIN BAY OF BARACHTI-2 AT CHANDAUTI (PMTL)	CHANDAUTI (PMTL)	132	13-11-2024	
8	BSPTCL	132KV MAIN BAY OF BARACHTI-1 AT CHANDAUTI (PMTL)	CHANDAUTI (PMTL)	132	13-11-2024	
9	NTPC	220KV MAIN BAY OF 100 MVA TIE TRANSFORMER -1 AT TSTPP	TSTPP	132	08-11-2024	

Members may note.

4.4. UFR operation during the month of November 2024.

Frequency profile for the month as follows:

MONTH	MAX (DATE/TIME)	MIN (DATE/TIME)	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
November, 2024	50.32 Hz on 02-11-2024 at 11:04 hrs	49.55 Hz on 27-11-2024 at 07:18 hrs	5.2	80.8	14.0

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

Members may note.

****

Annex_B.2.1

State	Energy Requirement in MUs for 2025-26 (As per CEA(GM Division))												
	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Annual
Bihar	4,208	4,547	5,074	5,160	4,833	4,705	4,117	2,939	3,079	3,590	2,992	3,824	49,068
Damodar Valley C	2,444	2,504	2,484	2,515	2,476	2,466	2,497	2,438	2,507	2,583	2,307	2,574	29,794
Jharkhand	1,391	1,499	1,543	1,465	1,383	1,316	1,267	1,228	1,209	1,089	1,157	1,198	15,746
Odisha	4,393	4,626	4,433	4,217	4,280	4,298	4,933	4,086	3,946	3,849	3,913	4,423	51,399
West Bengal	7,447	7,178	7,649	7,480	6,947	6,775	6,251	5,009	4,690	4,647	4,655	5,703	74,430
Sikkim	50	51	45	44	43	41	54	69	68	69	75	65	674
Eastern Region	**19,933**	**20,405**	**21,228**	**20,881**	**19,962**	**19,601**	**19,119**	**15,769**	**15,499**	**15,827**	**15,099**	**17,787**	**2,21,111**

Region/State	Peak Demand in MW for 2025-26 (As per CEA(GM Division))												
	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Annual
Bihar	7,692	8,270	8,624	9,056	8,582	8,962	7,851	5,767	6,038	6,987	6,353	7,001	9,056
Damodar Valley C	3,732	3,736	3,850	3,966	4,105	4,146	3,711	3,743	3,725	3,852	3,807	3,841	4,146
Jharkhand	2,377	2,580	2,619	2,524	2,421	2,455	2,488	2,102	2,168	2,318	2,371	2,139	2,619
Odisha	7,275	7,567	7,623	6,927	6,811	7,451	7,191	6,712	5,876	5,949	6,425	6,661	7,623
West Bengal	13,541	13,197	13,187	12,282	11,776	12,830	10,763	9,079	8,500	8,113	9,281	10,394	13,541
Sikkim	121	111	111	99	129	116	124	141	149	158	154	140	158
Eastern Region	**34,498**	**34,098**	**34,879**	**34,101**	**32,834**	**35,781**	**31,496**	**27,160**	**25,957**	**26,964**	**28,040**	**29,742**	**35,781**

ग्रिड-इंडिया
GRID-INDIA

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
GRID CONTROLLER OF INDIA LIMITED
(A Government of India Enterprise)
[formerly Power System Operation Corporation Limited (POSOCO)]
राष्ट्रीय भार प्रेषण केन्द्र / National Load Despatch Centre

कार्यालय : बी-9, प्रथम एवं द्वितीय तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016
Office : 1st and 2nd Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi -110016
CIN : U40105DL2009GOI188682, Website : www.grid-india.in, E-mail : gridindiacc@grid-india.in, Tel.: 011- 42785855

Annexure B.2.2

संदर्भ संख्या/ Ref No: NLDC/SO/Beta/2024/ 184 दिनांक/Date:09-Dec-2024

To,
As per distribution list

विषय/Subject: Amendment in CERC approved methodology for computation of Average Monthly Frequency Response Performance, Beta 'β' proposed by SRPC

महोदय/महोदया,

In compliance with the provisions of Regulation 62(5) and 65(4) of the CERC (Terms and Conditions of Tariff) Regulations, 2024, NLDC had prepared a draft methodology for computation of Average Monthly Frequency Response Performance, Beta 'ß'. After stakeholder consultation, the draft methodology was submitted on 30.07.2024 for approval of Hon'ble Commission.

CERC approved "*Methodology for computation of Average Monthly Frequency Response Performance, Beta 'ß'*" was received vide letter dated 23.10.2024. The scope of the methodology was enlarged to cover intra-state generating stations, whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs. Clause 4.4 (b) of the CERC approved methodology states that *"FRO of generating stations, whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs (in accordance with the control area jurisdiction as per Regulation 43 of CERC (IEGC) Regulations, 2023), as assessed by concerned SLDC shall be considered for computation of Beta by the SLDC."*

Clauses 4.7 and 4.9 (quoted below) mention about computation and certification of Beta respectively:

> *"**4.7**. The concerned LDC shall compute Average Monthly Frequency Response Performance, Beta 'ß' (truncated up to 2 decimal places):..."*

> *"**4.9**. The concerned LDC would furnish Average Monthly Frequency Response Performance, Beta 'ß' computed for a billing month to respective RPC along with all relevant supporting documents latest by 15th day of the following month. The Beta 'ß', furnished by concerned LDCs will be certified and issued by the RPC through publication on its website to make it a part of commercial accounting."*

17/12
Discussion OCC
AD (O)
SE (O)

पंजीकृत कार्यालय : प्रथम तल, बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016
Registered Office : First Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi -110016

SRPC vide email dated 27.11.2024 has suggested to modify Clause 4.9 for clarification regarding certification of Beta value for the generators whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs. Accordingly, an amendment is proposed in Clause 4.9 as below:

"4.9. Certification of Average Monthly Frequency Response Performance, Beta 'ß':

a) *In case of regional entity generating stations, the concerned RLDC would furnish Average Monthly Frequency Response Performance, Beta 'ß' computed for a billing month to respective RPC along with all relevant supporting documents latest by 15th day of the following month. The Beta 'ß', furnished by concerned RLDCs will be certified and issued by the RPC through publication on its website to make it a part of commercial accounting.*

b) *In case of generators whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs, concerned SLDC will certify the Beta 'ß', and issue it through publication on its website to make it a part of commercial accounting."*

Comments and suggestions on the amendments proposed by SRPC may be sent to NLDC at frcnldc@grid-india.in by 25th December 2024.

सधन्यवाद,

भवदीय/Yours faithfully,

9/12/24

(एस. उषा/S. Usha)

मुख्य महाप्रबंधक (प्रभारी), रा.भा.प्रे.कें.

Chief General Manager (In-charge), NLDC

Distribution list:

1. Member Secretary, NRPC/ERPC/NERPC/WRPC/SRPC
2. Executive Director, NRLDC/WRLDC/SRLDC/ERLDC/NERLDC, GRID-INDIA
3. Heads of State Load Despatch Centre (through respective RLDC)

Copy for information:

1. Chief (Engineering), Central Electricity Regulatory Commission
2. Chief (Regulatory Affairs), Central Electricity Regulatory Commission
3. Director (System Operation)/ Director (Market Operation), GRID-INDIA
4. Chairman and Managing Director, GRID-INDIA

Annexure B.2.3

CHHATTISGARH STATE POWER TRANSMISSION CO. LTD
(A Government of Chhattisgarh Undertaking)
O/o Executive Director (Planning, Commercial & Regulatory Affair)
3rd Floor, Space Load Dispatch Building, Danganiya Raipur(C.G.) - 492013
Email- cecnra.csptcl@cspc.co.in Phone: 2574831/4234

No. 02-12/PL-400KV SS/11/Kunkuri/1279 Raipur/dtd 4 DEC 2024.

To,

1. The Member Secretary,
   WRPC, F-3, MIDC area, Moral, Opp. Seepz,
   Central Road, Andheri (East), Mumbai-400093.

2. The Member Secretary,
   ERPC, 14, Golf club Road
   Tollygunje,Kolkata - 700033

Sub: - Construction of 400 KV Substation Kunkuri (village-Harradand) , District – Jashpur (C.G.) – Construction of LILO of existing 400 KV ISTS line i.e. 400 KV Sipat – Ranchi D/c line – request thereof to include the agenda in next meeting of WRPC & ERPC.

Ref: - Minutes of meeting held on dtd 13.11.2024.

Dear Sir,

With reference to above it is to intimate that CSPTCL is planning construction of new 400/132 KV Substation Kunkuri (Village-Harradand), District – Jashpur (C.G.) Initially it was planned that along with LILO of existing 400 KV Korba (W) – Madwa line of CSPTC shall be done at proposed 400/132 KV Kunkuri S/s. For construction of this line preliminary survey has been carried out and as per survey tentative route length of line is 195 Km & it involves 70.00 Km of forest. Therefore, construction of this LILO line shall involve long construction period, deforestation of large area of forest and also higher cost of construction. 01 No. 400 KV ISTS line viz. 400 KV Sipat (NTPC) - Ranchi D/c line is passing nearby the location identified for 400 KV SS Kunkuri (Village-Harradand), District – Jashpur (C.G.) and as per preliminary survey tentative route length of construction of LILO of this line at proposed 400 KV SS Kunkuri (Village-Harradand) is 8.00 KM & forest involvement of this LILO line is nil. Therefore, CSPTCL, requested CEA & CTUIL to permit LILO of this line for feeding to proposed 400/132 KV Kunkuri S/s.

In view of above and as per CSPTCL's requests, meetings were held on dtd 13.11.2024, 16.10.2024 & 11.09.2024 among CTUIL, NLDC, Grid-India, WRLDC, ERLDC, CTPTCL etc to discuss the feasibility of LILO of existing 400 KV Sipat-Ranchi DCDS line at proposed 400/132 KV SS Kunkuri (Village-Harradand), District-Jashpur C.G. CSPTCL.

CEA vide email dtd 25.11.2024 has conveyed Minutes of the meetings held on 13.11.2024 and intimated that ***"CSPTCL's proposal of LILO of establishment of Kunkuri 400/132 KV (intra-state) S/s by LILO of both circuits of 400 KV Sipat-Ranchi D/c line (an ISTS line) was agreed with the condition that the proposal should be presented before both the RPCs i.e. WRPC and ERPC by CSPTCL."***

In view of above, it is requested to include aforesaid agenda in the next meeting of WRPC & ERPC and consent for construction of LILO of both circuits of 400 KV Sipat-Ranchi D/c line (an ISTS line) at proposed 400/132 KV Kunkuri S/s may be conveyed at the earliest so that work may be taken up early.

Thanking you sir,

Regards

4/12/24

(K.S.Manothiya)
Executive Director (PC&RA)
CSPTCL: Raipur

Copy to: -

1. The Chief Engineer PSPA-1, CEA, Sewa Bhawan, R.K.Puram,New Delhi-110066.
2. The CMD, GRID INDIA, B-9, (1st Floor), Qutub Institutional Area, Katwaria Sarai, New Delhi,110016.
3. The Sr. GM (CTUIL), "Saudamini" 1st floor, Sectror-29, Gurugram-122001 (Haryana).
4. The ED, WRLDC, F-3, MIDC, Area , Marol, Andheri (East), Mumbai-400093.
5. The ED, ERLDC, Golf Club Rd, Golf Gardens, Tollygunge, Kolkata, West Bengal 700033
6. The ED (Transmission)/(SLDC)/(LINE), CSPTCL, Raipur.
7. The CE (S/s) CSPTCL, Bilaspur.

Agenda Related to CSPTCL

For upcoming Western Region Power Committee (WRPC) & Eastern Region Power Committee (ERPC) Meeting

Particulars	Description	Remarks
LILO of both circuits of 400 KV Sipat-Ranchi D/c line (an ISTS line) for establishment of 400/132/33 KV Kunkuri , Distt- Jashpur (C.G.) (intra-state) S/s.	• CSPTCL is planning construction of new 400/132 KV Substation Kunkuri (Village-Harradand), District – Jashpur (C.G.). • 01 No. 400 KV ISTS line viz. 400 KV Sipat (NTPC) - Ranchi D/c line is passing nearby the location identified for 400 KV SS Kunkuri (Village-Harradand). • As per preliminary survey tentative route length of construction of LILO of this line at proposed 400 KV SS Kunkuri (Village-Harradand) is 8.00 KM & forest involvement of this LILO line is nil. • CSPTCL vide letter dtd 24.07.2024 has requested CEA & CTUIL for permission for LILO of aforesaid 400 KV Sipat (NTPC) - Ranchi D/c line at proposed 400 KV SS Kunkuri (Village-Harradand). • A meeting was held on dtd 11.09.2024 among CTUIL, NLDC, Grid-India,WRLDC,ERLDC, CTPTCL etc. to discuss the feasibility of LILO of existing 400 KV Sipat-Ranchi DCDS line at proposed 400/132 KV Sub-station Kunkuri. • As envisaged by members during the meeting, possibility for construction of 220/132 KV Sub-station in place of proposed 400/132 KV Sub-station has been explored by CSPTCL from nearest available 220 KV system.	As per MOM of meeting held on dtd 13.11.2024, CSPTCL's proposal of establishment of Kunkuri 400/132 KV (intra-state) S/s by LILO of both circuits of 400 KV Sipat-Ranchi D/c line (an ISTS line) was agreed by CEA, CTUIL & Grid-India.

EE(PI-I)
O/o ED(PC&RA)
CSPTCL, Raipur

- A brief comparison between 220KV line scheme and LILO of 400KV ISTS line is given hereunder: -

S.No.	Particular	Proposed 220 KV Kunkuri Sub-station		Proposed 400 KV Kunkuri Sub-station
		220 KV DCDS from existing 220 KV Sub-station Gerwani (Raigarh).	LILO of 220 KV Raigarh-Tamnar (JPL) line.	LILO of 400 KV Sipat-Ranchi line (with twin moose conductor).
1	Tentative Route Length	150 KM	135 KM	08 KM
2	Forest Involvement	30 KM	29 KM	NIL
3	EHV line crossing	29 Nos	12 Nos	03 Nos
4	River crossing	04 Nos	04 Nos	1 No
5	Tentative cost **Rs.**	**231.67 Cr.**	**208 Cr.**	**32.17 Cr.**

- In view of above, CSPTCL vide letter dtd.24.09.2024 again requested CEA & CTUIL to permit connectivity for proposed 400/132 KV Sub-station Kunkuri (Village-Harradand), District-Jashpur by construction of LILO of aforesaid ISTS line i.e. 400 KV Sipat-Ranchi D/c line.

- Further, a meeting was held on dtd 13.11.2024 amongst CEA, CTUIL, Grid-India & CSPTCL. Further, CEA, vide email dtd 25.11.2024 has conveyed Minutes of the meetings held on 13.11.2024 and intimated that **"CSPTCL's *proposal of LILO of establishment of Kunkuri 400/132 KV (intra-state) S/s by LILO of both circuits of 400 KV Sipat-Ranchi D/c line (an ISTS line) was agreed with the condition that the proposal should be presented before both the RPCs i.e. WRPC and ERPC by CSPTCL."***

मनोहरम
EE (PL-I)
O/o ED (PC&RA)
CSPTCL

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन - I प्रभाग

Power System Planning & Appraisal-I Division

सेवा में / To,

(i) CEO, CTUIL, Floors No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana - 122001

(ii) CMD, Grid India, B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi -110016

(iii) Managing Director, CSPTCL, Dangania, Raipur (CG)-492013

विषय / Subject: Minutes of the meetings held on 13.11.2024 to discuss the establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line -regarding

महोदय / Sir,

A meeting was held on 13.11.2024 to discuss the establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line. The minutes of the meeting are attached herewith.

भवदीय / Yours faithfully,

Signed by Vikas Sachan
Date: 25-11-2024 10:30:17

(विकास सचान / Vikas Sachan)
उपनिदेशक / Deputy Director

प्रतिलिपि / CC: SA to Member (PS), CEA

Minutes of the meetings held on 13.11.2024 to discuss the establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line

A meeting was held on 13.11.2024 to discuss the establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line. The list of the participants is attached as **Annex-I**.

Background:

CSPTCL vide letter dated 24.09.2024 has informed that it is planned to establish 400/132 kV S/s under Intra-state by LILO of both circuits of 400 kV Sipat - Ranchi D/c line which is an ISTS line. It was also informed that a meeting was held among CTUIL, Grid-India, WRLDC, ERLDC and CSPTCL to discuss the same. In the meeting, it was envisaged that possibility of establishment of 220/132 kV S/s (by interconnecting it with nearby 220 kV S/s) instead of 400/132 kV S/s at Kunkuri may be explored by CSPTCL. Accordingly, CSPTCL has carried out the survey and main findings of the same are given below:

S. No.	Particular	220 kV DCDS from existing 220 kV Gerwani S/s at proposed Kunkuri S/s	LILO of 220 kV Raigarh – Tamnar (JPL) line at proposed Kunkuri S/s	LILO of 400 kV Sipat – Ranchi line at proposed Kunkuri S/s
1.	Tentative Route length	150 km	135 km	08 km
2.	Forest involvement	30 km	29 km	NIL
3.	EHV line crossing	29 Nos.	12 Nos.	03 Nos.
4.	River crossing	04 Nos.	04 Nos.	01 Nos.

In view of the above, CSPTCL has requested to grant the permission of establishment of Kunkuri 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line.

Deliberations:

i. CSPTCL informed that establishment of 220/132 kV S/s by connecting it to nearby 220 kV S/s involves transmission line passing through forest area and also the length of the 220 kV lines to proposed Kunkuri S/s is about 135 km, however, establishment of 400/132 kV S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line involves no forest and the length of the proposed LILO is also about 8 km.

ii. CTUIL presented the study and informed that due to the proposed LILO of both circuits of 400 kV Sipat - Ranchi D/c line, there is no additional loading observed in the network in 2028-29 timeframe. Also, reconductoring of the 400 kV Sipat - Ranchi D/c line may be done, if overloading would be observed in future. Accordingly, CSPTCL's proposal for establishment of Kunkuri 400/132 kV S/s may be agreed with a condition that CSPTCL has to do reconductoring of the LILO portion in future (commensurate with the

reconductoring of 400 kV Sipat - Ranchi D/c line), if needed. CSPTCL agreed for the same.

iii. Grid-India stated that as the angular difference between Sipat and Ranchi buses is observed to be on the higher side, an additional corridor might be planned instead of reconductoring of the existing line.

iv. CEA stated that since CSPTCL's proposal includes the LILO of an Inter-Regional line (WR-ER), the proposal should also be presented before both the RPCs i.e. WRPC and ERPC for their concurrence.

Decisions:

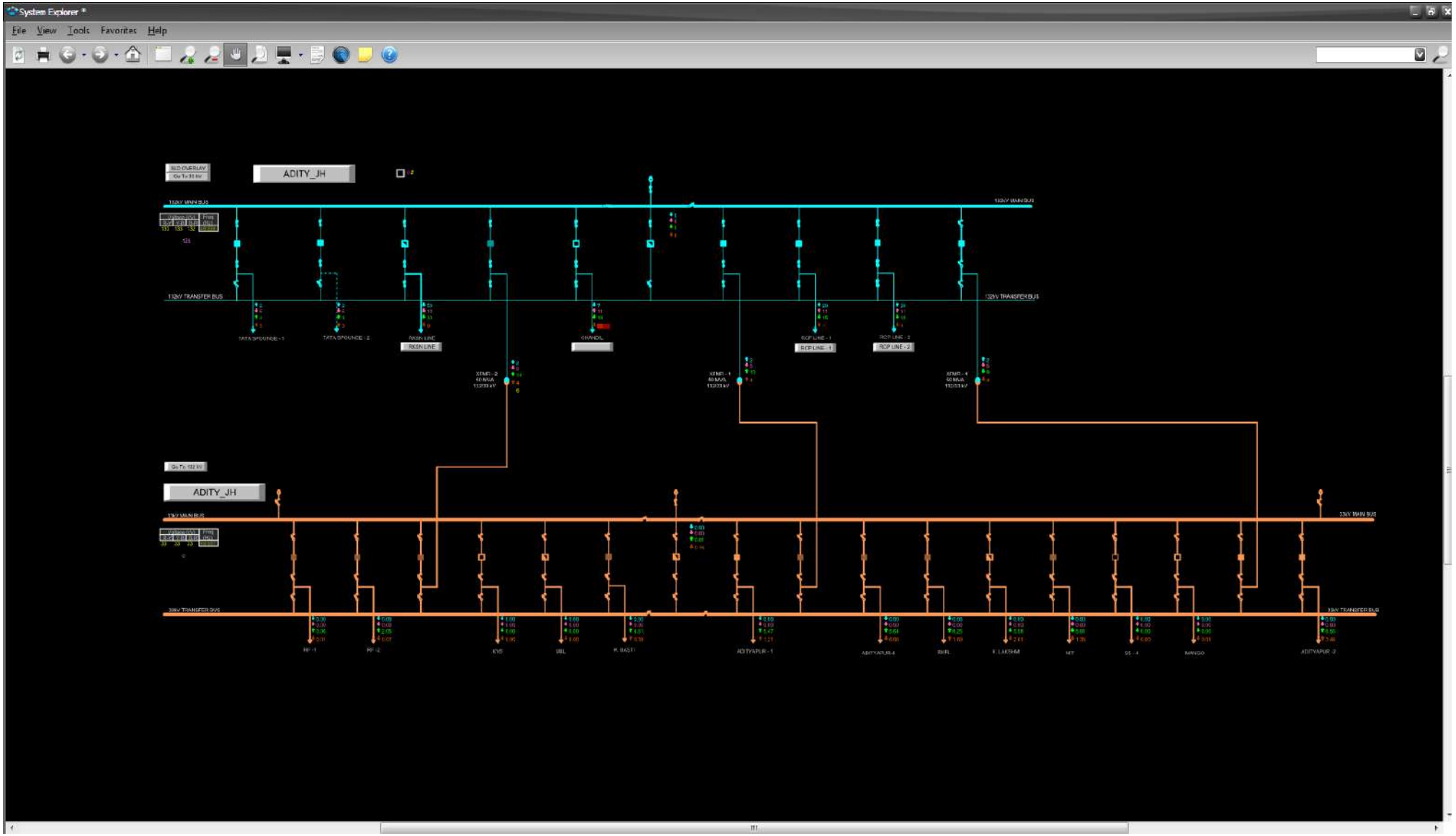
CSPTCL's proposal of LILO of establishment of Kunkuri 400/132 kV (Intra-state) S/s by LILO of both circuits of 400 kV Sipat - Ranchi D/c line (an ISTS line) was agreed with the condition that the proposal should be presented before both the RPCs i.e. WRPC and ERPC by CSPTCL.

Annex-I

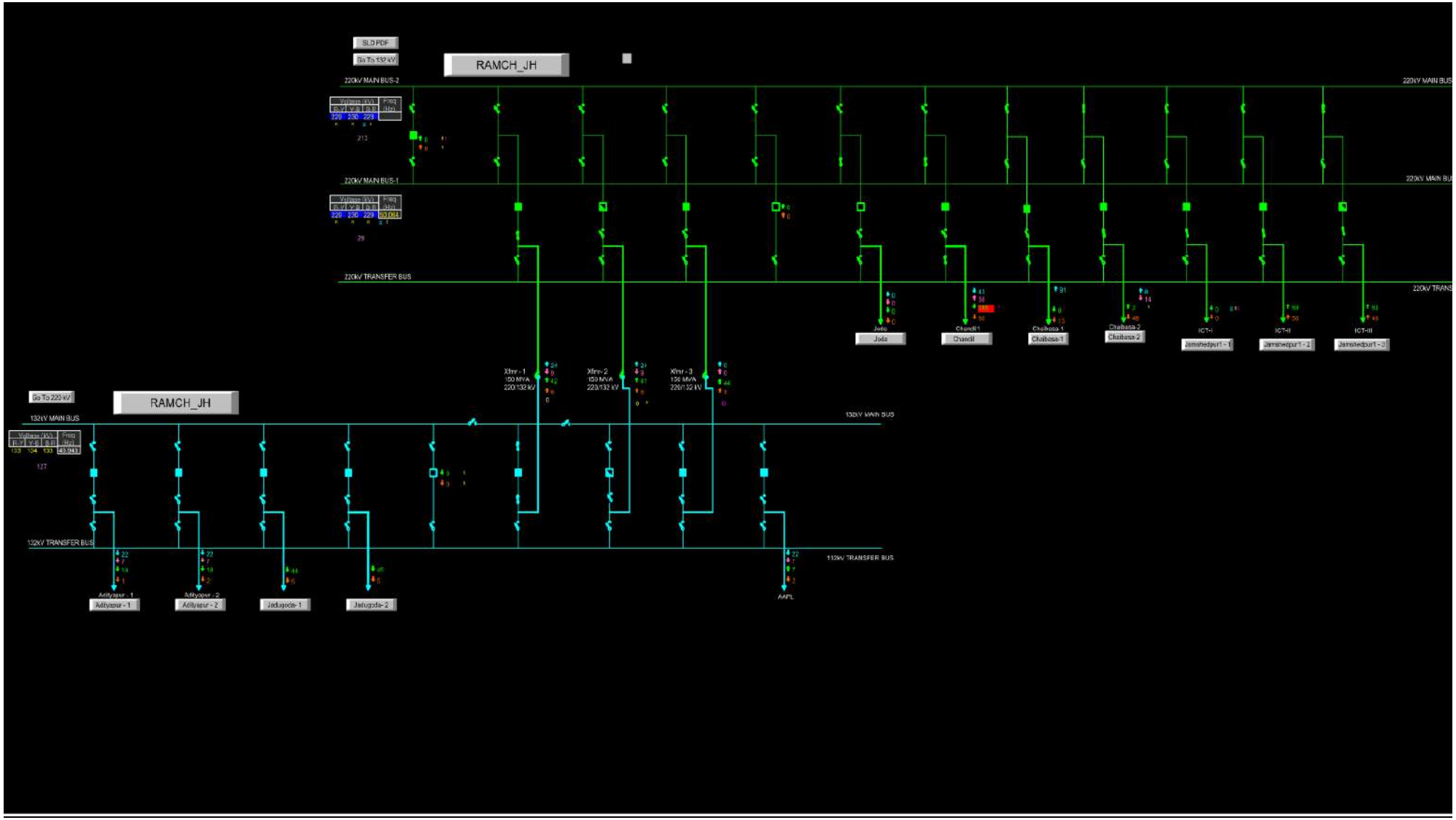
List of participants

- **CEA**
    1. Shri Ishan Sharan - Chief Engineer
    2. Ms. Manjari Chaturvedi - Director
    3. Shri Vikas Sachan - Deputy Director
    4. Ms. Akshata Yadav- Assistant Director
    5. Ms. Shobhna Singh Kurmi – Assistant Director
- **CTUIL**
    1. Shri Parth Sarthi Das – Sr. General Manager
    2. Shri Pratyush Singh – Chief Manager
    3. Shri Shashank Shekhar – General Manager
    4. Shri Manish Ranjan Keshari - Manager
- **Grid-India**
    1. Ms. Pushpa S. – Chief General Manager
    2. Shri Venky Minnakuri – Chief Manager
    3. Shri Priyam Jain – Chief Manager
    4. Shri Rahul Shukla - Chief Manager
    5. Shri Saibal Ghosh – Manager
- **CSPTCL**
    1. Shri K. S. Manothiya – ED (PC&RA)
    2. Shri R. C. Aggarwal – ED (Transmission)
    3. Shri Manoj Verma – Executive Engineer

Annex_B.2.4



Single Line Diagram of 132/33 kV Adityapur Grid Substation



Single Line Diagram of 220/132 kV Ramchandrapur Grid Substation

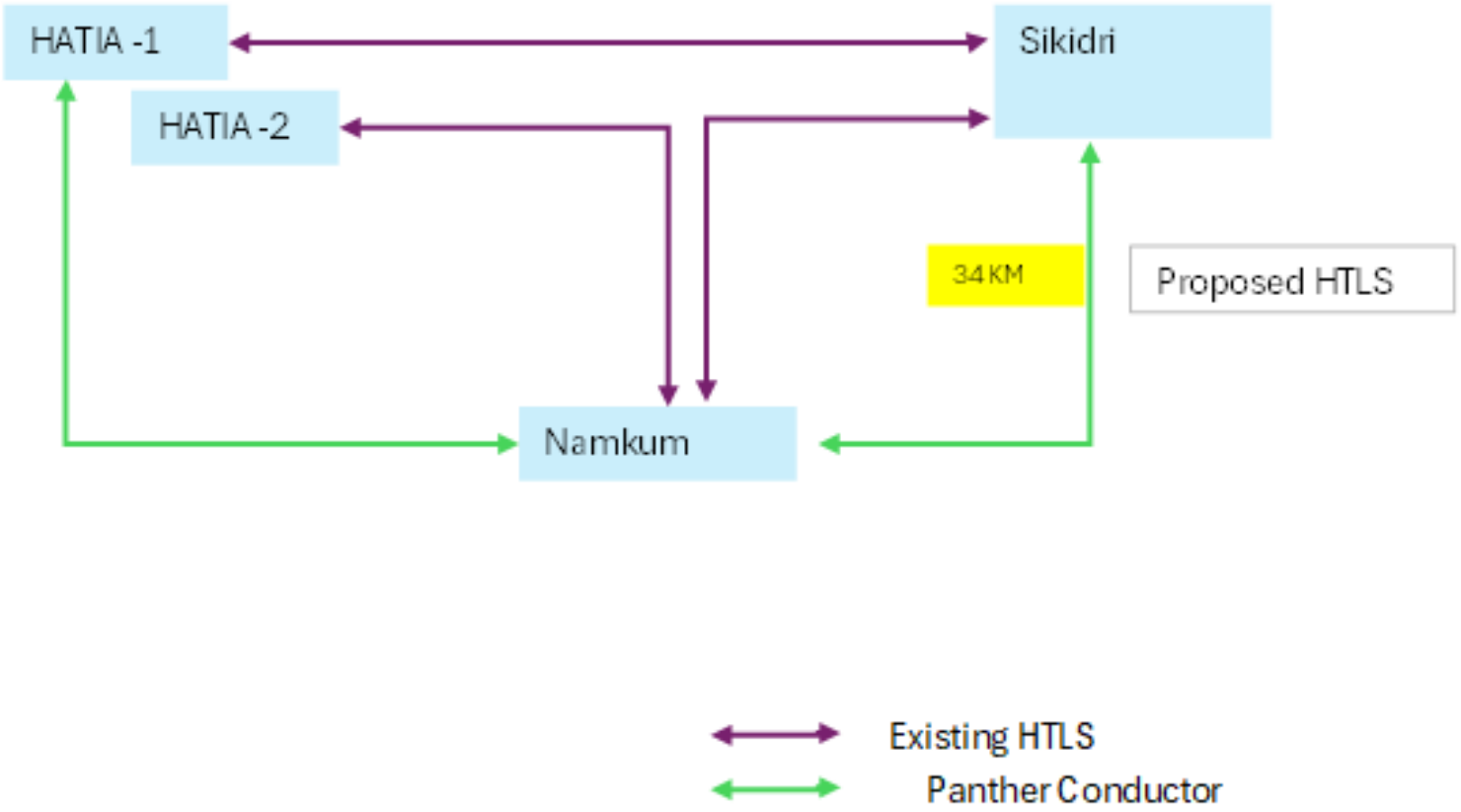
Report Name	Maximum load_Ramch_New_13-08-2024-16-Aug-2024-123906	**Interval**	1 Day
From Date	01-05-2024 00:00	**Data Source**	Open HRS
To Date	31-07-2024 23:59		
Generate Date	16-08-2024 00:00		

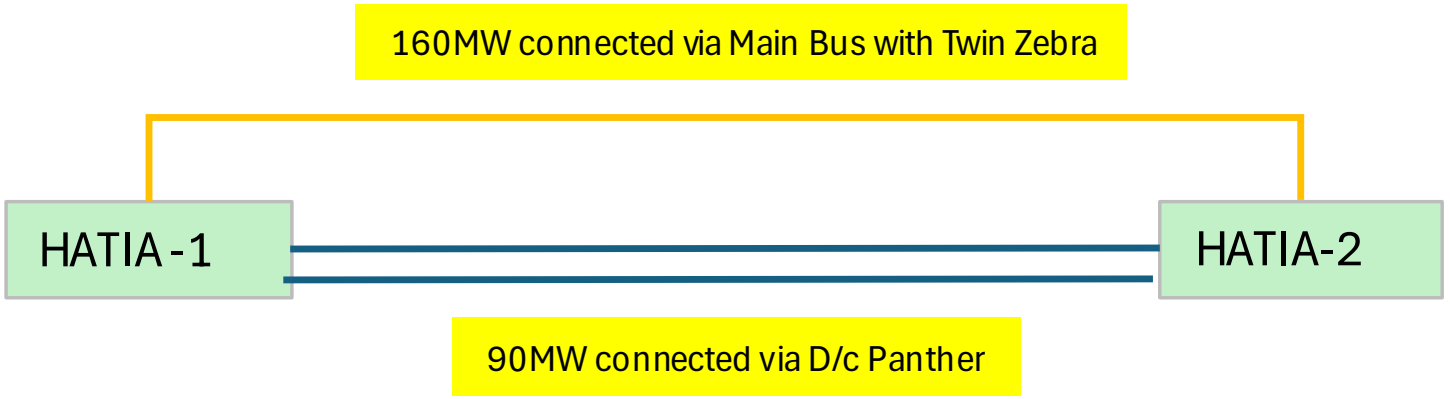
Date	RAMCH_JH - 132_ADP_1_P (MAXIMUM)	Quality	RAMCH_JH - 132_ADP_2_P (MAXIMUM)	Quality
30-04-2024 14:50	54.66980743	Good	55.31833267	Good
01-05-2024 03:09	56.99083328	Good	57.71468735	Good
02-05-2024 05:09	55.03375244	Good	55.00396729	Good
03-05-2024 22:30	55.45480728	Good	56.04527664	Good
04-05-2024 00:12	55.77075958	Good	55.47835922	Good
05-05-2024 00:28	56.42833328	Good	56.48275757	Good
06-05-2024 22:44	57.92205048	Good	57.29526138	Good
07-05-2024 23:43	54.80508804	Good	54.4229126	Good
08-05-2024 10:56	51.53707123	Good	51.20043564	Good
09-05-2024 14:57	53.40747833	Good	55.27397919	Good
10-05-2024 18:55	51.38597107	Good	52.36489868	Good
11-05-2024 12:21	53.4590416	Good	53.7430687	Good
12-05-2024 01:51	49.4435463	Good	49.45196533	Good
13-05-2024 21:33	51.88151169	Good	50.64943314	Good
14-05-2024 14:27	54.85877991	Good	56.36144257	Good
15-05-2024 19:41	56.37451172	Good	55.8030777	Good
16-05-2024 23:45	58.87243271	Good	58.9947319	Good
17-05-2024 15:47	59.54862976	Good	59.50117874	Good
18-05-2024 21:23	55.58945847	Good	55.94550705	Good

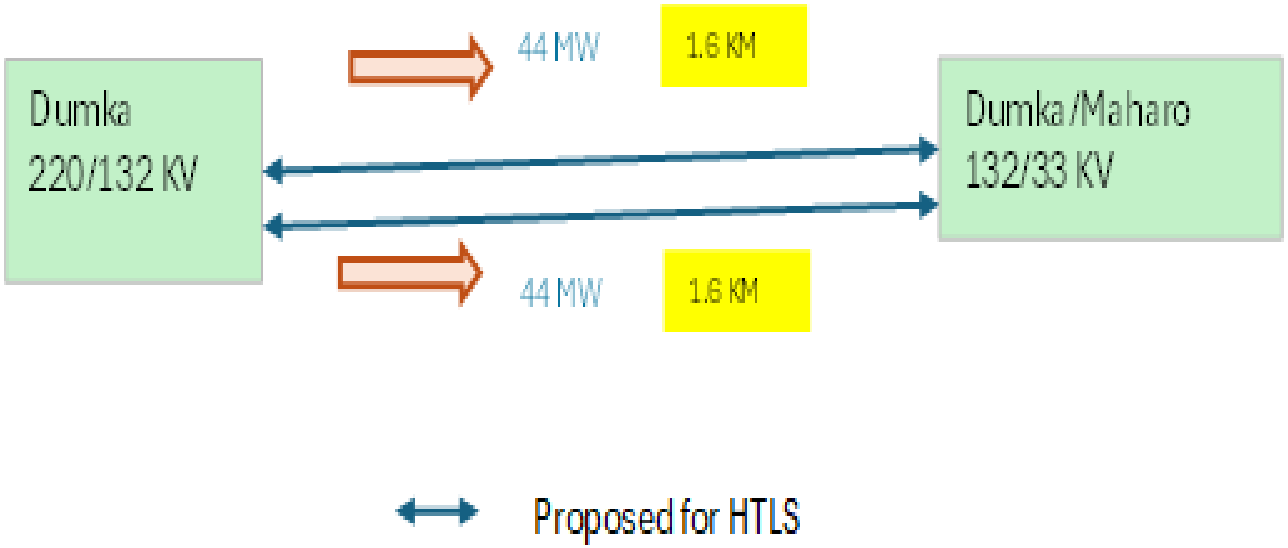
19-05-2024 01:21	57.1250267	Good	56.19827271	Good
20-05-2024 21:39	58.50878906	Good	57.81793213	Good
21-05-2024 19:49	56.40133667	Good	55.98607635	Good
22-05-2024 21:46	57.3712883	Good	57.32947922	Good
23-05-2024 00:14	54.19904327	Good	53.40706635	Good
24-05-2024 00:38	57.50087357	Good	57.346035	Good
25-05-2024 16:03	57.40965652	Good	57.41285324	Good
26-05-2024 23:17	56.8736763	Good	56.75031281	Good
27-05-2024 21:33	55.14609146	Good	54.6377449	Good
28-05-2024 00:34	55.01091766	Good	53.60300827	Good
29-05-2024 20:24	57.13328552	Good	56.33172989	Good
30-05-2024 13:32	54.24422073	Good	54.2118721	Good
31-05-2024 00:13	54.97441101	Good	57.36264038	Good
01-06-2024 08:27	54.80052185	Good	54.89855957	Good
02-06-2024 15:44	53.35302734	Good	55.55538559	Good
03-06-2024 02:08	56.10482788	Good	55.19496155	Good
04-06-2024 15:16	55.72384644	Good	54.57684326	Good
05-06-2024 03:01	51.5099144	Good	51.59192657	Good
06-06-2024 19:10	51.33071136	Good	53.66825485	Good
07-06-2024 12:29	49.29368973	Good	49.14059067	Good
08-06-2024 15:51	54.05611038	Good	54.0144043	Good
09-06-2024 01:24	55.9107933	Good	55.36374664	Good
10-06-2024 14:43	55.82816696	Good	56.49085999	Good
11-06-2024 21:37	57.59252548	Good	57.67747498	Good
12-06-2024 20:38	60.57804108	Good	61.59599686	Good
13-06-2024 01:14	65.53908539	Good	63.13509369	Good
14-06-2024 00:07	61.18854141	Good	61.36482239	Good
15-06-2024 22:58	61.08305359	Good	61.20567703	Good
16-06-2024 00:47	59.63100052	Good	58.60839462	Good

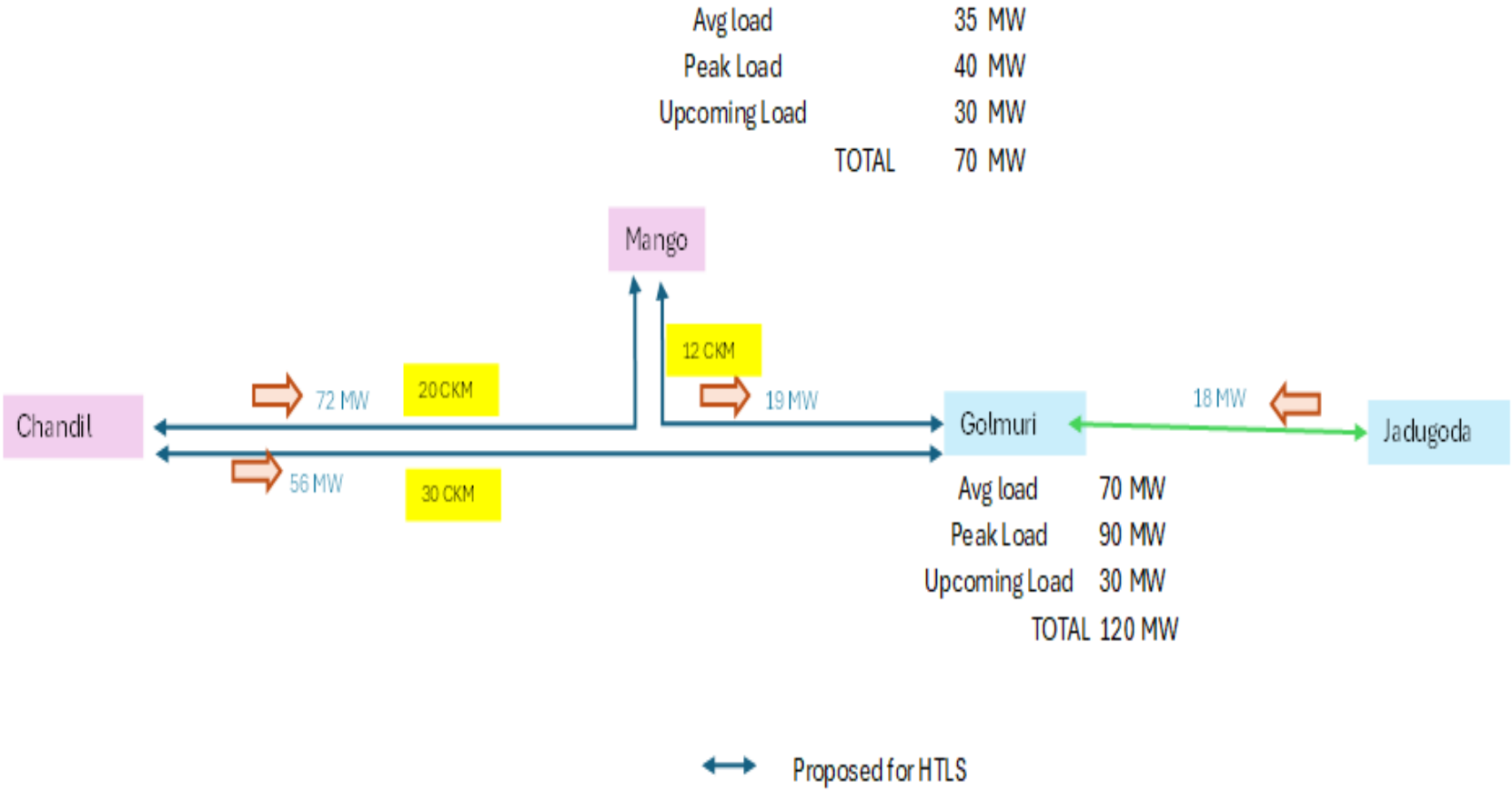
17-06-2024 00:01	51.17115784	Good	52.50847626	Good
18-06-2024 14:32	54.48604965	Good	55.51204681	Good
19-06-2024 15:52	61.43888092	Good	60.80610657	Good
20-06-2024 01:25	57.5037117	Good	57.70145035	Good
21-06-2024 22:55	56.57835388	Good	57.34041595	Good
22-06-2024 22:54	60.0905571	Good	59.69186401	Good
23-06-2024 01:40	53.83262253	Good	54.99904633	Good
24-06-2024 21:42	57.56978226	Good	57.43863297	Good
25-06-2024 02:36	56.781353	Good	57.13356018	Good
26-06-2024 02:36	55.84938431	Good	55.79109192	Good
27-06-2024 00:19	59.40401459	Good	59.96649933	Good
28-06-2024 05:19	52.51062012	Good	53.03681183	Good
29-06-2024 12:50	53.28882217	Good	53.57772827	Good
30-06-2024 21:17	51.60765839	Good	52.5965538	Good
01-07-2024 21:47	49.05825424	Good	48.80830002	Good
02-07-2024 05:10	50.21617126	Good	50.34555054	Good
03-07-2024 11:16	49.54129028	Good	49.50178528	Good
04-07-2024 19:26	51.51636505	Good	51.74461746	Good
05-07-2024 00:33	49.76605988	Good	49.7517128	Good
06-07-2024 22:57	54.11598969	Good	53.53696442	Good
07-07-2024 21:16	51.8591423	Good	52.44104004	Good
08-07-2024 00:25	49.26908112	Good	49.5403595	Good
09-07-2024 23:05	54.05602264	Good	55.28756332	Good
10-07-2024 22:36	57.95487595	Good	58.42102432	Good
11-07-2024 23:20	55.55660248	Good	55.77863693	Good
12-07-2024 02:37	54.98878098	Good	84.50899506	Good
13-07-2024 19:30	55.19398499	Good	54.75137711	Good
14-07-2024 14:24	72.06185913	Good	54.54489899	Good
15-07-2024 23:54	54.34848022	Good	53.85199738	Good

16-07-2024 01:00	53.64944839	Good	53.91359329	Good
17-07-2024 23:25	50.48521423	Good	50.53065491	Good
18-07-2024 23:36	54.66358185	Good	55.75226212	Good
19-07-2024 21:19	51.16725159	Good	52.52187729	Good
20-07-2024 00:14	51.58341599	Good	52.38525772	Good
21-07-2024 00:25	53.17589951	Good	53.52760315	Good
22-07-2024 20:49	53.20407104	Good	53.21210861	Good
23-07-2024 11:22	52.07314682	Good	51.75677109	Good
24-07-2024 20:01	54.07157516	Good	54.7122879	Good
25-07-2024 16:37	52.69375992	Good	53.20073318	Good
26-07-2024 20:22	54.07609177	Good	54.76185226	Good
27-07-2024 22:54	52.89832306	Good	52.92169571	Good
28-07-2024 00:47	53.60840225	Good	53.80528259	Good
29-07-2024 01:23	52.37448502	Good	53.1545372	Good
30-07-2024 15:59	54.42909241	Good	55.75387955	Good


HATIA -1
Sikidri
HATIA -2
34 KM
Proposed HTLS
Namkum
Existing HTLS
Panther Conductor


160MW connected via Main Bus with Twin Zebra
HATIA -1
HATIA-2
90MW connected via D/c Panther


44 MW
1.6 KM
Dumka
220/132 KV
Dumka /Maharo
132/33 KV
44 MW
1.6 KM
Proposed for HTLS


Avg load 35 MW
Peak Load 40 MW
Upcoming Load 30 MW
TOTAL 70 MW
Mango
12 CKM
Chandil
72 MW
20 CKM
19 MW
Golmuri
18 MW
Jadugoda
56 MW
30 CKM
Avg load 70 MW
Peak Load 90 MW
Upcoming Load 30 MW
TOTAL 120 MW
Proposed for HTLS

Annexure B.2.7

Minutes of Meeting (Online) and Action point for Patna Islanding held at 05-12-2024

In 221st OCC ERPC forum, Patna islanding matter was discussed, and forum advised to expedite the same. In view of this online meeting was conducted to expedite the implementation of Patna islanding scheme, members from NTPC, SLDC BIHAR, ERPC , and ERLDC were present.

ERLDC explained that preliminary dynamic feasibility study was done by ERLDC & ERPC for various load generation scenarios and accordingly islanding logic and remedial actions were suggested to make islanding successful. Based on the study, islanding was feasible but due to certain limitations of study it was advised that a detailed dynamic study will be done for assessing boiler dynamics, various controls, and islanding capability of NPGC machines.

Accordingly, NTPC involved Solvina to perform studies and feasibility was assessed. Results were in line with the study done by ERLDC &ERPC however Solvina suggested for nonlinearity test of governor which may cause unit tripping post island formation if there is sudden change of load.

In view of above NTPC representative stated that there is no requirement of test, and NPGC unit is capable of islanding operation.

SLDC Bihar mentioned that there is cost implication for Bihar islanding implementation. ERPC advised to discuss the matter in OCC forum with estimated budgetary cost by SLDC Bihar.

Based on the discussion following action points were finalised

- Communicate within a week via letter that NPGC unit is capable of islanding operation and there is no requirement of non-linearity test**, (Action point-NTPC).**
- Following details to be submitted within a week, **(Action Point- SLDC Bihar).**
    - ❖ Submit load details (Peak and minimum) of Patna Island in current scenario.
    - ❖ Updating list of Feeders which will be tripped for island formation.
    - ❖ Identification of feeders and loads along with quantum in MW for installing UFR within Island.

Post receipt of the above details further meeting will be conducted for finalising Islanding logic, other operational issues. Accordingly, action plan will be finalized for implementation of scheme as early as possible.

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Annex B.2.9

Cyclic Ramp up/down Cases in Nov'24

Block no	Time block	21-11-2024	23-11-2024	25-11-2024	28-11-2024
1	00:00-00:15	177.45	177.45	97.59	150.20
2	00:15-00:30	177.45	177.45	124.84	177.45
3	00:30-00:45	150.20	177.45	97.59	150.20
4	00:45-01:00	177.45	177.45	97.59	122.95
5	01:00-01:15	150.20	177.45	97.59	97.59
6	01:15-01:30	122.95	177.44	97.59	97.59
7	01:30-01:45	97.59	177.44	97.59	97.59
8	01:45-02:00	97.59	177.44	97.59	97.59
9	02:00-02:15	97.59	177.44	97.59	97.59
10	02:15-02:30	97.59	177.44	97.59	97.59
11	02:30-02:45	97.60	177.44	97.59	97.59
12	02:45-03:00	97.59	177.44	97.59	97.59
13	03:00-03:15	97.59	177.44	97.59	97.59
14	03:15-03:30	97.59	177.44	97.59	97.59
15	03:30-03:45	97.59	177.44	97.59	97.59
16	03:45-04:00	97.59	177.44	97.59	97.59
17	04:00-04:15	124.84	177.44	97.59	97.59
18	04:15-04:30	152.09	177.45	97.59	124.84
19	04:30-04:45	177.45	177.45	124.84	97.59
20	04:45-05:00	177.44	177.45	152.09	124.84
21	05:00-05:15	177.44	177.45	177.45	152.09
22	05:15-05:30	177.44	177.45	177.45	177.44
23	05:30-05:45	177.45	177.45	177.45	177.45
24	05:45-06:00	177.45	177.45	177.45	177.45
25	06:00-06:15	177.45	177.45	177.45	177.45
26	06:15-06:30	177.45	177.45	177.45	177.45
27	06:30-06:45	177.45	177.45	177.45	177.45
28	06:45-07:00	177.45	177.45	177.45	177.45
29	07:00-07:15	177.45	177.45	177.45	177.45
30	07:15-07:30	177.45	177.45	177.45	177.45
31	07:30-07:45	177.45	177.45	177.45	177.45
32	07:45-08:00	177.45	177.45	177.45	177.45
33	08:00-08:15	177.45	177.45	177.45	177.45
34	08:15-08:30	177.45	177.45	177.45	177.45
35	08:30-08:45	177.45	177.45	177.45	177.45
36	08:45-09:00	177.45	177.45	177.45	177.45
37	09:00-09:15	177.45	177.45	177.45	177.45
38	09:15-09:30	177.45	177.45	177.45	177.45
39	09:30-09:45	177.45	177.45	177.45	177.45

40	09:45-10:00	177.45	177.45	177.45	177.45
41	10:00-10:15	177.45	177.45	177.45	177.45
42	10:15-10:30	177.45	177.45	177.45	150.20
43	10:30-10:45	177.45	177.45	177.45	177.45
44	10:45-11:00	177.45	177.45	177.45	150.20
45	11:00-11:15	150.20	177.45	177.45	122.95
46	11:15-11:30	177.45	177.45	177.45	97.60
47	11:30-11:45	150.20	177.45	177.45	97.60
48	11:45-12:00	122.95	177.45	177.45	97.60
49	12:00-12:15	97.59	174.96	177.45	97.60
50	12:15-12:30	97.59	177.45	177.45	97.60
51	12:30-12:45	97.59	177.45	177.45	97.59
52	12:45-13:00	97.59	177.45	177.45	97.59
53	13:00-13:15	97.59	150.20	150.20	97.59
54	13:15-13:30	97.59	122.95	177.45	97.59
55	13:30-13:45	97.59	150.19	150.20	97.59
56	13:45-14:00	97.59	122.94	177.45	97.59
57	14:00-14:15	124.84	150.20	177.45	97.60
58	14:15-14:30	152.09	177.45	177.45	124.85
59	14:30-14:45	177.45	177.45	177.45	152.10
60	14:45-15:00	177.45	177.45	177.45	177.45
61	15:00-15:15	177.45	177.45	177.46	177.45
62	15:15-15:30	177.45	177.45	177.45	177.45
63	15:30-15:45	177.45	177.45	177.45	177.45
64	15:45-16:00	177.45	177.45	177.45	177.45
65	16:00-16:15	177.45	177.45	177.45	177.45
66	16:15-16:30	177.45	177.45	177.45	177.45
67	16:30-16:45	177.45	177.45	177.45	177.45
68	16:45-17:00	177.45	177.45	177.45	177.45
69	17:00-17:15	177.45	177.45	177.45	177.45
70	17:15-17:30	177.45	177.45	177.45	177.45
71	17:30-17:45	177.45	177.45	177.45	177.45
72	17:45-18:00	177.45	177.45	177.45	177.45
73	18:00-18:15	177.45	177.45	177.45	177.45
74	18:15-18:30	177.45	177.45	177.45	177.45
75	18:30-18:45	177.45	177.45	177.45	177.45
76	18:45-19:00	177.45	177.45	177.45	177.45
77	19:00-19:15	177.45	177.45	177.45	177.45
78	19:15-19:30	177.45	177.45	177.45	177.45
79	19:30-19:45	177.45	177.45	177.45	177.45
80	19:45-20:00	177.45	177.45	177.45	177.45
81	20:00-20:15	177.45	177.45	177.45	177.45

82	20:15-20:30	177.45	177.45	177.45	177.45
83	20:30-20:45	177.45	177.45	177.45	177.45
84	20:45-21:00	177.45	177.45	177.45	177.45
85	21:00-21:15	177.45	177.45	177.45	177.45
86	21:15-21:30	177.45	177.45	177.45	177.45
87	21:30-21:45	177.45	177.45	177.45	177.45
88	21:45-22:00	177.45	177.45	177.45	177.45
89	22:00-22:15	177.45	177.45	177.45	150.20
90	22:15-22:30	177.45	177.45	177.45	122.95
91	22:30-22:45	177.45	177.45	177.45	150.20
92	22:45-23:00	177.45	177.45	177.45	177.45
93	23:00-23:15	177.45	177.45	177.45	150.20
94	23:15-23:30	177.45	177.45	177.45	177.45
95	23:30-23:45	177.45	177.45	177.45	150.20
96	23:45-24:00	177.45	177.45	177.45	122.95

Cyclic Ramp up/down Cases in Sept'24

Block no	Time block	02-09-2024	05-09-2024	09-09-2024	15-09-2024	16-09-2024	25-09-2024
1	00:00-00:15	354.90	354.90	354.90	354.90	354.90	354.90
2	00:15-00:30	354.90	354.90	354.90	354.90	354.90	354.90
3	00:30-00:45	354.90	354.90	354.90	354.90	354.90	354.90
4	00:45-01:00	354.90	354.90	354.90	354.90	354.90	354.90
5	01:00-01:15	354.90	354.90	354.90	354.90	354.90	354.90
6	01:15-01:30	354.90	354.90	354.90	354.90	354.90	354.90
7	01:30-01:45	354.90	354.90	354.90	354.90	354.90	354.90
8	01:45-02:00	354.90	354.90	354.90	354.90	300.40	354.90
9	02:00-02:15	354.90	354.90	300.40	354.90	354.90	354.90
10	02:15-02:30	354.90	354.90	354.90	354.90	354.90	354.90
11	02:30-02:45	354.90	354.90	354.90	354.90	354.90	354.90
12	02:45-03:00	354.90	354.90	300.40	354.90	354.90	354.90
13	03:00-03:15	354.90	354.90	354.90	354.90	354.90	354.90
14	03:15-03:30	354.90	354.90	354.90	354.90	354.90	354.90
15	03:30-03:45	354.90	354.91	300.40	354.90	354.90	354.90
16	03:45-04:00	354.90	354.90	354.90	354.90	354.90	354.90
17	04:00-04:15	354.90	354.90	354.90	354.90	354.90	354.90
18	04:15-04:30	354.90	354.90	300.40	354.90	354.90	354.90
19	04:30-04:45	354.91	354.90	354.90	354.90	354.90	354.90
20	04:45-05:00	354.90	354.90	354.90	354.90	354.90	354.90
21	05:00-05:15	354.90	354.90	354.90	354.90	354.90	354.90
22	05:15-05:30	354.91	354.90	354.90	354.90	354.90	354.90
23	05:30-05:45	354.91	354.90	354.90	354.90	354.90	354.90
24	05:45-06:00	354.90	354.90	354.90	354.90	354.90	354.90
25	06:00-06:15	354.90	354.91	354.90	354.90	354.91	354.90
26	06:15-06:30	354.90	354.91	354.90	354.90	354.90	354.90
27	06:30-06:45	354.90	354.90	354.90	354.90	354.90	354.90
28	06:45-07:00	354.90	354.90	354.90	354.90	354.90	354.90
29	07:00-07:15	354.90	354.90	354.90	354.90	354.90	354.90
30	07:15-07:30	354.90	354.90	354.90	354.90	354.90	354.90
31	07:30-07:45	354.90	354.90	354.90	300.40	354.90	354.90
32	07:45-08:00	354.90	354.90	354.90	354.90	354.90	354.90
33	08:00-08:15	354.90	300.40	300.40	300.40	354.90	354.90
34	08:15-08:30	354.90	336.38	245.90	245.90	354.90	354.90
35	08:30-08:45	300.40	281.88	300.39	195.19	354.90	354.90
36	08:45-09:00	354.90	227.38	245.90	195.19	354.90	354.90
37	09:00-09:15	300.40	195.19	243.09	195.19	354.90	354.90
38	09:15-09:30	245.90	195.19	243.09	195.19	354.90	354.90
39	09:30-09:45	300.39	195.19	243.09	195.19	354.90	354.90
40	09:45-10:00	354.88	195.19	195.19	195.19	354.90	354.90
41	10:00-10:15	354.89	195.19	195.19	195.19	354.90	354.90
42	10:15-10:30	354.89	195.19	195.19	195.19	354.90	300.40
43	10:30-10:45	300.39	195.19	195.19	195.19	354.90	245.90
44	10:45-11:00	245.89	195.19	195.19	195.19	300.40	300.40
45	11:00-11:15	195.20	195.19	195.19	195.19	245.90	245.90
46	11:15-11:30	195.20	195.19	195.19	195.19	195.20	195.20
47	11:30-11:45	195.20	195.19	195.19	195.19	195.20	195.20

48	11:45-12:00	195.20	195.19	195.19	195.19	195.20	195.20
49	12:00-12:15	195.19	195.19	195.19	195.19	191.40	195.20
50	12:15-12:30	195.19	195.19	195.19	195.19	181.11	249.71
51	12:30-12:45	195.19	195.19	195.19	195.19	181.11	195.22
52	12:45-13:00	195.19	195.19	195.19	195.19	181.11	195.20
53	13:00-13:15	195.19	195.19	195.19	195.19	181.11	249.69
54	13:15-13:30	195.19	195.19	195.19	195.19	181.11	304.19
55	13:30-13:45	195.19	195.19	195.19	195.19	181.11	354.89
56	13:45-14:00	195.19	195.19	195.19	195.19	181.11	354.89
57	14:00-14:15	195.19	195.19	195.19	195.19	195.20	354.89
58	14:15-14:30	195.19	195.19	249.69	195.19	195.20	354.90
59	14:30-14:45	195.19	195.19	195.19	195.19	249.70	354.90
60	14:45-15:00	249.69	195.19	195.19	195.19	195.21	354.90
61	15:00-15:15	304.19	195.19	195.19	195.19	249.71	354.90
62	15:15-15:30	354.90	195.19	195.19	195.19	304.21	354.90
63	15:30-15:45	354.90	195.19	195.20	195.19	354.90	354.90
64	15:45-16:00	354.90	195.19	195.20	195.19	354.90	354.90
65	16:00-16:15	354.90	195.20	249.71	195.19	354.90	354.90
66	16:15-16:30	354.90	249.70	304.20	249.69	354.90	354.90
67	16:30-16:45	354.90	195.21	354.90	304.19	354.90	354.90
68	16:45-17:00	354.90	249.71	354.90	354.90	354.90	354.90
69	17:00-17:15	354.90	304.21	354.90	354.90	354.90	354.90
70	17:15-17:30	354.90	354.90	354.90	354.90	354.90	354.90
71	17:30-17:45	354.90	354.90	354.90	300.40	354.90	354.90
72	17:45-18:00	354.90	354.90	354.90	354.90	354.90	354.90
73	18:00-18:15	354.90	354.90	354.90	354.90	354.90	354.90
74	18:15-18:30	354.90	354.90	354.90	354.90	354.90	354.90
75	18:30-18:45	354.90	354.90	354.90	354.90	354.90	354.90
76	18:45-19:00	354.90	354.90	354.90	354.90	354.90	354.90
77	19:00-19:15	354.90	354.90	354.90	354.91	354.90	354.90
78	19:15-19:30	354.90	354.90	354.90	354.91	354.90	354.90
79	19:30-19:45	354.90	354.90	354.90	354.90	354.90	354.90
80	19:45-20:00	354.90	354.90	354.90	354.90	354.90	354.90
81	20:00-20:15	354.90	354.90	354.90	354.90	354.90	354.90
82	20:15-20:30	354.90	354.90	354.90	354.90	354.90	354.90
83	20:30-20:45	354.90	354.90	354.90	354.90	354.90	354.90
84	20:45-21:00	354.90	354.90	354.90	354.90	354.90	354.90
85	21:00-21:15	354.90	354.90	354.90	354.90	354.90	354.90
86	21:15-21:30	354.90	354.90	354.90	354.90	354.90	354.90
87	21:30-21:45	354.90	354.90	354.90	354.90	354.90	354.90
88	21:45-22:00	354.90	354.90	354.90	354.90	354.90	354.90
89	22:00-22:15	354.90	354.90	354.90	354.90	354.90	354.90
90	22:15-22:30	354.90	354.90	354.90	354.90	354.90	354.90
91	22:30-22:45	354.90	354.90	354.90	354.90	354.90	354.90
92	22:45-23:00	354.90	354.90	354.90	354.90	354.90	354.90
93	23:00-23:15	354.90	354.90	354.90	354.90	354.90	354.90
94	23:15-23:30	354.90	354.90	354.90	354.90	354.90	354.90
95	23:30-23:45	354.90	354.90	354.90	354.90	354.90	354.90
96	23:45-24:00	354.90	354.90	354.90	354.90	354.90	354.90

Outlook

MTPS Kanti Inputs for Agenda points of Meeting with ERLDC / ERPC

From KRITI MISHRA <KRITIMISHRA@NTPC.CO.IN>
Date Thu 10-Oct-24 17:41
To SUMEET NARANG <SUMEETNARANG@NTPC.CO.IN>
Cc MADHU S <SMADHU@NTPC.CO.IN>; Tapas Saha <TAPASSAHA@NTPC.CO.IN>; Yogesh <YOGESHSINGLA@NTPC.CO.IN>; oser1 <oser1@ntpc.co.in>; oser1hq@gmail.com <oser1hq@gmail.com>; RACHANA MEENA <RACHANAMEENA@NTPC.CO.IN>

6 attachments (3 MB)

Inputs to ER 1 OS for ERPC meeting.pdf; Mail_ERLDC_ERPC_NLDC_Kanti AGC issues of Jul24.pdf; Mail_ERLDC_ERPC_NLDC_Kanti AGC issues _18.11.2023.pdf; Mail chain dt. 14.08.2024 for 02.08.2024.pdf; Mail dt. 20.08.2024_Cyclic Ramps.pdf; Cyclic Ramp Up _Down Cases_Sept24.xlsx;

Dear Sir,

As sought by you over trailing mail, please find attached inputs from MTPS Kanti for incorporation in Agenda of Meeting with ERLDC / ERPC.

Thanks and Regards,

Kriti Mishra/कृति मिश्रा
Assistant Manager (EEMG)/सहायक प्रबंधक (ईईएमजी)
Muzaffarpur Thermal Power Station
मुजफ्फरपुर थर्मल पावर स्टेशन
NTPC Ltd / एन.टी.पी.सी. लिमिटेड
m- 7985425210

From: Yogesh <YOGESHSINGLA@NTPC.CO.IN>
Sent: Monday, October 7, 2024 12:37
To: opn.kbunl@gmail.com <opn.kbunl@gmail.com>
Cc: Tapas Saha <TAPASSAHA@NTPC.CO.IN>; Nilesh Dangayach <NILESHDANGAYACH@NTPC.CO.IN>; RACHANA MEENA <RACHANAMEENA@NTPC.CO.IN>; KRITI MISHRA <KRITIMISHRA@NTPC.CO.IN>
Subject: Fw: Agenda points regarding deviation in Schedule with ERLDC and ERPC

Dear Concerned,

As per ER1-OS communication , recurring issues in Schedule such as frequent ramp up / Ramp down , Cyclic ramping , AS/ SCUC schedules etc may be complied along with snapshot so that all the cases along with accounting related issues (being compiled by EEMG) may be put up for meeting agenda with ERPC /ERLDC .

Regards,

Yogesh Singla / योगेश सिंघला
AGM(EEMG) / अपर महाप्रबंधक (ई.ई.एम.जी)
Muzaffarpur Thermal Power Station
मुजफ्फरपुर थर्मल पावर स्टेशन
NTPC Ltd / एन.टी.पी.सी. लिमिटेड

From: SUMEET NARANG <SUMEETNARANG@NTPC.CO.IN>
Sent: Monday, October 7, 2024 12:28 PM
To: Yogesh <YOGESHSINGLA@NTPC.CO.IN>; Raj Kishore Mandal <RKMANDAL@NTPC.CO.IN>; NITIN KATIYAR <NITINKATIYAR@NTPC.CO.IN>; ARNAB BHATTACHARYA <ARNABBHATTACHARYA@NTPC.CO.IN>; Jaiprakash Verma <JAIPRAKASHVERMA@NTPC.CO.IN>; Anurag Gupta <ANURAGGUPTA@NTPC.CO.IN>; Chinmoy Mallick <CMALLICK@NTPC.CO.IN>; SHWETA YADAV <SHWETAYADAV@NTPC.CO.IN>; ABHISHEK MURARI <ABHISHEKMURARI@NTPC.CO.IN>; RACHANA MEENA <RACHANAMEENA@NTPC.CO.IN>; ALKA KUMARI <ALKAKUMARI@NTPC.CO.IN>
Cc: Tapas Saha <TAPASSAHA@NTPC.CO.IN>; Mathew E Kovoor <MEKOVOOR@NTPC.CO.IN>; Kare Deen Yadav <KAREDEEN@NTPC.CO.IN>; Amitabha Bhaumik <ABHAUMIK@NTPC.CO.IN>; B. RAJENDRA KUMAR <BRAJENDRAKUMAR@NTPC.CO.IN>; AKHAYA KUMAR PATRA <AKPATRA@NTPC.CO.IN>; Ramnath Pujari <RAMNATHPUJARI@NTPC.CO.IN>
Subject: Re: Agenda points regarding deviation in Schedule with ERLDC and ERPC

Dear Sir,

With reference to the trailing mail ,please share the cases by 10th October.

Regards
Sumeet Narang

Dear Sir/Mam,

Meeting with ERLDC/ERPC is to be scheduled regarding recurring issues in Schedule and Account issues.
It is requested to kindly give Agenda points for aberration in Schedule and Accounts which is happening and it has to be communicated and addressed for flawless scheduling.

It is also observed that schedule discrepancies are sometimes not corrected which are raised by SCE and further DSM loss is booked in the accounts.Please also share such cases in the agenda.

Thanks and Regards
Sumeet Narang
Sr Manager(OS)

Outlook

Regarding Frequent Cyclic Ramp up and Ramp down of schedule of MTPS-II for 19.08.2024 & 20.08.2024

From KRITI MISHRA <KRITIMISHRA@NTPC.CO.IN>
Date Tue 20-Aug-24 10:21
To erldccr@grid-india.in <erldccr@grid-india.in>
Cc Tapas Saha <TAPASSAHA@NTPC.CO.IN>; Yogesh <YOGESHSINGLA@NTPC.CO.IN>; Nilesh Dangayach <NILESHDANGAYACH@NTPC.CO.IN>; Operation kbunl <opn.kbunl@gmail.com>; finalschder@grid-india.in <finalschder@grid-india.in>; EEMG_KBUNL <eemg_kbunl@ntpc.co.in>; Rahul Anand <RAHULANAND@NTPC.CO.IN>; SUMEET NARANG <SUMEETNARANG@NTPC.CO.IN>

Dear Sir,

As per our telephonic discussion with ERLDC, it has been informed that frequent ramp up and ramp down schedule is being given from block 34 to block 38 on 20.08.2024 mainly on account of combination of AS & SCED . Similar scheduling pattern was observed on 19.08.2024 also from Block No,s 34-55 as shown in the tables below-

MTPS-II

Date : 20.08.2024 Rev 91

Time Block	Time Desc	ISGS	URS	OA_GNA	OA_TGNA	OA_PX	OA_REMC	AS	SCED	SCUC	Total
34	08:15-08:30	-161.4	0	0	0	0	0	0	-14.6	0	-176
35	08:30-08:45	-161.4	0	0	0	0	0	27.25	-14.6	0	-148.75
36	08:45-09:00	-147.78	0	0	0	0	0	54.5	-28.22	0	-121.5
37	09:00-09:15	-120.54	0	0	0	0	0	27.25	-55.46	0	-148.75
38	09:15-09:30	-102.7	0	0	0	0	0	27.25	-46.05	0	-121.5
39	09:30-09:45	-102.7	0	0	0	0	0	78.4	-73.3	0	-97.6
40	09:45-10:00	-102.7	0	0	0	0	0	51.15	-46.05	0	-97.6
41	10:00-10:15	-102.7	0	0	0	0	0	23.9	-18.8	0	-97.6

MTPS-II

Date : 19.08.2024 Rev 149

Time Block	Time Desc	ISGS	URS	OA_GNA	OA_TGNA	OA_PX	OA_REMC	AS	SCED	SCUC	Total
34	08:15-08:30	-50.26	0	0	0	-118.3	0	0	-7.44	0	-176
35	08:30-08:45	-43.1	0	0	0	-118.3	0	27.25	-14.6	0	-148.75
36	08:45-09:00	-43.1	0	0	0	-118.3	0	0	-14.6	0	-176
37	09:00-09:15	-50.54	0	0	0	-125.4	0	0	-0.06	0	-176
38	09:15-09:30	-50.54	0	0	0	-125.4	0	27.25	-0.06	0	-148.75
39	09:30-09:45	-56.76	0	0	0	-118.3	0	0	-0.94	0	-176
40	09:45-10:00	-176	0	0	0	0	0	27.25	0	0	-148.75
41	10:00-10:15	-163.32	0	0	0	0	0	54.5	-12.68	0	-121.5
45	11:00-11:15	-160.2	0	0	0	0	0	78.41	-15.81	0	-97.6
46	11:15-11:30	-160.2	0	0	0	0	0	51.16	-15.81	0	-124.85
47	11:30-11:45	-160.2	0	0	0	0	0	78.41	-15.81	0	-97.6
51	12:30-12:45	-160.2	0	0	0	0	0	0	27.25	35.35	-97.6
52	12:45-13:00	-160.2	0	0	0	0	0	0	0	35.35	-124.85
53	13:00-13:15	-160.2	0	0	0	0	0	0	54.5	8.1	-97.6
54	13:15-13:30	-160.2	0	0	0	0	0	-27.24	27.25	35.35	-124.84
55	13:30-13:45	-160.2	0	0	0	0	0	-27.22	0	35.35	-152.07
56	13:45-14:00	-160.42	0	0	0	0	0	-23.9	0	8.32	-176
57	14:00-14:15	-160.42	0	0	0	0	0	0	-15.59	0	-176.01

It is to mention that such frequent change in ramping direction is not desirable to generating machines barring some occasional emergency requirement. Often/block-to-block cyclic ramping is needlessly stressing our generating unit, as it is very difficult for mechanical systems of the unit to manage change in electrical system of the grid, this is severely increasing the stress on Boiler and Turbine. Moreover such frequent variations in schedule lead to huge losses for the station on account of DSM.

You are requested to please look into the matter and avoid such frequent schedule variations.

Thanks and Regards,

Kriti Mishra/कृति मिश्रा
Assistant Manager (EEMG)/सहायक प्रबंधक (ईईएमजी)

Muzaffarpur Thermal Power Station
मुजफ्फरपुर थर्मल पावर स्टेशन
NTPC Ltd / एन.टी.पी.सी. लिमिटेड
m- 7985425210

Annx-B.2.12

220kV Rajarhat-New Town-II

Event 1: - SD requisition submitted by WB on 09.07.24 for 10.07.24.

Reason: Rectification of gas leakage problem from B-ph. breaker pole

Event 2: - As per FIR on 10.07.24

Line charging attempted from Rajarhat end at 18:05 hrs on 10.07.24 but line tripped on SOTF.

Event 3: - WB communication received on 15.07.24.

S/D taken for cable testing work & communicated that ckt-II is under ***breakdown condition from 10.07.24.***

Event 4: - On 14.11.24 information received from WB.

220kV Rajarhat-New Town-II is under breakdown due to fault at **B-Phase cable since 10.07.2024**.

Event 5: - On 21.11.24 mail received from WB.

1. Repair of the b phase cable involves kits and spares from abroad, which is time consuming.
2. Other two phase UG cables healthy, it's extremely necessary to keep those in no load charging condition.
3. No load charging of Rajarhat (PG)-New Town II C circuit II (for R,Y phase only) from Rajarhat(PG) end only upto LA of New Town IIC only. This circuit has been out since 10/07/24 for b-phase cable fault.

please allow the no load charging of Rajarhat(PG)-New Town II C circuit II (for R-Y phase only) from Rajarhat(PG) end only upto LA of New Town IIC only. This circuit has been out since 10/07/24 for B-phase cable fault. The faulty B phase cable already is isolated at both ends. As, the repair of the B phase cable involves kits and spares from abroad, which is time consuming, so to keep the other two phase UG cables healthy, it's extremely necessary to keep those in no load charging condition.

Event 6: - On 27.11.24 mail received from WB.

In line with the decision taken in the mentioned OCC meeting on 27.11.2024, and in consultation with PG ER II, it is decided to charge the above mentioned R, Y phase cables in respect of Rajarhat to New Town II C ckt II tomorrow from Rajarhat (PG) end at around 1 pm to 1.30 pm. SLDC, WB will communicate in real time for charging code. Please allow for this no-load charging.

Event 7: - On 27.11.24 mail received from WB.

No load charging of Rajarhat (PG)-New Town II C #2I (for R,Y phase o from Rajarhat(PG) end only upto LA of New Town IIC is scheduled for 12:00 hrs (noon) on date. You are

hereby requested to convey the charging code to PGCIL in appropriate time so that the charging may take place at 12hrs (noon) sharp.

Event 7: -220KV-RAJARHAT-NEW TOWN(AA-II)-2 anti-theft charged.

R & Y phase anti-theft charged from Rajarhat end on **28/11/2024 at 12:15 hrs**.

Annex B.2.17.1

Odisha Feeder list for Disconnection
New feeders
ISTS feeders
220 kV Rengali(PG)-Rengali(OPTCL)
220/132 kV Baripada 160 MVA ICT
220 kV Baripada(PG)-Balsore (Odisha)
Intra-state feeders
132kV Bolangir(New)-Patnagarh S/C
132kV Bhadrak-Agarpada S/C
132kV Balasore-Soro
132kV Chandaka-Nimapara / Ranasighpur
132kV Baripada(PG)-Jaleswar/Bhograi
132kV Jajpur Rd. – Kendrapara D/C

DVC Feeder list for Disconnection
New 33kV feeders
Intra-state feeders
JSEB Barhi
JSEB Bokaro
JSEB Chas
JSEB Konar Banaso
JSEB Mugma
JSEB Giridih
JSEB Digwadih
JSEB Ganeshpur
JSEB Jamadoba
JSEB PADMA PSS RGGVY
JSEB Dugdha
JSEB Ramgarh
JSEB Karma PSS RGGVY
JSEB Kumardubi

JSEB Dumbri Banaso
JSEB Mukunda
JSEB Katras (Tilatand)
PMCH Medical College
JSEB West Bokaro (Ghato)
JSEB Sindri
JSEB Biada-Chas
JSEB Katras (Sijua)
JSEB Sendra Bansjora
JSEB Jainamore
JSEB Badjna
JSEB Hazaribagh
Jharkhand feeder list
New feeders
ISTS feeders
One 400/220 kV 315 MVA ICT Jamsedpur
220 kV Ranchi(PG)-Chandil(JUVNL)
Intra-state feeder
132kV Chandil – Golmuri D/C
132kV Dumka-Pakur S/C
33kV-Gumla-Bharno
33kV-Kamdara-Torpa
33kV-Lalmatia-Mahagama
33kV-Nouamundi-Noamundi
33kV-Kendposi-Kumardungi
33kV-Rajkharsawan-Rajkharsawan
33kV-Latehar-Manika
33kV-Japla-Md. Ganj
33kV-Daltonganj-Tukbera
33kV-Lohardaga-Kuru
33kV-Simdega-Kolebera
33kV-Japla-Japla
33kV-Kamdara-Karra

33kV-Lohardaga-Kisko
33kV-Tamar-Bundu
33kV-Simdega-Simdega
33kV-Godda-Pathargama
33kV-Chaibasa-Saraikela
33kV-Chaibasa-2-Rajnagar
33kV-Chakardharpur-CKP
33kV-Lalmatia-Mahagama
33kV-Chitra-Simla
33kV-Gumla-Ghagra
33kV-Kamdara-Basia
33kV-Chitra-Sarath
Bihar feeder list
New feeders
ISTS feeders
132 KV Sitamarhi(PG)-Runnisaidpur D/C T/L
132 kv Banka(PG)-Sultanganj D/C T/L
132 Kv Banka(PG)-Banka D/C T/L
Intra-state feeder
West Bengal feeder list
New feeders
ISTS feeders
220 kV Dalkohla (PG)-Dalkohla(WB)
132 kV Malda (PG)-Malda(WB)
132 kV Birpara(PG)-Birpara(WB)
Intra-state feeder
Sikkim feeder list
New feeders
ISTS feeders

PRIORITY WISE ISTS FEEDERS TO BE DISCONNECTED IN CASE OVERDRAWAL AND WHEN FREQUENCY IS BELOW 49.4 HZ AND NO UFR RELIEF HAS BEEN OBSERVED

Odisha Feeder list for Disconnection
132 kV Baripada-Bangriposi D/C
132 kV Baripada-Bhogarai/Jaleswar D/C
220 kV Bolangir-New Bolangir D/C
West Bengal Feeder list for Disconnection
220 kV Dalkohla (PG)-Dalkohla(WB) D/C
132 kV Malda (PG)-Malda(WB) D/C
132 kV Birpara(PG)-Birpara(WB) D/C
DVC Feeder list for Disconnection
220 kV Maithon-Dhanbad D/C
220 kV Maithon-Kalyaneswari D/C
220 kV Parulia-Parulia D/C
Jharkhand Feeder list for Disconnection
220 kV Daltonganj- Gardwa D/C
220 kV Daltonganj- Chatra D/C
220 kV Maithon-Dumka D/C
Bihar Feeder list for Disconnection
132 kV Sitamarhi (PG)-Runnisaidpur D/C
132 kV Banka (PG)-Sultanganj D/C
132 kV Banka (PG)-Banka D/C

Annex B.2.17.2

PART B: ITEMS FOR DISCUSSION

ITEM NO. B.1: Review of Identified feeders for disconnecting load of States during extreme events

In the 183rd OCC meeting, OCC advised all the SLDCs to submit the list of identified feeders to ERLDC for finalizing the feeder list for disconnecting load of states during extreme events.

Accordingly, ERLDC received list of feeders to be disconnected from Bihar, Jharkhand, Odisha & DVC. ERLDC is yet to receive list from West Bengal & Sikkim. List of the feeders of Bihar, Jharkhand, Odisha & DVC are tabled below. List of lines may be finalised including that from West Bengal & Sikkim.

Odisha Feeder list for Disconnection	
Old feeders	**New feeders**
ISTS feeders	
220 kV Rengali(PG)-Rengali(OPTCL)	220 kV Rengali(PG)-Rengali(OPTCL)
220/132 kV Baripada 160 MVA ICT	220/132 kV Baripada 160 MVA ICT
220 kV Baripada(PG)-Balsore (Odisha)	220 kV Baripada(PG)-Balsore (Odisha)
Intra-state feeders	
132kV Bolangir(New)-Patnagarh S/C	132kV Bolangir(New)-Patnagarh S/C
132kV Chhatrapur – Ganjam S/C	132kV Bhadrak-Agarpada S/C
132kV Bhanjanagar-Phulbani S/C	132kV Balasore-Soro
132kV Chandaka-Nimapara / Ranasighpur	132kV Chandaka-Nimapara / Ranasighpur
132kV Baripada(PG)-Jaleswar/Bhograi	132kV Baripada(PG)-Jaleswar/Bhograi
132kV Jajpur Rd. – Kendrapara D/C	132kV Jajpur Rd. – Kendrapara D/C

DVC Feeder list for Disconnection	
Old 33kV feeders	**New 33kV feeders**
Intra-state feeders	
JSEB Barhi	JSEB Barhi
JSEB Bokaro	JSEB Bokaro
JSEB Chas	JSEB Chas
JSEB Konar Banaso	JSEB Konar Banaso
JSEB Mugma	JSEB Mugma
JSEB Giridih	JSEB Giridih
JSEB Digwadih	JSEB Digwadih
JSEB Gobindpur	
JSEB Ganeshpur	JSEB Ganeshpur
JSEB Jamadoba	JSEB Jamadoba
JSEB PADMA PSS RGGVY	JSEB PADMA PSS RGGVY
JSEB Dugdha	JSEB Dugdha
JSEB Ramgarh	JSEB Ramgarh
JSEB Karma PSS RGGVY	JSEB Karma PSS RGGVY
JSEB Kumardubi	JSEB Kumardubi
JSEB DumbriBanaso	JSEB DumbriBanaso
JSEB Mukunda	JSEB Mukunda
JSEB Katras (Tilatand)	JSEB Katras (Tilatand)
PMCH Medical College	PMCH Medical College

JSEB West Bokaro (Ghato)	JSEB West Bokaro (Ghato)
JSEB Sindri	JSEB Sindri
JSEB Biada-Chas	JSEB Biada-Chas
JSEB Katras (Sijua)	JSEB Katras (Sijua)
JSEB SendraBansjora	JSEB SendraBansjora
JSEB Jainamore	JSEB Jainamore
JSEB Badjna	JSEB Badjna
WBSEB Belmuri	
WBSEB Buedwan	
WBSEB Kanyapur	
WBSEB Luchipur	
WBSEB Dendua	
WBSEB Kalyaneswary	
WBSEB Borjora	
WBSEB Santhaldih	
WBSEB Jamuria	
	JSEB Hazaribagh

Jharkhand feeder list	
Old feeders	**New feeders**
ISTS feeders	
One 400/220 kV 315 MVA ICT Jamsedpur	One 400/220 kV 315 MVA ICT Jamsedpur
220 kV Ranchi(PG)-Chandil(JUVNL)	220 kV Ranchi(PG)-Chandil(JUVNL)
Intra-state feeder	
132kV Chandil – Golmuri D/C	132kV Chandil – Golmuri D/C
132kV Dumka-Pakur S/C	132kV Dumka-Pakur S/C
	33kV-Gumla-Bharno
	33kV-Kamdara-Torpa
	33kV-Lalmatia-Mahagama
	33kV-Nouamundi-Noamundi
	33kV-Kendposi-Kumardungi
	33kV-Rajkharsawan-Rajkharsawan
	33kV-Latehar-Manika
	33kV-Japla-Md. Ganj
	33kV-Daltonganj-Tukbera
	33kV-Lohardaga-Kuru
	33kV-Simdega-Kolebera
	33kV-Japla-Japla
	33kV-Kamdara-Karra
	33kV-Lohardaga-Kisko
	33kV-Tamar-Bundu
	33kV-Simdega-Simdega
	33kV-Godda-Pathargama
	33kV-Chaibasa-Saraikela
	33kV-Chaibasa-2-Rajnagar
	33kV-Chakardharpur-CKP

	33kV-Lalmatia-Mahagama
	33kV-Chitra-Simla
	33kV-Gumla-Ghagra
	33kV-Kamdara-Basia
	33kV-Chitra-Sarath
Bihar feeder list	
Old feeders	**New feeders**
ISTS feeders	
132kV Ara(PG)-Jagdishpur S/C line	
	132 KV Sitamarhi(PG)-Runnisaidpur D/C T/L
132kV Banka(PG)-Sultanganj D/C	132 kv Banka(PG)-Sultanganj D/C T/L
132kV Banka(PG)-Banka D/C line	132 Kv Banka(PG)-Banka D/C T/L
Intra-state feeder	

West Bengal feeder list	
Old feeders	**New feeders**
ISTS feeders	
220 kV Dalkohla (PG)-Dalkohla(WB)	
132 kV Malda (PG)-Malda(WB)	
132 kV Birpara(PG)-Birpara(WB)	
Intra-state feeder	

Sikkim feeder list	
Old feeders	**New feeders**
ISTS feeders	

Member may discuss.

Deliberation in the meeting:

ERLDC representative submitted that the list of identified feeders has been received from Bihar, Jharkhand, Odisha and DVC and input from Sikkim is yet to be received. He further added that the list of feeders for West Bengal has been prepared in consultation with SLDC West Bengal. On query, SLDC West Bengal representative expressed that the matter may also be discussed with WBSEDCL for finalization of the list.

OCC advised ERLDC to finalize the above list and incorporate the same in the operating procedure. Changes in the list, if any, would be subsequently updated in the operating procedure.

ITEM NO. B.2: Removal of technical minimum schedule support from ISGS plants to facilitate full surrender of power by Constituents.

As per prevailing practice in Eastern Region, ISGS stations are provided with Technical Minimum schedule support. In the event where sum of requisition from all the beneficiaries falls below technical minimum, the beneficiary schedule is jacked up to provide technical minimum schedule to the generators.

However, in the light of recent CERC Order on Petition No: 60/MP/2019, the practice of jacking up surrendered schedule of beneficiaries shall be withdrawn, except in cases as mandated in

Annex-B.2.19.

PIYUSH SINGH, IAS
संयुक्त सचिव
JOINT SECRETARY

Tel : 011-23714367
Email: singhp7@nic.in

भारत सरकार
GOVERNMENT OF INDIA
विद्युत मंत्रालय
MINISTRY OF POWER
श्रम शक्ति भवन, रफी मार्ग
SHRAM SHAKTI BHAWAN, RAFI MARG

नई दिल्ली - 110001
NEW DELHI - 110001

सत्यमेव जयते

डायरी संख्या 894
दिनांक 25/11/24

DO. No. 22-1306/5/2020-OM

18th November, 2024

Respected Sir, / Madam,

The Crisis Management Plan (CMP) for Power Sector is reviewed regularly by Secretary (Security), Cabinet Secretariat. The last review meeting was held on 31.10.2023 wherein Secretary (Security) emphasized on the aspects of security of townships of power utilities and suggested to undertake the following measures:

i. Availability of details pertaining to local district authorities, revenue authorities, law enforcement, fire management authorities, etc., across the townships
ii. Adequate vetting of personnel/organisation responsible for township security by local law enforcement agencies.
iii. Regular conduct of mock drills in the townships, especially evacuation drills with ambulance and drills for handling major fire accidents.

2. Accordingly, CEA vide letter dated 13.12.2023 requested States and CPSUs to take appropriate action on the aforementioned suggestion to ensure prompt and effective handling of any crisis / emergency situation. (**Copy of letters attached**)

3. Action Taken Report on the implementation of the decision taken in above-mentioned meeting of Crisis Management Plan is required to be sent to the Cabinet Secretariat. I would, therefore, request you to kindly update us on the action taken on the aforementioned suggestions by November 25, 2024 positively.

With Regards,

Yours sincerely,

(**Piyush Singh**)

Chief Secretaries / Principal Secretaries (Energy / Power) of all the States/UTs

Copy to:-
Shri A. Balan, Member (Planning), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi – 110066.

25.11.24

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RIGHT TO INFORMATION

स्वच्छ भारत
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Annexure D.1

Anticipated Peak Demand (in MW) of ER & its constituents for January 2025 (as per LGBR 2024-25)

1	**BIHAR**	**Demand (MW)**	**Energy Requirement (MU)**
	NET MAX DEMAND	6244	3329
	NET POWER AVAILABILITY- Own Sources	488	399
	Central Sector+Bi-Lateral	6760	4716
	SURPLUS(+)/DEFICIT(-)	1005	1786
2	**JHARKHAND**		
	NET MAXIMUM DEMAND	2060	1157
	NET POWER AVAILABILITY- Own Source	394	208
	Central Sector+Bi-Lateral+IPP	1352	816
	SURPLUS(+)/DEFICIT(-)	-280	-133
3	**DVC**		
	NET MAXIMUM DEMAND	3556	2205
	NET POWER AVAILABILITY- Own Source	5584	3327
	Central Sector+MPL	269	165
	Bi- lateral export by DVC	2346	1746
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	-50	-459
4	**ODISHA**		
	NET MAXIMUM DEMAND (OWN)	4500	2604
	NET MAXIMUM DEMAND (In Case of CPP Drawal of 900 MW(peak) and average drawl of 700 MW)	4811	2906
	NET POWER AVAILABILITY- Own Source	3502	2771
	Central Sector	2072	1427
	SURPLUS(+)/DEFICIT(-) (OWN)	1074	1594
	SURPLUS(+)/DEFICIT(-) (I(In Case of CPP Drawal of 900 MW(peak) and average drawlm of 700 MW)	763	1292
5	**WEST BENGAL**		
	WBSEDCL		
5.1	NET MAXIMUM DEMAND	6280	3651
	NET MAXIMUM DEMAND (Incl. Sikkim)	6285	3655
	NET POWER AVAILABILITY- Own Source (Incl. DPL)	4830	2822
	Central Sector+Bi-lateral+IPP&CPP+TLDP	2634	1502
	EXPORT (To SIKKIM)	5	4
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	1179	669
5.2	**CESC**		
	NET MAXIMUM DEMAND	1410	706
	NET POWER AVAILABILITY- Own Source	460	385
	IMPORT FROM HEL	541	258
	TOTAL AVAILABILITY OF CESC	1001	643
	SURPLUS(+)/DEFICIT(-)	-409	-63
	WEST BENGAL (WBSEDCL+CESC+IPCL)		
	(excluding DVC's supply to WBSEDCL's command area)		
	NET MAXIMUM DEMAND	7690	4357
	NET POWER AVAILABILITY- Own Source	5290	3207
	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	3175	1760
	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXPORT	775	610
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXPORT	770	606
6	**SIKKIM**		
	NET MAXIMUM DEMAND	135	65
	NET POWER AVAILABILITY- Own Source	44	56
	Central Sector	300	166
	SURPLUS(+)/DEFICIT(-)	209	156
	EASTERN REGION		
	NET MAXIMUM DEMAND	23711	13717
	NET MAXIMUM DEMAND ((In Case of CPP Drawal of 800 MW(peak) and average drawl of 700 MW)	24015	14019
	BILATERAL EXPORT BY DVC (Incl. Bangladesh)	2346	1746
	EXPORT BY WBSEDCL TO SIKKIM	5	4
	EXPORT TO B'DESH & NEPAL OTHER THAN DVC	642	478
	NET TOTAL POWER AVAILABILITY OF ER	26884	17272
	(INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)		
	SURPLUS(+)/DEFICIT(-)	180	1326
	SURPLUS(+)/DEFICIT(-) (In Case of CPP Drawal for Odisha)	-125	1024