



**AGENDA**  
**FOR**  
**212<sup>TH</sup> OCC MEETING**

**Date: 22.02.2024**

**Eastern Regional Power Committee**

**14, Golf Club Road, Tollygunge**

**Kolkata: 700033**

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# **EASTERN REGIONAL POWER COMMITTEE**

**AGENDA FOR 212<sup>TH</sup> OCC MEETING TO BE HELD ON 22.02.2024 (THURSDAY) AT 10:30 HRS**

## **1. PART-A: CONFIRMATION OF MINUTES**

### **1.1. Confirmation of Minutes of 211<sup>th</sup> OCC Meeting held on 24<sup>th</sup> January 2024 virtually through Microsoft Teams online meeting platform**

The minutes of 211<sup>th</sup> Operation Coordination Sub-Committee meeting held on 24.01.2024 was circulated vide letter dated 07.02.2024.

**Members may confirm the minutes of 211<sup>th</sup> OCC meeting.**

## **2. PART-B: ITEMS FOR DISCUSSION**

### **2.1 Decision taken during 22<sup>nd</sup> meeting of monitoring committee regarding the sanction of the new PSDF projects including the projects under examination: NLDC**

This is to inform that during the 22<sup>nd</sup> meeting of the monitoring committee, a decision has been taken to withhold the sanction of new projects including the projects under examination for the period of one year, except the critical projects i.e SCADA for NER, Security operation Centre(SOC) for SLDCs, Islanding schemes and REMC projects.

The decision has been taken considering the fund availability in the PSDF account and the existing liabilities on account of ongoing projects. The decision shall be reviewed after a period of one year.

As per the decision taken by the Monitoring committee, all the projects that are under examination (barring the critical projects mentioned above) are considered as **deemed returned**.

Letter from NLDC on subject matter attached at **Annexure-B.2.1.1** and List of such projects of ER attached at **Annexure-B.2.1.2**

Also, new projects barring the above exceptions, shall not be accepted for funding through PSDF until the aforementioned decision remains in effect. This is for information of all concerned.

**Members may discuss.**

### **2.2 Status update on restoration of 1200 MW Teesta III Hydro-electric Project(SUL), Teesta –V HEP(NHPC) and Dikchu HEP: ERPC secretariat**

1200 MW Teesta III Hydro-electric Project, on the intervening night of 03.10.2023 and morning of 04.10.2023, had encountered a natural disaster in upstream catchment area of the dam. It was reported that a cloudburst in upstream of dam region has led to sudden increase in discharge of Teesta river.

This had also subsequently resulted in considerable damage to Teesta –V HEP(NHPC) and Dikchu HEP located in downstream.

Present status of revamping works at Teesta –III HEP, Teesta-V HEP(NHPC) and Dikchu HEP along with tentative timeline for revival of service may please be intimated.

**SUL, NHPC and Dikchu HEP may update. Members may discuss.**

### **2.3 Shifting of Agriculture Loads from Non-Solar hours to Solar hours: ERPC secretariat**

This is in reference to MoP letter no. 22/41/2023-OM (269407) dated 01.02.2024 (copy enclosed as **Annexure B.2.2**) regarding subject stated above requesting all the states to shift their agriculture load from non-solar to solar hours in light of upcoming high demand season.

The Government of India's Ministry of Power has issued a directive to shift agricultural power load to solar hours, citing the need to address global warming and take advantage of the 180 GW of renewable energy capacity available, which is expected to grow to 500 GW by 2030. This shift is motivated by the abundant solar power during daylight hours, which is cheaper than thermal or hydroelectric power and will help conserve water resources. The ministry has requested the implementation of this shift by the end of March 2024 and has suggested using funds to separate agricultural feeders for better transmission and distribution, while reducing the financial burden on state governments.

Further, as it is proposed to shift to Time of Day (TOD) tariff, under which tariff during solar hours will be less, it may be also analysed as to what other load can be shifted to solar hours.

**Members may discuss.**

### **2.4 Installation of 315 MVA transformer bank at 400 kV New Chanditala S/s and replacement of 4th ICT at 400 kV Jeerat S/s by 315 MVA spare ICT from Malda (PG) S/s on loan basis: West Bengal SLDC (WBSETCL)**

(i) In view of last year's unprecedented load growth in the state of WB, and the apprehended delay to come the 4th ICT at New Chanditala 400 kV sub-station, WBSETCL taken initiative to form a transformer bank of capacity 315 MVA at New Chanditala 400 kV sub-stn from own stock of 3 numbers of single-phase transformers sacrificing the 80 MVAR Reactor Bay at 400 kV side. This is needed to avoid / minimise PLS during ensuing summer 2024 in districts like Howrah, Hooghly and in CESC areas fed from Howrah, Liluah etc. We are expected to bring the said ICT by 31st March, 2024. Already the matter is discussed and made through in 26th CMETS-ER meeting held on 27/12/23.

(ii) The 4th ICT at Jeerat 400 KV sub-stn is out since 2021, where the repairing and re-connection of the damaged ICT will not be possible by forthcoming summer due to some issues related to procurement procedure. Hence apprehending the extreme congestion in the network at around Nadia, North 24 Parganas and at the state capital, Kolkata (CESC command area), WBSETCL had taken up the matter with Power Grid and decided to take the 315 MVA spare ICT from Malda (PG) Sub-stn on loan basis to handle the situation till the damaged 4th ICT is repaired and ready for commissioning. As, this is to replace the damaged 4th ICT, hence no need of any consent of CMETS-ER meeting. However, real time FTC clearance will be needed from ERLDC.

Requirement of both these asset's synchronisation with the system was discussed and agreed in OCC forum. Now, as these two ICTs are expected to come next month or before hence, the forum is requested to assist in advance regarding the requirements of first-time charging clearance from ERLDC for both the cases as detailed above. Other than Chief Electrical Officer's clearance and SCADA integration, if any other pre-requisite is needed, then that may please be informed in advance. So that, after completion of the installations on war footing basis in view of forthcoming summer load and general election, there should not be any hindrances regarding FTC clearance.

**West Bengal SLDC (WBSETCL) may update. Members may discuss.**

## **2.5 Delay in conductor upgradation to HTLS owing to pending clearance from South Eastern Railway– West Bengal SLDC (WBSETCL).**

Severe bottleneck is faced for changing conductor from age old Zebra to HTLS at four numbers of railway crossings due to non-clearance from south eastern railway authority in terms of giving way leave estimate since last one year which will enable us to pay for the amount. Only after completion of this, we can apply for power blocks to south eastern railway and on receipt of their clearance we can pay for power block also.

This upgradation of conductor is extremely important to supply power to a part of Kolkata (CESC command area) including Nabanna building and to Howrah and Hooghly districts. In view of forthcoming summer and ensuing general election kind attention of the forum is drawn on this important issue to request the south eastern railway authority to resolve the issue within shortest possible time. As, after getting the licensee status, railway department also have come to some meetings under ERPC, so if a message is conveyed to railway authority from the OCC forum, it may have an impact to resolve the long pending issue.

**West Bengal SLDC (WBSETCL) may explain. Members may discuss.**

## **2.6 Update on installation of 3rd ICT at Rajarhat (PG)-West Bengal SLDC (WBSETCL)**

Status and the headway achieved in respect of proposed 3rd ICT at Rajarhat (PG) may please be intimated as this status was not discussed in the Subhasgram ICT monitoring meeting held on 13.02.2024. The need of the 3rd ICT at Rajarhat (PG) was agreed by WBSETCL in 21st CMETS-ER meeting held on 28.07.2023, but till date the advancement since last 7 months in this regard is not known to us. Also, it is important to mention here that on 16.01.24 New Town II C sub-station was commissioned, which may further add up on the apprehended 900 MW load of Rajarhat (PG) in the coming summer.

Hence it is extremely important to monitor the status update of the proposed 3rd ICT at Rajarhat(PG).

**West Bengal SLDC (WBSETCL) may explain & Members may discuss.**

## **2.7 Shutdown proposal of generating units for the month of March'2024-ERPC Secretariat**

<b>Maintenance Schedule of Thermal Generating Units of ER during 2024-24 in the month of March '2024</b>
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System	Station	Unit No.	Capacity (MW)	Period (as per LGBR 2024-24)		No. of Days	Reason
				From	To		
DVC	Bokaro-A TPS	1	500	15.02.2024	20.03.2024	35	COH- Blr, Turb, Gen
	Shutdown not availed as per 211th OCC						
WBPDC	Kolaghat TPS	5	210	21.03.2024	30.03.2024	10	PG Test/ Boiler License Renewal
NTPC	KhSTPS	6	500	01.03.2024	30.03.2024	30	Boiler Maintenance
	Barauni	8	250	01.03.2024	30.03.2024	30	Boiler + Turb Bearings inspection + All Turbine Valves

**Members may discuss.**

## 2.8 Reason for forced outage of Central Generating stations in ER: ERPC Secretariat

This is in reference to MoP letter no. 22/7/2024-OM [E271032] dated 08.02.2024 (copy enclosed as **Annexure B.2.8**) regarding subject stated above requesting to carry out the analysis of the reasons for forced outage of Central generating Stations.

It is requested to kindly send the list of Planned Maintenance, Forced Outages and other outages along with reason of outages and duration of outages for the last six (6) years.

**Members may discuss.**

## 2.9 Status of upcoming Thermal Projects of Eastern Region (Scheduled for COD)-ERPC Secretariat

Enhancing thermal capacity is imperative due to escalating load demands. As we approach the summer season, ensuring preparedness is of utmost importance. Possessing adequate capacity during peak load periods is crucial for effective grid management. There are several forthcoming thermal projects within the region, with a few Thermal Power Plants (TPPs) awaiting their CODs such as North Karanpura, Barh, Patratu, and SJVN.

It is necessary for these thermal power plants to strategize for their timely completion and integration into the grid, ensuring the region's readiness for the upcoming demand surge.

**Generators may update.**

## **2.10 Ensuring Optimal Reservoir Levels for Hydro Generating Stations in the Eastern Region-ERPC Secretariat**

In anticipation of the summer season and the expected increase in load demand, it is crucial for the Eastern Region to be well-prepared, particularly in terms of hydroelectric power generation. So, the readiness of all hydro generating stations within the region to operate at their full potential during the high hydro season has to be ensured.

It is essential for the hydro generating stations to contribute effectively to meeting the region's energy demand, thereby maintaining stability and efficiency in the power grid during peak load periods.

Details of water levels at major Hydro reservoirs of Eastern region for preceding years (2021-22,2022-23) attached at **Annexure B.2.10**.

**Generators may update.**

## **2.11 Progress of 400kV DTL from IBEUL to Sundergarh-ERPC Secretariat**

As per the deliberation of the meeting dated 8th November'2023 convened by the CEA, chaired by Chairperson CEA, regarding LILO arrangement/Power evacuation of IBEUL, IBEUL shall complete the DTL latest by March 2024 and shall submit monthly progress reports to CEA, ERPC, ERLDC, OPTCL and CTUIL.

In 210<sup>th</sup> OCC Meeting, it was also affirmed that 40% of DTL for IBEUL plant is already completed and extra manpower has been deployed by IBEUL for its final completion by mid February'2024.

**IBEUL may update.**

## **2.12 220 KV BTPS - Begusarai circuit tripping on 18:45 on 12/02/2024: NTPC ER-I**

220 KV BTPS - Begusarai Ckt-2 tripped at 18:45 hrs on 12/02/2024 on Zone-1 earth fault protection due to snapping of Y phase jumper at Begusarai substation end. After tripping of Begusarai CKT-2, the line loading of BTPS- Begusarai Ckt-1 increased. Other four lines of 220KV did not share the load. The loading in Mokamma ckt-1,2 were maintaining ( - ) 10 MW each and in Hazipur Ckt-1,2 were 80 MW each. So BTPS Stage-2 generation was reduced to avoid further loading & tripping of Begusarai CKT-1. Begusarai CKT-1 loading increased on increasing of generation. SLDC Control room was informed for balancing the load in other 220KV Ckts but it could not be done. SLDC control room was also requested to revise the BTPS Stage-2 schedule for safe running of BTPS Stage-2 Units (2\* 250MW), but it could not be done.

SLDC Bihar may kindly review upgrading of circuits at sub station end balancing of load may also be looked into.



**NTPC ER-I may update and SLDC Bihar may respond. Members may discuss.**

### **2.13 Request for replacing the L&T make meter at POWERGRID, Angul end for both GMR – Angul CKT-I & CKT-II: GMR**

As it is known, GMR Odisha Unit#1 and Unit#2 are directly connected to POWERGRID network at Angul end through two no's of 400KV transmission lines. For billing purpose, Main meter having serial no NP-8780-A & Check meter having serial no NP-8786-A have been installed in GMR – POWERGRID, Angul CKT-I and similarly, Main meter having serial no NP-8785-A and Check meter having serial no NP-8781-A have been installed in GMR – POWERGRID, Angul CKT-II. But due to frequent time drifting in these energy meters, it creates the time difference for 15 minutes block energy meter and hence generates a difference in power calculation in real time basis, both at GMR end as well as at POWERGRID, Angul end. Also, it is not possible for L&T make energy meter to be synchronized with GPS time, because it allows only one minute time retardation or advance.

So, it is requested to ERLDC and POWERGRID, Odisha to replace the L&T make meters by any other make meters at POWERGRID, Angul end so that the frequent time drifting nature of L&T energy Meter can be avoided.

**GMR may update. Members may discuss.**

### **2.14 Difference in ABT(SCADA) vs SEM meters-NTPC Darlipalli**

Station ABT meter is 0.2S class ( L&T make) same as SEM. ABT meters are auto time sync with GPS where as SEM meters are not synced with GPS. Manual correction is being done in SEM meters if any time drift is observed.

Due to time sync differences, differences in ABT vs SEM being observed which is causing DSM loss to the station. Last month station incurred DSM loss of 2.85 lacs.

The matter was already discussed in 211th OCC meeting held on 24.01.2024 wherein OCC had opined the mismatch in meter data may be owing due to different technical specifications of different OEM meters, thereby NTPC was advised to replace some of the ABT meters with Genus make meters on pilot basis to check whether the difference still exists or not.

**NTPC Darlipalli may update. Members may discuss.**

### **2.15 SEM meter replacement and DSM loss due to deviation in meter reading- NTPC TSTPS**

It has been observed that after the replacement of SEM(Genus make) meters in TSTPS Bus Section 1&3 on 15th Dec 2023 and subsequently during the HVDC Bi-pole shutdown, the difference in ABT (SCADA-Nexus make) meter vs SEM meters has got increased. Due to this, TSTPS has incurred DSM loss of Rs.16.49 Lakh(17th Jan to 3rd Feb-2024).

Station ABT meter is 0.2S class(Nexus make) same as SEM (Genus make). The meter reading difference was less before replacement of new meters. However, it has got increased post replacement.

The meters are auto time sync with GPS whereas SEM meters are not synced with GPS. Manual correction is being done in SEM meters if any time drift is observed.

Considering the above, it is requested to:

- a. Allow TSTPS to use the old (L&T make) main meters as check meter to the new Genus make main meter to verify the correctness of reading.
- b. Access to the SEM meters may be provided for online monitoring of DSM and auto-time sync in real time.

**NTPC TSTPS may update. Members may discuss.**

## **2.16 Revision of schedules from 18-12-2024 till implementation of software restriction by ERLDC: NTPC ER-I**

In view of Suo-moto order by CERC dated 18.12.2023, (Petition No. 18 /SM/2023) clause 10, which states that

Quote :

*“Keeping in view the difficulties expressed by the Grid-India with respect to SCUC and generating stations, we are of the considered view that while the beneficiaries/buyers shall have full flexibility to decide on their requisition from a generating station up to 1430 hrs on ‘D-1’ day, **(their right to revision of schedules in the said generating station for ‘D’ Day shall be subject to the condition that such revision of schedule for ‘D’ Day shall not be below their respective share of minimum turndown level in the respective generating station.** This shall enable a realistic SCUC exercise and help ensure adequacy of reserves in the system, while at the same time enabling the beneficiaries/buyers to undertake advance planning and optimal portfolio management of their power purchases.”*

Further Grid India implemented the restriction arising from above order on 24-01-2024. Before that there are several instances of revision of schedules below technical minimum on D Day by beneficiaries.

In such cases, revision of schedules may kindly be implemented as per CERC suo moto order.

Details of such cases attached in **Annexure B.2.16**

**NTPC ER-I and ERLDC may update. Members may discuss.**

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

#### 3.1. ER Grid performance during January 2024.

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month January -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)
438 MU	462.3 MU 30.01.2024	23044 MW, 27.01.2024 at 18:20 Hrs.	13890 MW, 02.01.2024 at 03:28 Hrs.	4452	4608

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

#### 3.2. Ensuring the healthiness of ADMS

State	Criteria for ADMS operation	Number of instances for which ADMS criteria satisfied	Number of instances for which detail received	Discussion regarding previous month performance	Update in 211 <sup>th</sup> OCC meeting
West Bengal	1. System Frequency < 49.7 Hz 2. WB over-drawl > 150 MW 3. Delay = 4 min	0	-	-	-
Jharkhand	1. System Frequency < 49.9 Hz 2. Jharkahnd over- drawl > 25 MW 3. Delay = 3 min	182	Nil	-	-
DVC	1. System Frequency < 49.9 Hz 2. DVC over-drawl > 150 MW 3. Delay = 3 min	14	Nil	-	-

Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. Delay = 3 min	0	-	-	-
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**Members may note.**

### 3.3. Commissioning status of ADMS

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

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

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

**Members may note.**


### 3.4. Primary frequency response of generating units in ER

The availability of sufficient primary frequency response is one of the fundamental requirements of power system operation not only from reliability point of view but also from regulatory compliance point of view. Based on the assessed FRC re-testing of primary frequency response can be recommended. Therefore, the accurate and high-resolution data from generator end is extremely important in absence of which assessment of FRC is done as per low resolution ERLDC SCADA data. The plant wise data submission statistic for frequency event flagged by ERLDC upto 30.11.2023 is given below:

STATIONS	17.12.2023	05.01.2024	15.01.2024	15.01.2024
	13:01	05:16	13:59	14:06
ADHUNIK	Received	Received	Received	Received
BARH	Pending	Pending	Pending	Pending
BRBCL	Pending	Pending	Pending	Pending
DARLIPALLI	Received	Received	Received	Received
DIKCHU	Plant out	Plant out	Plant out	Plant out

FARAKKA	Pending	Pending	Pending	Pending
GMR	Received	Received	Received	Received
JITPL	Received	Received	Received	Pending
KAHALGAON	Received	Received	Received	Received
MPL	Received	Received	Received	Received
NPGC	Received	Received	Received	Received
TALCHER	Received	Pending	Pending	Pending
TEESTA III	Plant out	Plant out	Plant out	Plant out
TEESTA V	Plant out	Plant out	Plant out	Plant out
North Karanpura	Pending	Pending	Pending	Pending

In view of the same all utilities are once again requested to kindly look into the matter and take necessary action to ensure consistent.

 = Data received

Data submission for every frequency event flagged by ERLDC.

 = Data not received

**Members may note.**

#### 4. PART-D: OPERATIONAL PLANNING

##### 4.1. Anticipated power supply position during March 2024

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of March 2024 were prepared by ERPC Secretariat (**Annexure D.1**) on the basis of LGBR for 2023-24 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc.

**Members may update.**

##### 4.2. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on 14-02-2024)

###### 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	BARH	BIHAR	NTPC	1	660	Initially the unit was out due to Boiler Tube Leakage, from 00:00 Hrs of 24/11/2023 the unit was taken under annual overhauling. Unit was out for capital overhauling till 05/01/2024. Unit is out for rotor replacement work w.e.f. 06/01/2024	19-Nov-2023
4	JITPL	ODISHA	JITPL	1	600	IP control valve close	08-Feb-2024
5	NORTH KARANPURA	BIHAR	NTPC	1	660	Boiler Tube Leakage	11-Feb-2024
6	IB.TPS	ODISHA	OPGC	2	210	Boiler Tube Leakage	12-Feb-2024

7	HEL HIRANMAYEE	WEST BENGAL	HEL	1	150	due to a problem in the ID Fan VFD thyristor	11-Feb- 2024
8	DPL	WEST BENGAL	WBPDC	7	300	Previously out due to Flash in excitation system. Then taken for annual overhauling since 00:00 hrs of 13.12.2023.	12-Dec- 2023
9	TSTPP	ODISHA	NTPC	1	500	Annual Overhauling	04-Jan- 2024
10	DSTPS	DVC	DVC	2	500	Unit overhauling	13-Jan- 2024
11	FSTPP	WEST BENGAL	NTPC	6	500	Overhauling Purpose	15-Jan- 2024
12	SANTALDIH TPS	WEST BENGAL	WBPDC	5	250	Unit Overhauling	26-Jan- 2024
13	KOLAGHAT	WEST BENGAL	WBPDC	3	210	Capital Overhauling	06-Feb- 2024
14	Sterlite	ODISHA	SEL	3	600	AOH and R&M activity	13-Feb- 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	09-Feb- 2024
2	SOUTHERN	WEST BENGAL	CESC	2	67.5	Low System Demand	09-Feb- 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	1	48	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
8	DIKCHU Hep	SIKKIM	SKPPL	2	48		
9	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
10	TEESTA HPS	SIKKIM	NHPC	2	170		
11	TEESTA HPS	SIKKIM	NHPC	3	170		
12	BALIMELA HPS	ODISHA	OHPC	3	60	The unit taken out under R&M since 08/07/2022 for 18 months.	08-Jul-2022
13	INDRAVATI	ODISHA	OHPC	2	150	Capital Maintenance	23-Nov-2023



14	CHIPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15-Dec-2023
15	RANGIT HPS	SIKKIM	NHPC	1	20	Capital maintenance	02-Jan-2024
16	RANGIT HPS	SIKKIM	NHPC	3	20	Special annual maintenance	02-Jan-2024
17	JORETHANG	SIKKIM	DANS	1	48	Barrage Civil Work	08-Jan-2024
18	JORETHANG	SIKKIM	DANS	2	48	Barrage Civil Work	16-Jan-2024
19	CHUZACHEN	SIKKIM	GATI	1	55	Annual Overhauling	31-Jan-2024
20	CHUZACHEN	SIKKIM	GATI	2	55	Annual Overhauling	11-Feb-2024
21	U.KOLAB	ODISHA	OHPC	1	80	Annual maintenance	01-Feb-2024
22	BALIMELA HPS	ODISHA	OHPC	1	60	Annual maintenance	08-Feb-2024
23	RENGALI HPS	ODISHA	OHPC	3	50	Annual maintenance	07-Feb-2024

d) **Long outage report of transmission lines (As on 14.02.2024):**

Transmission Element / ICT	Outage From	Reasons for Outage
220/132KV 100 MVA ICT II AT LALMATIA	22.01.2019	Commissioning work of 220/132KV, 100MVA Transformer and its associated control Panel under progress.
220 KV PANDIABILI - SAMANGARA D/C	03.05.2019	Tower Collapsed during Cyclone FANI (Restoration project is entrusted upon PGCIL & 220kV Samangara-Pandiabili ckt-I&II are anti-theft charged from Pandiabili end from loc no.01 to loc no.74)
220/132KV 100 MVA ICT 3 AT CHANDIL	30.04.2020	Due to Fire hazard ICT damaged and burnt.
400/220KV 315 MVA ICT 4 AT JEERAT	09.04.2021	Due to Fire hazard ICT damaged and burnt. It was decided that 315MVA, 400/220KV spare ICT from Regional

		Pool at Malda to be replaced in place of defective 315 MVA ICT (4th) at Jeerat 400 KV S/S(WB). Work under progress.
220KV-FSTPP-LALMATIA-I	21.04.2021	Conductor stringing 12.965 km has been completed and Stringing between Tower Loc. no. 152 to 159 is under progress. Transmission line is idle charged between Lalmatia GSS end to Tower Loc.no.169
220KV-MUZAFFARPUR(PG)-GORAUL(BH)-1	11.06.2022	Main Bay is under breakdown due to flashing in GIS module
220KV-WARIA-BIDHANNAGAR-1 & 2	08.06.2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
400/220KV 315 MVA ICT 2 AT PATRATU	27.09.2022	ICT tripped on few occasions due to Buchholz later DGA violation found, internal fault in transformer to be rectified. (DGA violation)
132KV-BARHI-RAJGIR-1	25.03.2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destraining of conductor of both circuits and Earthwire between tension tower no. 218-237 in same line.
132KV-NALANDA-BARHI(DVC)-1	25.03.2023	
220KV-TSTPP-MEERAMUNDALI-2	10.06.2023	Tower collapse at loc no 41, 42 (from Meramundali end). Ckt1 charged through ERS.
400KV-RANGPO-TEESTA-V-1 & 2	04.10.2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-TEESTA-III-RANGPO-1	04.10.2023	Hand tripped from Teesta-III end due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-TEESTA-III-DIKCHU-1	04.10.2023	
400KV-RANGPO-DIKCHU-1	04.10.2023	Hand tripped from Rangpo 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 JHARSUGUDA-ROURKELA-1 & 3	26.10.2023	Reconductoring work

400KV-BINAGURI-BONGAIGAON-2	27.10.2023	Reconductoring work
220KV/132KV 160 MVA ICT 2 AT MALDA	30.11.2023	For shifting of the ICT- 2 from 132KV AIS to GIS
400KV-INDRAVATI(PG)-INDRAVATI(GR)	28-12-2023	Isolator problem at GRIDCO end
400KV-BINAGURI-BONGAIGAON-1	29.01.2024	Reconductoring work of 400 KV Bongaigaon Binaguri-1
400KV-BINAGURI-TALA-2	31.01.2024	Annual maintenance at Tala end
220KV-JODA-RAMCHANDRAPUR-1	12.01.2024	Tower collapsed at locations no 335, 336 & 337 due to heavy theft of tower leg bracing members.
400KV-ALIPURDUAR (PG)-PUNASANGCHUN-JIGMELING-1,2	01.02.2024	Rectification of SCADA issues at Jigmeling
400KV-BIHARSARIFF(PG)-BANKA(PG)-1 & 2	02.02.2024	Diversion Work due to 4 lane work of Rajauli -Bakhtiyarpur NH
400KV-DHANBAD-RANCHI-1 & 2	05.02.2024	DIVERSION WORK DUE TO NH WORK OF RANCHI BYPASS BY NHAI

Transmission licensees/ Utilities are requested to update expected restoration date & work progress regarding restoration regularly to ERLDC/ERPC on monthly basis by 5<sup>th</sup> 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 January -2024.

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

NEW ELEMENTS COMMISSIONED DURING JANUARY, 2024							
GENERATING UNITS							
SL. NO.	Location	Owner/ Unit name	Unit No / Source	Capacity added (MW)	Total/Installed Capacity (MW)	DATE	Remarks
1	Jharsuguda, Odisha	IBEUL - UNIT 1	1/ IBEUL	350	700/350	13-01-2024	

ICTs/ GTs / STs							
SL. NO.	Agency/ Owner	SUB-STATION	ICT NO	Voltage Level (kV)	CAPACITY (MVA)	DATE	Remarks
1	JSW Ltd	IBEUL SS	GT-1	400/20	438	13-01-2024	
2	JSW Ltd	IBEUL SS	ST-1	400/6.6	60	12-01-2024	
TRANSMISSION LINES							
SL. NO.	Agency/ Owner	Line Name	Length (KM)	Conductor Type	DATE	Remarks	
1	WBSETCL	220 kv Rajarhat-Newtown All ckt-1	11.25	1 CORE 1200 SQ. MM. CU, XLPE LEAD SHEATH CABLE	16-01-2024	Previously FTC issued for Antitheft condition and this time FTC issued for full load condition	
2	WBSETCL	220 kv Rajarhat-Newtown All ckt-2	11.25	1 CORE 1200 SQ. MM. CU, XLPE LEAD SHEATH CABLE	16-01-2024		
LILO/RE-ARRANGEMENT OF TRANSMISSION LINES							
SL. NO.	Agency/ Owner	Line Name/LILO at	Length (KM)	Conductor Type	DATE	Remarks	
1	IBEUL up to LILO point at 11 KM, OGTPPL(Indigrid) from LILO point to OPGC End and Sundargarh End	400KV-IBEUL-OPGC-1	OPGC to LILO Point(7.27 4)+ LILO Point to IBEUL(11.088)	OPGC to LILO Point(Triple bundle Snowbird conductor)+ LILO Point to IBEUL(ACS R twin Moose Conductor)	10-01-2024	LILO of OPGC-jharsuguda -2 at IBEUL(Ind-Barath)	
2	IBEUL up to LILO point at 11 KM,OGTPPL(Indi	400KV-IBEUL-JHARSUGUDA-1	SUNDAR GARH to LILO Point(44.0 75)+ LILO	SUNDERG ARH to LILO Point(Triple bundle	09-01-2024	LILO of OPGC-jharsuguda -2 at	

	grid) from LILO point to OPGC End and Sundargarh End		Point to IBEUL(11.088)	Snowbird conductor)+ LILO Point to IBEUL(ACS R twin Moose Conductor)		IBEUL(Ind-Barath)
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#### BUS/LINE REACTORS

SL. NO.	Agency/ Owner	Element Name	SUB-STATION	Voltage Level (kV)	DATE	Remarks
1	WBSETCL	125MVAR 400KV B/R-2 AT KHARAGPUR	KHARAGPUR	400	25-01-2024	

#### BUS

SL. NO.	Agency/ Owner	Element Name	SUB-STATION	Voltage Level (kV)	DATE	Remarks
1	JSW Ltd	400KV MAIN BUS - 1 AT IBEUL	IBEUL	400	09-01-2024	
2	JSW Ltd	400KV MAIN BUS - 2 AT IBEUL	IBEUL	400	09-01-2024	

#### BAYS

SL. NO.	Agency/ Owner	Element Name	SUB-STATION	Voltage Level (kV)	DATE	Remarks
1	JSW Ltd	400KV TIE BAY OF GT1 AT IBEUL	IBEUL	400	13-01-2024	
2	JSW Ltd	400KV GT1 MAIN BAY AT IBEUL	IBEUL	400	13-01-2024	
3	JSW Ltd	400KV TIE BAY OF ST1 AT IBEUL	IBEUL	400	12-01-2024	
4	JSW Ltd	400KV MAIN BAY OF ST1 AT IBEUL	IBEUL	400	12-01-2024	
5	JSW Ltd	400KV MAIN BAY OF JHARSUGUDA-1 AT IBEUL	IBEUL	400	09-01-2024	

Members may note.

#### 4.4. UFR operation during the month of January 2024.

Frequency profile for the month as follows:

MONTH	MAX	MIN	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
	(DATE/TIME)	(DATE/TIME)			
Jan, 2024	50.33 Hz on 21-01-2024 at 06:03 hrs	49.52 Hz on 17-01-2024 at 09:09 hrs	6.8	75.8	17.4

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

**Members may note.**

\*\*\*\*\*

# Annexure B.2.1.1

## GRID CONTROLLER OF INDIA LTD.

### National Load Despatch Centre

(Designated as Nodal Agency in accordance with Regulation 5 of CERC (PSDF) Regulations, 2014)  
(PSDF-Secretariat)

Office Address: B-9, 1<sup>st</sup> Floor, Qutub Institutional Area, Katwaria Sarai, New Delhi -16

Tel: 011-26524521, 26536959 Fax: 011-26524525, 26536901

Website: <https://psdfindia.in/>. Email [psdf@posoco.in](mailto:psdf@posoco.in); [nldc.psdf2020@gmail.com](mailto:nldc.psdf2020@gmail.com)

Ref: NLDC-PSDF/2023-24/

Dated: 14<sup>th</sup> February 2024

To,

As per the distribution list:

**Subject: - Decision taken during 22<sup>nd</sup> Meeting of the Monitoring committee regarding the sanction of the New Projects including the projects under examination, for one year.**

Sir,

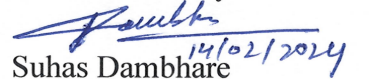
This is to inform that during the 22<sup>nd</sup> meeting of the Monitoring Committee, a decision has been taken to withhold the sanction of New Projects including the projects under examination for the period of one year, except the critical projects i.e. SCADA for NER, Security Operation Center (SOC) of SLDCs, Islanding Schemes and REMC projects.

The decision has been taken considering the fund availability in PSDF account and the existing liabilities on account of ongoing projects. This decision shall be reviewed after a period of one year.

As per the decision taken by the Monitoring committee, all the projects that are under examination (barring the critical projects mentioned above) are considered as deemed returned. The list of such projects is attached at Annexure-I. Also, new projects barring the above exceptions, shall not be accepted for funding through PSDF until the aforementioned decision remains in effect. This is for kind information please.

Thanking you,

Yours faithfully

  
Suhas Damhare 14/02/2024

Sr.GM (PSDF)  
NLDC-Grid India

Copy to:

- 1) CMD, Grid-India
- 2) Chairperson, CEA
- 3) JS (OM) MOP
- 4) ED(NLDC) Grid-India
- 5) CE(NPC) CEA
- 6) Director (OM) MOP

**Annexure-B.2.1.2**

<b>Sl. No.</b>	<b>Name of State/Entity</b>	<b>Region</b>	<b>Name of Entity</b>	<b>Name of Scheme and Unique ID No</b>	<b>Estimated cost by entity (Rs. Crore)</b>
1	Odisha	ER	OPTCL	Implementation of WAMS (Wide Area Management System) in Odisha. (350)	19.36
2	Odisha	ER	OPTCL	Implementation of STAMS (State Transmission Asset Management System) in Odisha. (368)	200.00
3	Odisha	ER	OPTCL	Physical Separation of OT Network from IT network based on MPLS-TP Technology. (405)	49.56
4	West Bengal	ER	WBSETCL	Supply & Installation of Bus-Bar Protection Panels including Bus Differential Relays and GPS based Time Synchronization Equipments in different 220 kV & 132 kV Sub- stations of WBSETCL. (413)	55.41
5	DVC	ER	DVC	Renovation & Modernization of DVC T&D System (Phase-I). 423)	387.51
6	West Bengal	ER	WBSETCL	Replacement of existing conductor by higher capacity HTLS conductor in different 220KV transmission lines of WBSETCL. (431)	252.34
7	Bihar	ER	BSPTCL	Implementation of SAS for control and monitoring of existing 10 Nos of 132/33 Kv substation of Transmission circle of Patna including modification of existing IEDs and field equipment of BSPTCL. (437)	105.10
8	DVC	ER	DVC	Implementation of SAMAST ((Scheduling, Accounting, Metering & Settlement of Transactions in Electricity) in DVC. (438)	18.96



**F.No.22/41/2023-OM (269407)**

**Government of India**

**Ministry of Power**

\*\*\*

Shram Shakti Bhawan, Rafi Marg  
New Delhi, the 1<sup>st</sup> February, 2024

To,

All Additional Chief Secretaries / Principal Secretaries of Power / Energy  
CMDs of all Distribution Companies

**Subject:- Shifting of agricultural load from Non-Solar hours to Solar hours**

Sir,

In order to combat global warming, it is necessary to shift from coal based power generation to Renewables. India has pledged that by 2030, it will have 50% of its installed capacity from non fossil (Renewable) sources. Total installed capacity of Renewable energy (RE) is currently 180 GW. RE capacity of 78935 MW is currently under construction which includes 50056 MW of solar projects. By the end of 2023-24, there will be a total 79349 MW of installed solar power capacity in the country. By 2030, we shall have 500 GW installed capacity from non fossil sources which will includes 292.5 GW of Solar and 99.9 GW of Wind.

The country's power demand is increasing at a rapid pace. In 2014, it was 136 GW. Today, it is 243 GW. The demand will keep growing at a rapid pace as India's economy grows.

During peak demand of 243 GW, the total demand was met with no shortfall during solar hours. During non-solar hours, there was a shortfall of 8000 to 9000 MW. It

is expected that the demand will continue growing at a rapid pace because of the increase in the pace of growth of the economy. Thermal capacity addition cannot keep pace – because the gestation period of constructing a thermal power plant is 6 to 7 years. Renewable Energy – especially solar – has a lower gestation period – so the increase in solar capacity will keep pace with the growth in demand. This will ensure that there will be no shortage of power during solar hours. Keeping all factors in view, it has been decided that agricultural load be shifted to solar hours. This will have the following advantages:

- i- The farmers will be able to irrigate their fields during daylight hours.
- ii- This will prevent depletion and help in conservation of precious ground water resource.
- iii- Solar power is cheaper than thermal / hydro – so the cost of supply during daylight hours is cheaper – so the cost of power for irrigation will come down.

There shall be no curtailment in the hours of supply for agriculture. The farmers will keep getting the same number of hours of supply which they are getting now. Because of the large capacity additions in RE, there shall be no shortage of Solar / RE during the solar hours.

It is requested that the shift in agricultural load to solar hours be implemented by end of March, 2024. Some States have reported constraints in transmission / distribution because of which the shift could be delayed. In such cases, the shift can be in phases. The transmission and distribution bottlenecks can be addressed by using funds from the RDSS to separate agriculture feeders. The agriculture feeders can be solarised in the RESCO mode under Kusum. This will do away with the transmission and distribution constraints, reduce the cost of supply for agriculture and reduce the subsidy burden on the State Government. This is the route most States have adopted. This does not entail any expenditure by the State Government, because the solarisation is done in the RESCO mode with subsidy from Government of India. It is requested that the shift in agricultural load to solar hours be operationalised as soon as possible because the

demand – which is already 12 to 15 thousand megawatts more than last year on a daily basis – is likely to increase especially as the year progresses.

Further, as it is proposed to shift to Time of Day (TOD) tariff, under which tariff during solar hours will be less, It may be also analyzed as to what other load can be shifted to solar hours; and this may be done.

Yours sincerely,



(Piyush Singh)

Joint Secretary

**Copy to:**

1. The Chairman, CEA
2. Secretary, CERC / FOR, New Delhi.
3. Secretary (Energy / Power), All State Governments / UTs
4. All State Electricity Regulatory Commissions

**Copy for information to :-**

1. PS to Hon'ble Minister for Power & MNRE.
2. APS to Hon'ble MoSP.
3. Sr. PPS to Secretary (Power).
4. All Addl. Secretaries / Joint Secretaries / EA / CE, MoP.
5. All Directors / Deputy Secretaries, MoP.



F.No. 22/7/2024-OM [E271032]

भारत सरकार  
Government of India  
विद्युत मंत्रालय  
Ministry of Power

Dated: 08<sup>th</sup> February, 2024

To,

Chairperson  
Central Electricity Authority (CEA)  
Sewa Bhawan, R.K. Puram,  
New Delhi -110066

**Subject: Reason for forced outage of Central Generating Stations –reg.**

Sir,

I am directed to refer to the review meeting of MoP held on 05th February, 2024, wherein, Hon'ble Minister of Power directed that an analysis of the reasons for forced outage of Central Generating Stations during the last six months may be carried out.

2. CEA is, therefore, requested to carry out the analysis and report may be submitted to this Ministry at the earliest.

Yours faithfully,

(Hausuanthang Guite)  
Under Secretary (OM)

Tel: 23062492

Email:opmonitor-power@nic.in

**Copy to:** Sh. Hemant Jain, Member (GO&D), CEA, Sewa Bhawan, R.K Puram, New Delhi

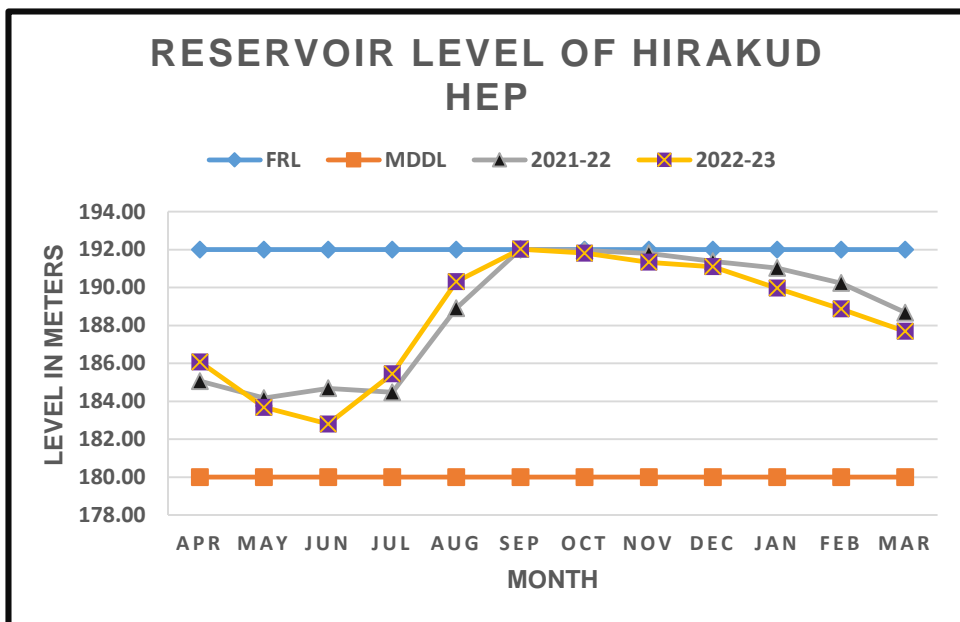
## Annexure-B.2.10

### WATER LEVEL IN MAJOR HYDRO RESERVOIRS IN THE REGION DURING 2022-23 AND 2021-22 (On Last Day of the month)

#### All Figs in meters

Month	FRL	MDDL	2021-22	2022-23
Apr	192.00	180.00	185.06	186.07
May	192.00	180.00	184.16	183.68
Jun	192.00	180.00	184.68	182.80
Jul	192.00	180.00	184.47	185.45
Aug	192.00	180.00	188.91	190.31
Sep	192.00	180.00	192.02	192.02
Oct	192.00	180.00	191.95	191.81
Nov	192.00	180.00	191.81	191.33
Dec	192.00	180.00	191.38	191.09
Jan	192.00	180.00	191.03	189.97
Feb	192.00	180.00	190.23	188.87
Mar	192.00	180.00	188.68	187.69

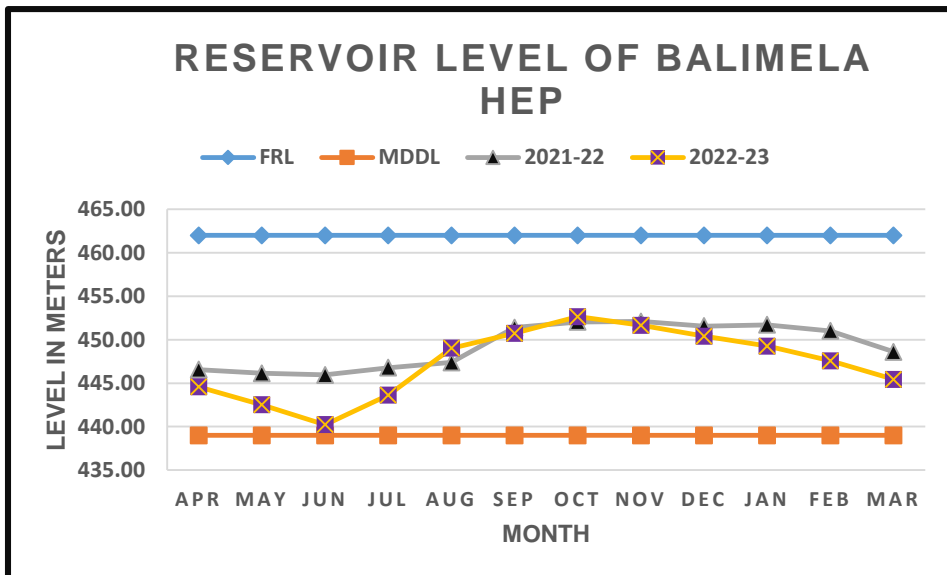
#### RESERVOIR LEVEL OF HIRAKUD HEP



#### RESERVOIR LEVEL OF BALIMELA HEP

#### All Figs in meters

Month	FRL	MDDL	2021-22	2022-23
Apr	462.00	439.00	446.56	444.58
May	462.00	439.00	446.14	442.51
Jun	462.00	439.00	445.95	440.22
Jul	462.00	439.00	446.78	443.64
Aug	462.00	439.00	447.39	449.03
Sep	462.00	439.00	451.41	450.74
Oct	462.00	439.00	452.05	452.66
Nov	462.00	439.00	452.11	451.65
Dec	462.00	439.00	451.56	450.40
Jan	462.00	439.00	451.71	449.28
Feb	462.00	439.00	451.01	447.57
Mar	462.00	439.00	448.60	445.43



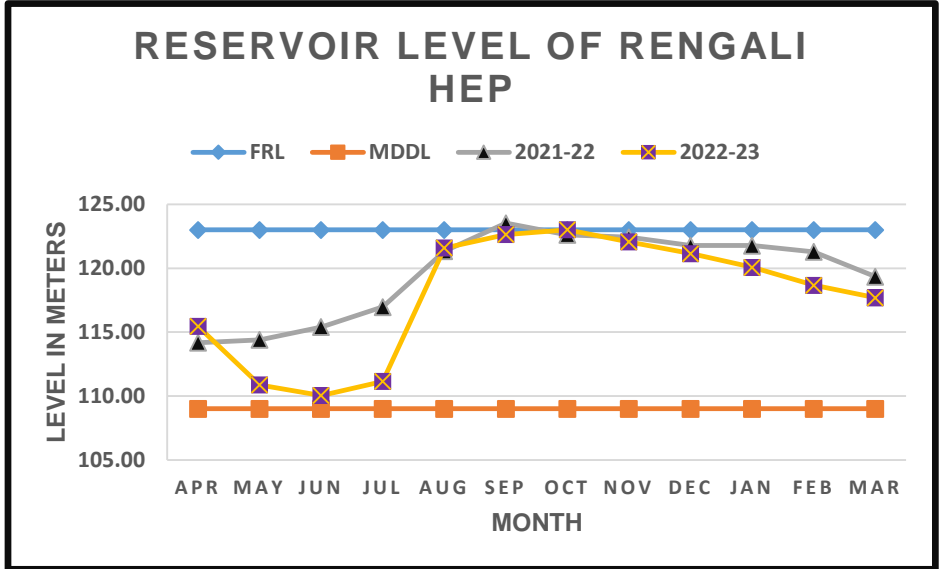
## Annexure-B.2.10

**FRL:**Full reservoir Level **MDDL:**Minimum Draw down Level

All Figs in meters

Month	FRL	MDDL	2021-22	2022-23
Apr	123.00	109.00	114.18	115.45
May	123.00	109.00	114.40	110.87
Jun	123.00	109.00	115.40	110.04
Jul	123.00	109.00	116.97	111.14
Aug	123.00	109.00	121.34	121.59
Sep	123.00	109.00	123.53	122.64
Oct	123.00	109.00	122.61	123.01
Nov	123.00	109.00	122.42	122.06
Dec	123.00	109.00	121.78	121.15
Jan	123.00	109.00	121.78	120.07
Feb	123.00	109.00	121.28	118.67
Mar	123.00	109.00	119.35	117.69

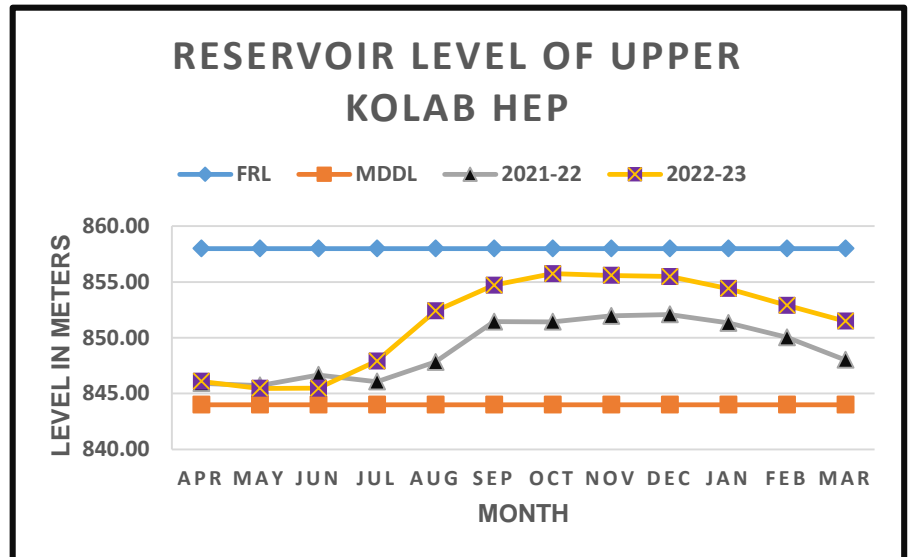
### RESERVOIR LEVEL OF RENGALI HEP



All Figs in meters

Month	FRL	MDDL	2021-22	2022-23
Apr	858.00	844.00	845.92	846.09
May	858.00	844.00	845.72	845.46
Jun	858.00	844.00	846.66	845.47
Jul	858.00	844.00	846.06	847.91
Aug	858.00	844.00	847.83	852.4
Sep	858.00	844.00	851.44	854.71
Oct	858.00	844.00	851.42	855.74
Nov	858.00	844.00	851.95	855.59
Dec	858.00	844.00	852.09	855.48
Jan	858.00	844.00	851.33	854.41
Feb	858.00	844.00	850.03	852.91
Mar	858.00	844.00	848.01	851.48

### RESERVOIR LEVEL OF UPPER KOLAB HEP



**FRL:**Full reservoir Level **MDDL:**Minimum Draw down Level

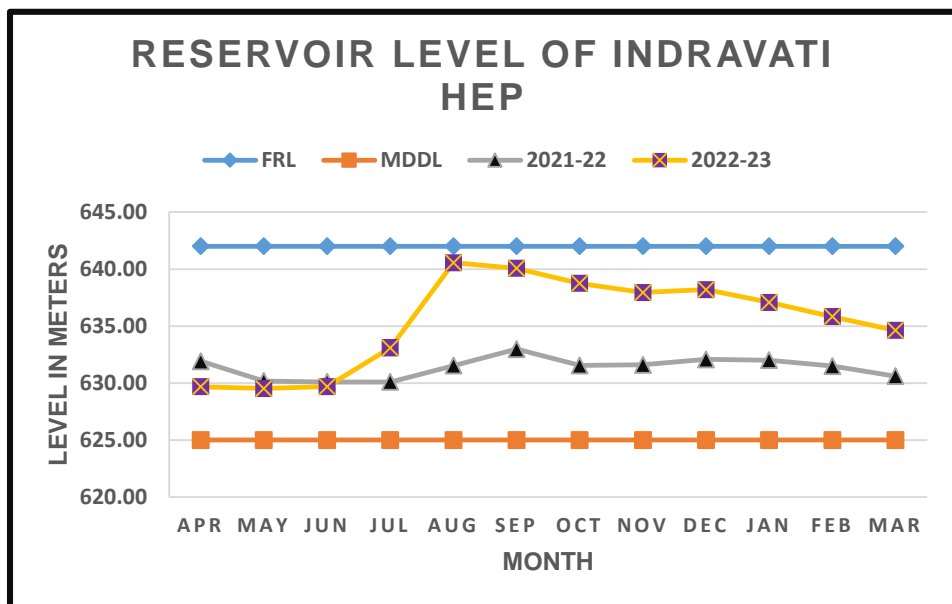


## Annexure-B.2.10

### RESERVOIR LEVEL OF INDRAVATI HEP

All Figs in meters

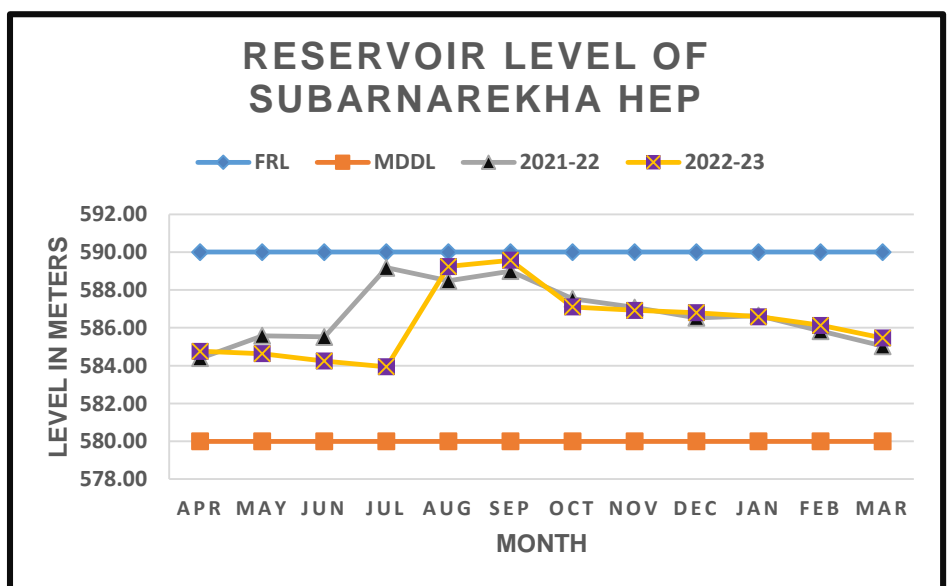
Month	FRL	MDDL	2021-22	2022-23
Apr	642.00	625.00	631.90	629.68
May	642.00	625.00	630.18	629.52
Jun	642.00	625.00	630.10	629.69
Jul	642.00	625.00	630.10	633.09
Aug	642.00	625.00	631.53	640.55
Sep	642.00	625.00	632.97	640.06
Oct	642.00	625.00	631.54	638.75
Nov	642.00	625.00	631.59	637.94
Dec	642.00	625.00	632.08	638.20
Jan	642.00	625.00	632.01	637.07
Feb	642.00	625.00	631.48	635.83
Mar	642.00	625.00	630.60	634.62



### RESERVOIR LEVEL OF SUBARNAREKHA HEP

All Figs in meters

Month	FRL	MDDL	2021-22	2022-23
Apr	590.00	580.00	584.39	584.76
May	590.00	580.00	585.58	584.64
Jun	590.00	580.00	585.52	584.24
Jul	590.00	580.00	589.18	583.94
Aug	590.00	580.00	588.48	589.24
Sep	590.00	580.00	589.00	589.57
Oct	590.00	580.00	587.53	587.11
Nov	590.00	580.00	587.08	586.92
Dec	590.00	580.00	586.53	586.80
Jan	590.00	580.00	586.65	586.59
Feb	590.00	580.00	585.83	586.13
Mar	590.00	580.00	585.03	585.46



**FRL:**Full reservoir Level    **MDDL:**Minimum Draw down Level

## Annexure-B.2.16

**Total REA adjustment**

**146773669.5**

	Barh I	SG	Amount
Dec 23	305.2	6610.92	5044133.362
Jan 24	318.5	1259.67	1003014.549
	Barh II	SG	Amount
Dec 23	306.7	12969.51	9944370.299
Jan 24	315.9	5096.76	4025163.137
	FSTPP I	SG	Amount
Dec 23	370.2	34366.26	31805971.21
Jan 24	282.3	73708.90	52020058.3
	FSTPP III	SG	Amount
Dec 23	307.2	12511.15	9608565.981
Jan 24	258	29972.44	19332224.92
	KHSTPP I	SG	Amount
Dec 23	298.6	354.91	264939.8529
Jan 24	285.1	804.36	573310.3434
	KHSTPP II	SG	Amount
Dec 23	283.2	6079.89364	4304564.694
Jan 24	270.4	7529.87	5090192.873
	NPGC	SG	Amount
Dec 23	310.4	19.01	14752.16
Jan 24	328.7	3204.62	2633396.97
	MTPS	SG	Amount
Dec 23	279	1245.14	868487.4245
Jan 24	281.5	320.02	225212.9209
	TSTPP1	SG	Amount
Dec 23	156.4	1.01	395.898057
Jan 24	144.7	41.23	14914.64103



## Annexure D.1

### Anticipated Peak Demand (in MW) of ER & its constituents for March 2024

1	BIHAR	Demand (MW)	Energy Requirement (MU)
	NET MAX DEMAND	6358	3294
	NET POWER AVAILABILITY- Own Sources	428	257
	Central Sector+Bi-Lateral	6817	3889
	SURPLUS(+)/DEFICIT(-)	886	852
2	<b>JHARKHAND</b>		
	NET MAXIMUM DEMAND	1900	1094
	NET POWER AVAILABILITY- Own Source	430	197
	Central Sector+Bi-Lateral+IPP	891	649
	SURPLUS(+)/DEFICIT(-)	-579	-248
3	<b>DVC</b>		
	NET MAXIMUM DEMAND	3532	2190
	NET POWER AVAILABILITY- Own Source	5721	3463
	Central Sector+MPL	267	131
	Bi- lateral export by DVC	2001	1314
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	455	90
4	<b>ODISHA</b>		
	NET MAXIMUM DEMAND (OWN)	6000	3434
	NET MAXIMUM DEMAND (In Case of CPP Drawal)	6195	3214
	NET POWER AVAILABILITY- Own Source	3681	2105
	Central Sector	1895	1293
	SURPLUS(+)/DEFICIT(-) (OWN)	-424	-36
	SURPLUS(+)/DEFICIT(-) (In Case, 600 MW CPP Drawal)	-619	184
5	<b>WEST BENGAL</b>		
	WBSEDCL		
5.1	NET MAXIMUM DEMAND	8259	5042
	NET MAXIMUM DEMAND (Incl. Sikkim)	8264	5046
	NET POWER AVAILABILITY- Own Source (Incl. DPL)	5643	2916
	Central Sector+Bi-lateral+IPP&CPP+TLDP	2696	1328
	EXPORT (To SIKKIM)	5	4
	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	75	-802
5.2	<b>CESC</b>		
	NET MAXIMUM DEMAND	1920	963
	NET POWER AVAILABILITY- Own Source	700	483
	IMPORT FROM HEL	540	365
	TOTAL AVAILABILITY OF CESC	1240	848
	DEFICIT(-) for Import	-680	-115
	WEST BENGAL (WBSEDCL+CESC+IPCL)		
	(excluding DVC's supply to WBSEDCL's command area)		
	NET MAXIMUM DEMAND	10179	6005
	NET POWER AVAILABILITY- Own Source	6343	3399
	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	3236	1693
	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXPORT	-600	-913
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXPORT	-605	-917
6	<b>SIKKIM</b>		
	NET MAXIMUM DEMAND	120	62
	NET POWER AVAILABILITY- Own Source	2	2
	Central Sector	57	21
	SURPLUS(+)/DEFICIT(-)	-61	-39
	<b>EASTERN REGION</b>		
	NET MAXIMUM DEMAND	27538	16079
	NET MAXIMUM DEMAND (In Case of CPP Drawal of Odisha)	27729	15859
	BILATERAL EXPORT BY DVC (Incl. Bangladesh)	2001	1314
	EXPORT BY WBSEDCL TO SIKKIM	5	4
	EXPORT TO B'DESH & NEPAL OTHER THAN DVC	642	431
	NET TOTAL POWER AVAILABILITY OF ER	27767	15786
	(INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)		
	SURPLUS(+)/DEFICIT(-)	224	-297
	SURPLUS(+)/DEFICIT(-) (In Case, 600 MW CPP Drawal of Odisha)	33	-77