



# Agenda for **153<sup>rd</sup> OCC Meeting**

**Date: 21.01.2019**  
**Eastern Regional Power Committee**  
**14, Golf Club Road, Tollygunge**  
**Kolkata: 700 033**

## **Eastern Regional Power Committee**

**Agenda for 153<sup>rd</sup> OCC Meeting to be held on 21<sup>st</sup> January, 2019 at ERPC, Kolkata**

### **Item no. 1: Confirmation of minutes of 152<sup>nd</sup> OCC meeting of ERPC held on 17.12.2018**

The minutes of 152<sup>nd</sup> OCC meeting were uploaded in ERPC website and circulated vide letter dated 27.12.2018 to all the constituents.

**Members may confirm the minutes.**

## **PART A : ER GRID PERFORMANCE**

### **Item no. A1: ER Grid performance during December, 2018**

The average consumption of Eastern Region for December- 2018 was 344.7 Mu. Eastern Region energy consumption for December month was 356.9Mu on 15thDecember - 2018. Total Export schedule of Eastern region for December - 2018 was 2336.63 Mu, whereas actual export was 2092.13Mu.

**ERLDC may present the performance of Eastern Regional Grid covering the followings:**

- 1. Frequency profile**
- 2. Over drawal/under injection by ER Entities**
- 3. Performance of Hydro Power Stations during peak hours**
- 4. Performance of ISGS during RRAS**
- 5. Reactive Power performance of Generators**
- 6. Restricted Governor /Free Governor Mode Operation of generators in ER**

## **PART B: ITEMS FOR DISCUSSION**

### **Item No. B.1: Status of projects funded under PSDF schemes**

In the PSDF review meeting, it was advised to RPCs to monitor the status of all the projects funded by PSDF. Therefore, constituents are requested to update the status of projects which are being funded by PSDF in the desired format.

#### **A. Projects approved:**

SN	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	PSDF grant approved (in Rs.)	Amount drawn till date (inRs.)	Latest status
1	WBSETCL	Renovation & up-gradation of protection system of 220 kV & 400 kV Substations in W. Bengal	31-12-14	April 2018	108.6 Cr	37 Cr.	100 % Supply and Erection is Completed. Compilation of final bills is in progress.
2		Renovation & modernisation of transmission system for relieving congestion in Intra-State Transmission System.	22-05-17	25 months from date of release of 1 <sup>st</sup> instalment	70.13	21.03 Cr	Order has been placed . Work is in progress.
3		Installation of switchable reactor at 400kV & shunt capacitors at 33kV	22-05-17	19 months from date of release of 1 <sup>st</sup> instalment	43.37	6.59 Cr	Order has been placed and work is in progress.
4	WBPDC	Implementation of Islanding scheme at Bandel Thermal Power Station	10.04.17	March 2018	1.39 Cr	1.25 Cr	The implementation would be completed by July 2018.
5		Upgradation of Protection and SAS		April 2020	23.48	2.348 Cr	Bid opened and order has been placed. Work started.
6	OPTCL	Renovation & Up-gradation of protection and control systems of Sub-stations in the State of Odisha in order to rectify protection related deficiencies.	10.05.15	30.11.18	162.5 Cr.	37.79 Cr	Total contract awarded for Rs. 51.35 Cr
7		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.17		25.61 Cr.		Agreement signed on 03.01.2018
8		Installation of 125 MVAR Bus Reactor along with construction of associated bay each at 400kV Grid S/S of Mendhasal, Meramundali& New Duburi for VAR control & stabilisation of system voltage	27.07.18		27.23 Cr		
9	OHPC	Renovation and up-gradation of protection and control system of 4 nos.OHPC substations.		U.Kolab, Balimela, U.Indravati, Burla, Chiplima March 2019	22.35 Cr.	2.235 Cr	Placed work order.
10	BSPTCL	Renovation and up-gradation of 220/132/33 KV GSS Biharshariff, Bodhgaya, Fatuha, Khagaul, Dehri -on-sone& 132/33 kV GSS Kataiya	11/5/15	31.07.2018	64.02 crore	56.04 crore	85% of work has been completed. Contract awarded for Rs.71.37 Cr till date. The work has been completed.
11		Installation of capacitor bank at different 35 nos. of GSS under BSPTCL	5/9/2016	31 <sup>st</sup> March 2019	18.88 crore	Nil	Work awarded for all GSS.
12		Renovation & up-gradation of protection and control system of 12 nos. 132/33 KV GSS under BSPTCL.	02.01.17	31 <sup>st</sup> March 2018	49.22 Cr.		75% work completed for seven no. GSS as part of R & M work. Revised DPR is to be submitted for rest 5 no. GSS.
13	JUSNL	Renovation and up-gradation of protection system	September 2017	15 Months	138.13 crores		LOA placed on 28 <sup>th</sup> Sep 2018.

14	DVC	Renovation and upgradation of control & protection system and replacement of Substation Equipment of 220/132/33 kV Ramgarh Substation	02.01.17	01.06.2019	25.96 Cr	2.596 Crore on 01.06.2017	Work awarded for 28.07 Cr. Work would be completed by May 2019.
15		Renovation and upgradation of control & protection system including replacement of substation equipment at Parulia, Durgapur, Kalyaneshwari, Jamshedpur, Giridih, Barjora, Burnpur, Dhanbad and Burdwan Substation of DVC	27.11.17	24 Months from the date of release of fund.	140.5 Cr.	1 <sup>st</sup> installment of 14.05 Cr. received on 21.12.2017	Work awarded for 6.45 Cr. Price bid opened for West Bengal portion and technical bid opened for Jharkhand portion.
16	POWERGRID	Installation of STATCOM in ER		June 2018	160.28 Cr	16.028 Cr	Work is in progress, expected to complete by June 2018. STATCOM at Rourkela has been commissioned.
17	ERPC	Creation & Maintenance of web based protection database and desktop based protection calculation tool for Eastern Regional Grid	17.03.16	Project is alive from 30 <sup>th</sup> October 2017	20 Cr.	4.94 Cr. + 9.88 Cr.	1) Protection Database Project has been declared 'Go live' w.e.f. 31.10.17. 2) Pending training on PDMS at Sikkim and 3 <sup>rd</sup> training on PSCT has been also completed at ERPC Kolkata.
18a	ERPC	Training for Power System Engineers	27.07.18		0.61 Cr.	Nil	Approved
18b		Training on Power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents	27.07.18		5.46 Cr.	Nil	

## B. Projects under process of approval:

SN	Name of Constituent	Name of Project	Date of Submission	Estimated cost (in Rs.)	Latest status
1	Sikkim	Renovation & Upgradation of Protection System of Energy and Power Department, Sikkim.	09-08-17	68.95 Cr	The proposal requires third party protection audit. Issue was discussed in the Monitoring Group meeting in Siliguri on 8.6.2018. Sikkim was asked to coordinate with ERPC.
2		Drawing of optical ground wire (OPGW) cables on existing 132kV & 66kV transmission lines and integration of leftover substations with State Load Despatch Centre, Sikkim	09-08-17	25.36 Cr	Scheme was approved by Appraisal Committee. It was sent to CERC for concurrence.
3	JUSNL	Reliable Communication & Data Acquisition System upto 132kV Substations.	23-08-17	102.31 Cr	Scheme was approved by Appraisal Committee. It was sent to CERC for concurrence.
4	OPTCL	Implementation of Automatic Demand Management System (ADMS) in SLDC, Odisha	22-12-17	3.26 Cr	Scheme was approved by Appraisal Committee. It was sent to CERC for concurrence.
5		Protection upgradation and installation of SAS for seven numbers of 220/132/33kV Grid substations (Balasore, Bidanasi, Budhipadar, Katapalli, Narendrapur, New-Bolangir & Paradeep).	12-03-18	41.1 Cr.	Scheme examined by TSEG on 20.03.2018. Inputs sought from the entity are awaited.
6	WBSETCL	Implementation of Integrated system for Scheduling, Accounting, Metering and Settlement of Transactions (SAMAST) system in West Bengal	22-12-17	25.96 Cr	Proposal recommended by Appraisal committee as communicated on 16.11.2018.
7		Installation of Bus Reactors at different 400kV Substation within the state of West Bengal for reactive power management of the Grid	12-03-18	78.75 Cr.	Proposal recommended by Appraisal committee as communicated on 16.11.2018.

8		Project for establishment of reliable communication and data acquisition at different substation at WBSETCL.	10-05-18	80.39 Cr.	Proposal recommended by Appraisal committee as communicated on 16.11.2018.
9	BSPTCL	Implementation of Scheduling, Accounting, Metering and settlement of Transaction in Electricity (SAMAST)in SLDC Bihar.	27-02-18	93.76 Cr.	Scheme examined by TSEG on 20.03.2018 & 31.05.2018. Further inputs furnished by BSPTCL on 1.8.2018. Shall be examined in the next meeting of TSEG.

**Respective constituents may update the status.**

**Item No. B.2: Installation of PMUs for observation of the dynamic performance of STATCOMs**

*In 39<sup>th</sup> ERPC Meeting, it was decided that,*

- i. Power Grid shall immediately place an order on M/s GE for supply and installation of 4 nos. PMUs for 4 STATCOMs in the Eastern Region at an estimated cost of Rs. 40 Lakh.*
- ii. The cost of the above should be included within the quantity variation clause under the URTDSM Project funded from PSDF.*
- iii. Powergrid shall approach the PSDF Appraisal Committee for inclusion of the above under the quantity variation clause under the URTDSM Project.*
- iv. In case PSDF funding for this addition supply and installation is not available, then the cost of PMUs including the installation cost (approx. Rs.40 Lakh) shall be included under the project "Upgradation of SCADA / RTUs / SAS in the Central Sector Stations and strengthening of OPGW network".*

**Powergrid may update.**

**Item No. B.3: IMPLEMENTATION OF 4TH PHASE AMR INCLUDING REQUIREMENT OF AMR DATA FOR SCADA DATA COMPARISON**

In 39th TCC/ERPC Meeting, it was agreed to implement 4th phase AMR at a cost of Rs 1.75 Cr in place of Rs. 93.56 lakhs approved earlier, considering the added requirement of meters, locations, additional functionality, AMC etc.

ERPC suggested that Power Grid should ensure reliability in data transmission by implementing LAN connectivity through OPGW Network wherever feasible.

**Powergrid may update.**

**Item No. B.4: Implementation of FGD for Bakreswar units-WBPDCL**

WBPDCL informed that earlier they had considered the BKTPS units were SOx compliant with respect to the new emission norms. However, after feasibility study done M/s GE Power they have planned to install wet FGD for all the units of BKTPS.

WBPDCL requested to consider the extension of deadline for implementation of FGD at BkTPS and forward the recommendation to CEA for further communication to MOEF & CC/CPCB.

**WBPDCL may explain. Members may decide.**

**Item No. B.5: Alternate power supply arrangement for Chakradharpur, Goikera, Rajkharswan and Kendposi TSS under JSEB—South Eastern Railways**

South Eastern Railways informed that train services are being seriously disturbed due to frequent and prolonged power supply failures at above substations. At present the supply is coming from Chandil S/s of Jharkhand.

JUSNL has recently commissioned 132kV Chaibasa-Manoharpur D/C line. In view of prolonged power supply failures at Chandil substation, SER requested to provide alternate source from Manoharpur to Goilkera and further to Chakradharpur, Rajkharswan and Kendposi to ensure uninterrupted traction power supply.

**SER may explain. Members may discuss.**

**Item No. B.6: Evacuation of Power from OPGC expansion project-modification of network configuration--GRIDCO**

Two units of Odisha Power Generation Corporation (OPGC) with 660 MW capacity each are going to be commissioned shortly. Both the generating units are under advanced commissioning stage and most likely attain COD within April-2019. Entire capacity (2 x 660 MW) is meant for the State of Odisha as per the Government of Odisha notification. OPGC & GRIDCO are in the process of executing the PPA for entire capacity. Under such arrangement OPGC Station shall become State embedded unit.

Power evacuation scheme has been proposed with **SPLIT BUS** arrangement at IbTPS (OPGC) switchyard with one unit (Unit # 3) connected to STU system at Lapanga Sub-station through 400 kV D/C line and the other unit (Unit # 4) shall be connected to 765 kV / 400 kV Jharsuguda PG through 400 kV D/C line.

Presently, both transmission systems are already charged under SPLIT BUS condition.

In view of the above, it is felt necessary to operate both units (2 x 660 MW) in **COMMON BUS** mode having connectivity with both STU & CTU system for a reliable, efficient, secured & stable grid.

In the above common bus arrangement as proposed the 400 kV IbTPS-Jharsuguda PG D/C line needs to be declared as the interstate tie lines of Odisha.

OPTCL has conducted the System Study (Short Circuit & Load Flow Analysis) under COMMON BUS mode and found technically suitable within permissible limits.

The Committee may deliberate and finalize the common bus arrangement for evacuation of power from OPGC (2 x 660 MW) new plant.

**GRIDCO may explain.**

**Item No. B.7: Islanding Scheme of IB-TPS**

Special Meeting on Islanding Scheme of IB-TPS held at ERPC, Kolkata on 12th December 2018 at 11:00hrs. Minutes of the meeting are enclosed at **Annexure-B7**. In the meeting, OPTCL and OPGC were advised to present final islanding scheme in the OCC Meeting of January 2019.

**OPTCL and OPGC may present the final scheme.**

**Item No. B.8: Crossing of OPTCL transmission line under 400kV DC Baripada-Dubri/Pandiabili(Earlier Baripada-Mendhasal line) without taking approval from POWERGRID--Powergrid**

M/s OPTCL has sent a letter ref no:Tech-303-11 date 03.01.2018 regarding approval for passing of 132kV Udala LILO line under 400kV Baripada-Mendhasal D/C between Location 112-113-114 near ManitriDistMayurbhanja.

Accordingly, mail was sent to M/s OPTCL on dt 24/04/2018 for clarification before giving consent for stringing of the line. But without further communication M/s OPTCL has constructed the line

which pass on both side of TOWER Loc 113. The distance of the Conductor from the Tower is barely 10mtrs. Because of this maintenance activity of the line at the Tower Loc. 113 will be extremely difficult. Therefore, it is requested to M/s OPTCL to take up the matter seriously and divert the line in such a way that there should not be any hindrance to POWERGRID during maintenance activity. After getting due approval from POWERGRID, OPTCL is requested to divert the line.

**Powergrid may explain. Members may discuss.**

**Item No. B.9: Review of Rangpo SPS scheme after commissioning of 400 KV Teesta III- Kishangaanj line**

As per discussion in special meeting held on 14<sup>th</sup> October, 2016 at ERPC, Kolkata, on installation of SPS at 400kV level at Rangpo S/s for reliable power evacuation through 400kV Rangpo – Siliguri D/c line, one SPS scheme was proposed to facilitate maximum evacuation from the generation projects in Sikkim till the commissioning of the main evacuation line of the Sikkim IPPs viz. Rangpo – Kishangunj 400kV D/c (Quad) line. It was decided to review SPS scheme after commissioning of evacuation link to Kishangunj.

In view of commissioning of 400 KV Teesta III- Kishangunj & 400 KV Rangpo – Kishangaanj line Rangpo SPS scheme may be reviewed.

**Members may please discuss.**

**Item No. B.10: Load Generation Balance Report (LGBR) for the year 2019-20**

The draft LGBR has been prepared by ERPC after the detailed discussion with the constituents of Eastern Region in the meeting on finalization of draft Load Generation Balance Report (LGBR) for the year 2019-20, which was held at ERPC, Kolkata on 18.12.2018. Major observations are given below:

**1. The following major thermal units shutdown were deferred from summer months considering strong reservations by a no. of distribution utilities, which have their major share:**

- NTPC Barh STPSU#4(660MW)(01.03.19to 04.05.19)to **01.11.19 to 04.01.20 (65 days continuous)**
- NTPC Barh STPS U#5 (660MW)(01.03.20 to 04.05.20) to **15.01.20 to 19.03.20 (65 days continuous)**
- NTPC FSTPSU#6(500 MW)(01.06.19 to 05.07.19) to **01.11.19 to 05.12.19 (35 days continuous)**
- NTPC TSTPS U#1 (500 MW)(22.07.19 to 25.08.19) to **01.12.19 to 04.01.20(35 days continuous)**
- DVC KodernaU#1(500 MW)(01.04.19 to 06.05.19 to **16.01.20 to19.02.20 (35 days continuous)**
- MPL Unit # 1 (525 MW) (25.05.19 to 07.06.19) to **01.11.19 to 14.11.19 (14 days continuous)**

Besides, the above revised outage programme, some of the NTPC units of Farakka, Kahalgaon STPS and Kolaghat & Santaldih TPS of WBPDC due to Boiler licence renewal were allowed to shift 10-15 days as per deliberations. The maintenance schedule of thermal generating units in ER during 2019-20 as agreed and finalised in the LGBR meeting is shown in **Annexure-B10.1**.

Thereafter, NTPC has requested for changes in the planned maintenance in LGBR. Letter is enclosed at **Annexure-B10.1A**.

**2. ABSTRACT OF SYSTEMWISE UNRESTRICTED PEAK DEMAND (MW) (Refer Annexure- B10.2)**

The month wise demand (MW) (unrestricted) of the constituents as projected considering the actual demands is being met during the current months, were analysed and corrected during the meeting. The demand forecast of the constituents and cumulative regional demand based on generation availability and diversity factor were worked out and assessed in the range of 21550

MW to 24820 MW. The regional monthly peak surplus or deficit taking into account of export to neighbour countries worked out to be in the range of 600 MW to 700 MW. However, Bihar and Jharkand states remained in deficit peak demand on monthly basis due to less generation availability from their own sources.

### **3 ABSTRACT OF SYSTEMWISE UNRESTRICTED ENERGY REQUIREMENT (MU) (Refer Annexure-10.3)**

The expected monthly energy requirement (MU) of the constituents against energy availability indicated that, except Bihar and Jharkand states, most of the constituents would meet the energy requirement and there would be surplus of energy in ER on monthly basis. The energy availability from the new units of NTPC and constituents as indicated have been considered. This would lead to energy surplus in ER. The energy availability would vary in between 13800 to 16700 MU on monthly basis considering monthly scheduled maintenances of generating units.

### **4 SCHEDULE OF COMMISSIONING OF NEW GENERATING UNITS IN THE CONSTITUENT SYSTEMS**

The following units are expected to commission during 2019-20 and their energy availability (MU) have been taken into consideration as agreed by the constituents:

SYSTEM	THERMAL UNITS	CAPACITY(MW)	EXPECTED DATE COD
NTPC	DARLIPALLI # 1	800	01.04.2019
	DARLIPALLI #2	800	01.10.2019
BRBCL	NABINAGAR U#3	250	01.04.2019
ODISHA	IB TPS U# 3	660	01.04.2019
	IB TPS U#4	660	01.04.2019
BIHAR	BARUNI U#8	250	01.07.2019
TOTAL		3420	

The final LGBR of ER would be subsequently prepared and published on receipt of Annual Generation Target from CEA/MOP.

#### **Members may discuss.**

#### **Item No. B.11: Requirement of 132kV bay at 400/220/132kV Baripada S/s---OPTCL**

OPTCL informed that at present two no. of 132 kV Bays are available at Kuchei. The Kuchei-Rairangpur 132 kV S/C line is LILO at Bangiripushi. The loads of connected substation are as follows:

Bangiriposi-8 MW, Rairangpur-28 MW, Karanjia-21 MW, Dhenkikote-10 MW.

Thus the 132 kV S/C line is loaded 67 MW. In case of outage at Joda the Polasponga load which is around 40 MW is catered through this line breaching the thermal limit of the line.

OPTCL requested for a new 132 kV Bay at Kuchei for 132KV Kuchei- Bangiripushi line to limit the line loading as well as to meet the n-1 contingency.

*In 152<sup>nd</sup> OCC, OPTCL explained the requirement of 132kV bay at 400/220/132kV Baripada S/s with a detailed presentation. OPTCL requested for a new 132 kV Bay at Baripada for 132KV Kuchei- Bangiripushi line to limit the line loading as well as to meet the n-1 contingency. OPTCL informed that sufficient space is available at 400/220/132kV Baripada S/s for construction of two 132kV bays.*

*Powergrid informed that space is available but it is allotted for construction of bays for new 220/132kV Transformer.*



OCC advised OPTCL and Powergrid to visit the site and place the details in next OCC Meeting.

**OPTCL and Powergrid may update.**

**Item No. B.12: Load Trimming Scheme on 400/132 kV Motihari ICTs.**

400/132 kV Motihari substation is having a two ICTs each with 200 MVA capacity. It has been observed that due to higher load catering of Bihar along with Nepal, the ICTs are running without N-1 reliability. On 22<sup>nd</sup> August 2018 at 14:59 Hrs, the ICTs combined load increased to 280 MW and one ICT got tripped on mal-operation of OSR relay due to moisture ingress. This led to overloading of other ICT, which tripped in overcurrent protection. This led to the loss of 280 MW of Bihar and Nepal.

Such unreliable operation of ICTs due to higher load is not desirable and following action point may be desired:

1. Implementation of Load Trimming Scheme (LTS) on Motihari ICTs.
2. BSPTCL Long term plan to ensure the meeting such high demand in the areas.
3. Prevention of Tripping of Motihari ICT on OSR relay mis-operation during moisture ingress in rainy season.
4. Capacity augmentation for long term measures may be planned.

In 149<sup>th</sup> OCC, it was informed that one more ICT of 315 MVA had been planned in 13<sup>th</sup> Plan which would be commissioned by May 2020.

OCC advised Bihar to plan a load-trimming scheme till the availability of 3<sup>rd</sup> ICT.

In 39<sup>th</sup> TCC, BSPTCL requested Powergrid to expedite the installation of 3<sup>rd</sup> ICT at Motihari S/s. BSPTCL would draw up a plan for load trimming at Motihari to take care of the eventualities arising out of tripping of any of the existing two ICTs. The plan will be finalized within a month and the same will be shared with ERPC and ERLDC.

BSPTCL informed that Motihari grid have a capacity of (2X200) MVA, 400/132 KV GSS here and power evacuation from this station taken place by following three 132KV double circuit lines as detailed below (SLD enclosed at **Annexure-B12**):-

Sl. N.	Name of tie line	GSS getting power with Maximum load	Remarks
1.	132KV Motihari (400/132 KV)-Motihari	Motihari-60 MW	
2.	132KV Motihari (400/132 KV)-Bettia	Bettia-50 MW Narkatiyaganj Ramnagar BHPC, Balmikinagar Surajpura, (Nepal)-70 MW Total-120 MW	Bettia will have two source from Motihari (400/132 KV) and Gopalganj
3.	132KV Motihari (400/132 KV)-Raxaul	Raxaul-40 MW Parwanipur (Nepal)-70 MW Total-110 MW	.
	Total Load	290 MW	

A scheme to be formulated to open the 132 KV Motihari (400/132 KV)-Bettia (D/C) line and 132 KV Bettia-Raxaul (D/C) line to trip/open at Bettia end. Once one no. 200 MVA Power transformer tripped at Motihari (400/132 KV) station. By this way Motihari (400/132 KV) station will have only 170 MW load ( i.e load of one 200 MVA power transformer).

In 152<sup>nd</sup> OCC, BSPTCL explained the load trimming scheme.

*OCC advised BSPTCL to trip radial loads instead of tripping 132kV lines. OCC also advised to ensure reliable communication for transferring trip signal to respective CBs for successful operation of load shedding scheme.*

*OCC advised BSPTCL to revise the scheme accordingly and submit the details to ERPC and ERLDC.*

**BSPTCL may update.**

#### **Item No. B.13: Use of Polymer Insulators in the transmission lines--CEA**

CEA vide letter dated 28<sup>th</sup> November 2018 informed that many representations have been received in CEA as well as VIP references from Ministry of Power from various manufacturers and associations highlighting the issue of indiscriminate use of polymer insulators which are mostly imported from China leading to closure of indigenous porcelain manufacturing industry. To resolve the issue, a meeting was held in CEA on 25.5.2018 with various stakeholders to deliberate on the issue.

PGCIL vide letter no . C/CTU/E/02/TBCB dated 24.10.2018, indicated that on the directions of RPC's, only polymer type insulators are being used in the new transmission lines of PGCIL traversing through states in Northern and eastern Regions. Moreover, PGCIL is replacing the porcelain insulators with polymer insulators in the existing transmission lines of the region . PGCIL has categorically mentioned that the same has been done in accordance with the decision taken in the meetings with Regional Power Committees.

It is to mention that CEA has issued the Regulations and there are specific provisions regarding use of porcelain (disc type / long rod) and polymer insulators . Regulation Clause No. 89(1)(f)(i) of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2010, may be referred in this regard.

It may be clarified whether decision of use of polymer insulation in place of porcelain insulator was taken for some particular lines or locations. Considering the sensitiveness of issue, the same may also be discussed in respective RPC meetings and a balanced approach may be adopted for all future lines.

*In 152<sup>nd</sup> OCC, Powergrid informed that they are following the "Regulation Clause No. 89(1)(f)(i) of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2010".*

*After detailed deliberation, OCC decided the following:*

- *Powergrid should submit the details of the progress made towards insulator replacement work and quantity of polymer insulators received till date*
- *Powergrid should submit the details of order placed for the polymer insulators, which are scheduled to be delivered in near future*
- *The issue would be placed in TCC/ERPC Meeting for detailed discussion*
- *Powergrid should not place any fresh order for polymer insulators till further decision by TCC/ERPC*

Reply received from Powergrid Odisha Projects is enclosed at **Annexure-B13**.

**Powergrid may update.**

#### **Item No. B.14: Problems in operating at 55 % Minimum Technical Limit conditions-MPL**

Minimum Technical Limit (MTL) of interstate generating stations is guided by Indian Electricity Grid Code (IEGC) following CERC notification in this regard. Moreover, it is the responsibility of ERLDC to ensure applicability of IEGC. As you are aware that there is widespread coal crisis across Eastern India & MPL station is not an exception to this. In view of poor coal quality

(Specific Coal Consumption variation from 0.56 to 0.7) difficulties are being faced in Boiler combustion . At 55 % Technical Minimum level the Boiler flame condition is unstable and & also there are fluctuations in drum level.

MPL is not able to operate to 55% MTL condition as flame intensity and frequency becomes low at pull out value of fireball. The low flame intensity and frequency issues are due to erosion of coal burners, Secondary air dampers erosion and fouling of burner nozzle assemblies These conditions will be addressed in forth coming Annual overhaul in April 2019 and Nov 2019 respectively for unit 2 and 1.

Hereby request to all beneficiaries to co-operate us in this situation and limit out technical minimum operating condition at 61%. With your great co-operation we assure smooth and reliable operation.

**MPL may explain. Members may discuss.**

**Item No. B.15: Status of Emergency Restoration system (ERS) of respective Transmission Licencees**

CEA vide mail dated 28-09-2018 has requested to provide Status of Emergency Restoration system (ERS) of respective Transmission Licencees in respective Regions as per the format.

*OCC advised all the transmission licensees to submit the requisite information as per the format in the form of soft copy through email (mail ID: mserpc-power@nic.in).*

*Till date, the details have been received from WBSETCL, OPTCL and JUSNL as follows:*

State-wise Emergency Restoration system				
Transmission Licensee	Requirement of Total no of ERS in State	Number of ERS available in state	No of ERS to Be Procured	Remark if Any .
WBSETCL	10	10	Nil	-
OPTCL	84	54	30	
JUSNL	13	8	5	

*OCC advised all the other transmission licensees to submit the requisite information as per the format in the form of soft copy through email (mail ID: mserpc-power@nic.in) within 7 days.*

**Other Transmission Licencees may submit the details as per the format.**

**Item No. B.16: Review of Cyber Security Works/Activities- CEA**

CEA vide letter informed that Secretary (Power) is going to review the cyber security related works /activities being carried out in Power Sector. In this regard, it is requested to provide the State wise status on following action points pertaining to cyber security at the earliest:

1. Appointment of organization-wise Chief Information Security Officers and its status
2. Identification of organization-wise Critical Infrastructure and its status
3. Preparation of organization-wise Crisis Management Plan and its status
4. Status of Cyber Security Mock Drill activity in coordination with CERT-In
5. Status of Training / Workshops on Cyber Security organized / participated by power sector entities
6. Status of action taken on CERT-In / NCIIPC advisories

*In 148<sup>th</sup> OCC, all the constituents were advised to send the latest status to [mserpc-power@nic.in](mailto:mserpc-power@nic.in) within a week.*

*The details had been received from DVC, WBSETCL, Bihar and OPTCL only.*

*OCC advised all the other constituents to send the information to [mserpc-power@nic.in](mailto:mserpc-power@nic.in) at the earliest.*

**Members may comply.**

**Item No. B.17: Submission of static data for preparation of a report on coal fired stations in the country--ERLDC**

One internal committee has been formed by POSOCO to prepare a report on coal fired stations in the country, which will be submitted to the FOLD &FOR, at a later stage. Similar reports have already been prepared by POSOCO for hydro, gas and RES plants, which has been widely appreciated in different forums like FOLD & FOR.

To prepare this report, some static data (commercial, technical, environmental & general) in proper format for all coal fired stations (ISGS, IPP and State Generators) of capacity  $\geq 200$  MW need to be submitted to ERLDC so that the compilation and subsequent analysis of data of thermal generators on an all India basis could be made within stipulated time period.

The format for data submission was intimated to all generators and state SLDCs via email. Till date only GMR, Adhunik, MPL and Sagardighi have submitted their static data.

ISGS (NTPC), IPP and State Generators of Eastern Region are requested to kindly accord high priority for submitting the static data to ERLDC in [erldcso@posoco.in](mailto:erldcso@posoco.in) for preparation of the report within stipulated period.

Nodal coordinators for this Process from ERLDC are:

1. Shri Biswajit Mondal, Sr. Engineer, Mob No: 9903329271
2. Shri Chandan Mallick, Sr. Engineer, Mob No: 9007059660

*In 152<sup>nd</sup> OCC, ERLDC updated the following generating stations have not submitted static data for preparation of report on coal firing stations:*

1. IB thermal stage -1
2. TTPS (Odisha)
3. Talcher STPP
4. Santaldih TPP
5. Budge-Budge TPP
6. Tenughat TPP

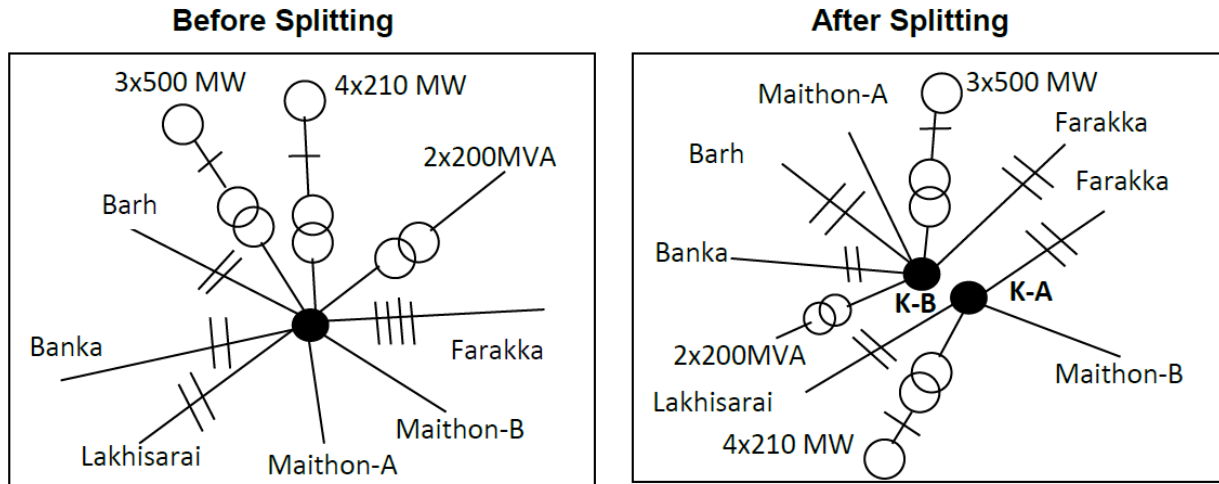
*OCC advised above thermal generators to submit the relevant information to ERLDC at the earliest.*

**Members may update.**

**Item No. B.18: NTPC Kahalgaon bus splitting--ERLDC**

The Bus splitting of 400/132 kV Kahalgaon (NTPC) was discussed and agreed in principle in the 11th Standing Committee meeting of Eastern region held on 20th Sept 2010 and completion of bus splitting is expected during January 2019. The bus splitting scheme is as follows:

## Kahalgaon Switchyard



400kV Kahalagaon-Banka-I line was taken shutdown from 26-11-2018 to facilitate the bay shifting work from Bus-I to Bus-III as per the bus splitting scheme. However to restore the same line on its new bay, 400kV Kahalgaon-Banka-II line shutdown was also taken from 03-01-2019 due to some line crossing work which was not mentioned during outage request of 400kV Kahalagaon-Banka-I. Now 400kV Kahalgaon-Banka-II will be restored with Bus – III of Kahalgaon on 16-1-2019. Also Kahalgaon Bus-I was taken shutdown on 09-01-2019 for splitting of bus into two different sections. After splitting, Bus-I was charged at 20:08hrs of 09-01-2019 and Bus III along with 400kV Kahalgaon-Banka-I was charged 02:30hrs of 10-01-2019.

**NTPC Kahalgaon is requested to give a detail presentation about the further plan to complete remaining bus splitting work.**

### **Item No. B.19: Operation Eastern Regional grid from ERLDC back up control Centre at, NLDC, New Delhi as a part of Disaster Management: ERLDC**

As a part of disaster Management preparedness, the control room shift operation of ERLDC is planned to be operated from its back up control Centre at NLDC, New Delhi tentatively on 08th February, 2019 (one shift only). During this process all control room shift operation regular activities viz. real time supervision and monitoring of Eastern Region system, switching/ outage co-ordination of transmission elements, all scheduling activities and preparation of different reports shall be performed from back up ERLDC Control Centre from NLDC, New Delhi.

The contact numbers of back-up ERLDC would be informed to all ER constituents prior to such exercise.

**Members may please note.**

### **Item No. B.20: Segregation of Tala and Chukha Energy**

Order related to Dagachu scheduling was issued by Honorable CERC on 11th September 2014 via order no 187/MP/2014. As per CERC order, for computing the actual power of Tala and Chukha injected at Indian periphery, the actual injection of Dagachhu power as computed by meters installed on its outgoing lines and furnished by NLDC Bhutan, has to be subtracted from the total power injected at Binaguri (New Siliguri) and Birpara.

The total power of Tala and Chukha so arrived above will be apportioned amongst Tala and Chukha in the ratio of the Tala and Chukha receipt at Indian periphery in the corresponding month of the previous year as per the published figure in the Regional Energy Accounts.

After deriving the components of injection of Tala and Chukha at Indian periphery, the existing methodology of settlement with reference to Tala and Chukha injection shall be followed by ERPC. Accordingly, the above methodology was being used for Tala and Chukha energy segregation.

However it was observed that after adjusting Dagachu Power from the export of net power from Bhutan power at Indian Boundary, Bhutan has net import of India Power in the Month of Feb18 and March 18 and due to the same REA for Bhutan was suspended in Feb18 & Mar18.

*In view of above, Due to non-availability of Tala and Chukha receipt at Indian Periphery and suspended REA in Feb18 & Mar18, Segregation of Tala and Chukha energy at Indian Periphery in Feb19 & March19 will be done as per Feb17 & March17 REA data.*

**Members may note.**

**Item No. B.21: Updation of Restoration procedure of Eastern Region--ERLDC**

In compliance with clause 5.8 (a) and (b) of the present IEGC, The regional Restoration Procedure has to be developed and updated annually by RLDC in consultation with NLDC, all users, STU, SLDC, CTU, RPC Secretariat of the region.

For fulfillment of same, Draft copy of "Black Start and Restoration Procedure" was mailed on 11<sup>th</sup> Jan 2019 for review and feedback from stake holders. Based on feedback and updated information same will be finalized by 31<sup>st</sup> Jan 2019.

**All regional entities of Eastern Region are therefore requested to furnish their observations (if any) positively by 25-01-19.**

**Item No. B.22: Collection of modelling data from Renewable as well as conventional energy generators: ERLDC**

As a National Grid operator, POSOCO is continuously working for ensuring reliability and security of the Grid. With penetration of more and more renewable energy source the task is becoming complicated day by day. An accurate dynamic modeling of the National Grid, needs modelling of conventional as well as renewable / distributed generation sources. World Bank has engaged Digsilent as consultant for assisting POSOCO for building dynamic model of the Grid. A guideline for dynamic data collection has been developed in consultation with Digsilent Pacific team.

All the utilities are requested to collect data from the grid scale renewable power plants as well as from conventional power plants under their jurisdiction and submit the same to ERLDC/ERPC as early as possible.

**Members may comply.**

**Item No. B.23: Additional agenda**

## **PART C: ITEMS FOR UPDATE**

### **Item no. C.1: Status of UFRs healthiness installed in Eastern Region**

UFR Healthiness Certification for the month of December, 2018 has been received from CESC, WBSETCL, DVC, BSPTCL and JUSNL.

**Members may note.**

### **Item no. C.2: Status of Islanding Schemes healthiness installed in Eastern Region**

At present, the following islanding schemes are in service:

1. CESC as a whole Islanding Scheme, CESC
2. BkTPS Islanding Scheme, WBPDC
3. Tata Power Islanding Scheme, Haldia
4. Chandrapura TPS Islanding Scheme, DVC
5. Farakka Islanding Scheme, NTPC
6. Bandel Islanding Scheme, WBPDC

In 108<sup>th</sup> OCC meeting, respective constituents agreed to certify that the islanding schemes under their control area are in service on monthly basis.

The healthiness certificate for Islanding Scheme for December, 2018 has been received from CTPS, DVC, NTPC, West Bengal, JUSNL, WBPDC and CESC.

**Members may note.**

### **Item no. C.3: Healthiness of SPS existing in Eastern Region**

The Status of healthiness certificate for December, 2018 is given below:

<b>Sl. No.</b>	<b>Name of the SPS</b>	<b>Healthiness certificate received from</b>	<b>Healthiness certificate not received from</b>
1.	<i>Talcher HVDC</i>	<i>NTPC, GMR,</i>	<i>JITPL, Powergrid,</i>
2.	<i>Rango</i>	<i>Chuzachen,</i>	<i>Dikchu, Dansenergy, Powergrid, Teesta-III</i>
3.	SPS in CESC system	<i>CESC</i>	<i>Nil</i>
4.	SPS at Chuzachen	<i>Chuzachen</i>	<i>Nil</i>

**Members may update.**

### **Item no. C.4: Implementation of Automatic Demand Management Scheme (ADMS)-ERLDC**

The latest status along with proposed logic as follows:

<b>Sl No</b>	<b>State/Utility</b>	<b>Logic for ADMS operation</b>	<b>Implementation status/target</b>	<b>Proposed logic (if different from under implementation logic)</b>
1	West Bengal	F <49.7 AND deviation > 12 % or 150 MW	Implemented on 25.11.16	F <49.9 AND deviation > 12 % or 150 MW
2	DVC	F <49.7 AND deviation > 12 % or 150 MW	Implemented on 17.06.2016	
3	Bihar	F <49.7 AND deviation > 12 % or 150 MW	They would place the order to Chemtrol for implementation.	F <49.9 AND deviation > 12 % or 150 MW

4	Jharkhand	1. System Frequency < 49.9 Hz AND deviation > 12 % or 25 MW 2. System Frequency < 49.9 Hz AND deviation > 12 % or 50 MW 3. System Frequency < 49.9 Hz AND deviation > 12 % or 75 MW	9 Months Tendering for RTU installation is in progress. Implemented by December 2018	Condition 1: Block I feeders will be selected for load shedding Condition 2: Block I & II feeders will be selected for load shedding Condition 3: Block I, II & III feeders will be selected for load shedding
5	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. DISCOM over-drawl > (40 MW)	10 Months Sent for PSDF approval.	Logic 2 and 3 is AND or OR, in case it is AND then ADMS may not operated when discom are in schedule but GRIDCO is overdrawing due to less generation at state embedded generators
6.	Sikkim			Sikkim informed that they have submitted a proposal to PSDF Committee for installation of OPGW cables which is under approval stage. Sikkim added that ADMS scheme would be implemented after installation of OPGW.

In 142<sup>nd</sup> OCC, it was opined that uniform logic should be implemented for all the states. OCC decided to review the logic of ADMS after implementation of the scheme by all the states.

During the Month of November 18, ADMS criteria got satisfied for following cases:

#### A. West Bengal

SI No	Date & Time	West Bengal O/D (MW)	Frequency (Hz)	ADMS Optd (Y/N)	Relief (MW)
1	12-12-2018 07:38	251	49.69		
2	12-12-2018 07:39	227	49.69		

Members may update.

#### Item no. C.5: 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar&Pandiabil S/s

PGCIL has already commissioned the 2x315MVA 400/220kV Bolangir S/s by LILoing of 400kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

In last OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x315MVA 400/220kV Bolangir S/s	
a.	LILo of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S	Only 7 towers left (Severe ROW problem). <b>By March, 2019.</b>
2.	400/220kV Pandiabil Grid S/s:	
a.	Pratapsasan (OPTCL)-Pandiabil (PG) 220 kV D/C line	<b>By March, 2019.</b>
3.	400/220 kV Keonjhar S/S	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	By end of Dec, 2018.
b.	Keonjhar (PG)-Turumunga (OPTCL) 220kV D/C line	By 2019. The work is yet to be started.



**OPTCL may update.**

**Item no. C.6: 220 kV inter-connecting lines of JUSNL with 2x315 MVA, 400/220 kV sub-stations at Chaibasa, Daltonganj&Dhanbad**

In lastOCC, JUSNL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	<b>Daltonganj 400/220/132kV S/s:</b>	
a.	Daltonganj(POWERGRID)–Latehar220kVD/c	By April, 2019.
b.	Daltonganj (POWERGRID) – Garhwa 220kV D/c	The line expected to be completed by May, 2018 but – Garhwa 220kV is expected to be completed by Dec 2018.
C	Daltonganj (POWERGRID) – Daltonganj (JUSNL) 132kV D/c	The line charged as per original configuration on 26 <sup>th</sup> July 2018.
D	Daltonganj (POWERGRID) – Chatarpur/Lesliganj 132kV D/c	Tendering is in progress. Expected to be completed by October 2019
2	<b>Chaibasa400/220kVS/s</b>	
A	Chaibasa(POWERGRID)–Noamundi220kVD/c	Not yet started
3	<b>Dhanbad400/220kVS/s</b>	
A	LILO of Govindpur–Jainamore/TTPS 220kVD/c at Dhanbad	ROW issues.Target date November 2018.

**JUSNL may update.**

**Item no. C.7: 220 kV inter-connecting lines of WBSETCL with 400/220 kV, 2x315 MVA Subashgram& 2x500 MVA Rajarhat sub-stations**

In last OCC, WBSETCL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	<b>2x500MVA, 400/220kV Rajarhat---</b>	
a.	Rajarhat-N. Town-3 (WBSETCL) 220 kV D/C line	Matching, ROW problem
b.	Rajarhat-N. Town-2 (WBSETCL) 220 kV D/C line	ROW problem, December 2019
c.	Rajarhat- Barasat (WBSETCL) 220 kV D/C line	ROW problem, February 2019
2	<b>Subashgram400/220kVS/s</b>	
a	Subashgram–Baraipur220kVD/cline	June 2019, 75% of work has been completed.

**WBSETCL may update.**

**Item no. C.8: Status of Installation of STATCOM in Eastern Region**

In the 15<sup>th</sup> meeting of SCM it was agreed to install STATCOM in combination with mechanically switched Reactors (MSR) and Capacitors (MSC) and co-ordinated control mechanism of MSCs and MSRs at Ranchi, Rourkela, Jeypore and Kishanganj substations in Eastern Region.

The matter was again discussed in the 28th ERPC/TCC meeting held on 12th -13th September, 2014 at Goa, wherein, it was decided that POWERGRID may go ahead with implementation of the STATCOM project in Eastern Region with debt – equity ratio of 70:30 funding. The debt part should be refunded through PSDF and Equity Component (30%) to be funded by POWERGRID to be recovered through regulated tariff mechanism. CTU should initiate the process of availing fund from PSDF.

Powergrid updated the latest status as follows:

SI No	Location /Sub-Station of POWERGRID in ER	STATCOM - Dynamic Shunt Controller (MVar)	Mechanically Switched Compensation Sl. (MVar)		Latest status
			Reactor (MSR)	Capacitor (MSC)	
1	Rourkela	±300	2x125		In service from March 2018.
2	Kishanganj	±200	2x125		70% civil work completed. 30% switchyard equipment supplied. Expected to complete by January 2019
3	Ranchi(New)	±300	2x125		Commissioned on 12 <sup>th</sup> July 2018
4	Jeypore	±200	2x125	2x125	Commissioned on 30 <sup>th</sup> June 2018

**Powergrid may update.**

#### Item no. C.9: Update on status of telemetry

CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed NLDC and respective RLDCs to update the status of telemetry every month at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action.

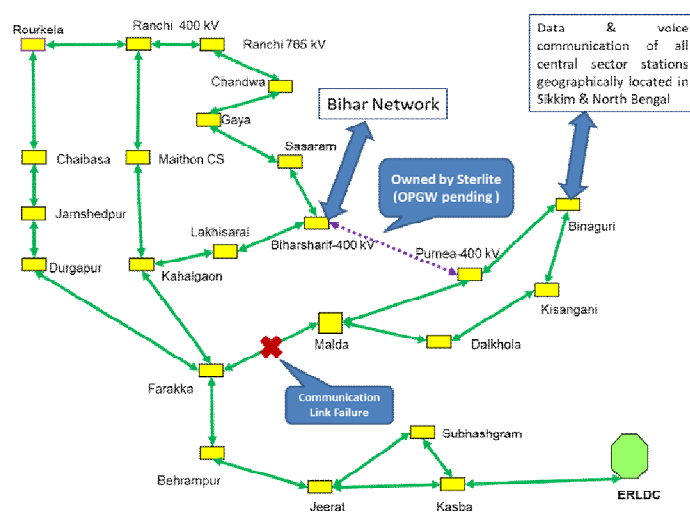
Major issues are given below:

- Regarding frequent intermittent of real time SCADA data from Talcher STPS Stage 1 & 2, NTPC agreed to provide additional ports by March 2019.
- Alternate path for Malda–Farakka OPGW link

In 152<sup>nd</sup> OCC, Powergrid gave a detailed presentation on alternate path for Malda–Farakka OPGW link. Presentation is enclosed at **Annexure-C9**.

Thereafter, Powergrid informed that the tentative cost implication for providing alternate connectivity between Siliguri 220kV and Muzaffarpur S/s with one STM-4 bandwidth connectivity comes to Rs. 26 Lakhs per annum.

Parallely the Kishanganj-Darbhanga-Muzaffarpur OPGW link shall be provisioned subsequent to commissioning of Kishanganj-Darbhanga line by M/s KPTL.



**ERLDC may present. Members may update.**

**Item no. C.10: Non submission of SEM data to ERLDC from Gelephu and Malbase S/S in Bhutan--ERLDC**

Malbase end meter data of 220 KV Malbase-Birpara(PG) and 400 KV Malbae-Binaguri(PG) D/C Line is not being received by ERLDC since last 2 months. Malbase informed ERLDC that due to non-working of DCD they are not sending the data to ERLDC.

In 38<sup>th</sup> CCM, it was emphasized that these two locations are very crucial and requested PGCIL to resolve the matter at the earliest by adjusting DCDs from any of the other locations which remained unutilized. It was also advised to PGCIL to collect the unutilized DCD from Teesta –III (TUL) and to hand over to Malbase.

*In 151<sup>st</sup> OCC, Powergrid informed that they had handed over DCD, cable and supporting software to BPC on 14<sup>th</sup> November 2018.*

*BPC vide mail dated 13<sup>th</sup> December 2018 informed that the new DCD meter was issued to Malbase substation on 14.11.2018 by PGCIL. But it is of different make ( SANDS) and substation people are not familiar using the new DCD meter. They could download the readings from the SEM but the files could not be transferred from DCD to PC. Therefore, BPC requested to depute an official from PGCIL to guide our substation people on the usage of the new DCD meter for one time.*

*Regarding Gelephu, BPC informed the downloading cable is defective and needs replacement.*

*In 152<sup>nd</sup> OCC, Powergrid informed that they would arrange the demonstration of downloading meter data using DCD and the cable within a week.*

*OCC advised BPC to send the updated status after week to ERPC Secretariat.*

However, the data from Malbase and Gelephu is still not being sent to ERLDC.

**PGCIL/Bhutan may please respond.**

**Item no. C.11: Replacement of Non-functioning/Defective Meter--ERLDC**

**i) Talcher Solar NTPC**

In 152<sup>nd</sup> OCC, PGCIL informed that all 03 meters at NTPC Talcher Solar have been replaced, Till now neither meter details is sent to ERLDC nor meter data is being sent.

**PGCIL/NTPC may please respond.**

**ii) NTPC Barh ICT-3**

In 152<sup>nd</sup> OCC meeting, PGCIL informed the meter had been replaced by Genus Meter. However the data of Genus Meter is not being sent by NTPC Barh since replacement of meter. At Present newly replaced meter is not connected through AMR.

**PGCIL/NTPC may please respond.**

**iii) Ranchi New(PG)**

In 152<sup>nd</sup> OCC, PGCIL informed that meter at Ranchi has been replaced, Till now neither meter details is sent to ERLDC nor meter data is being sent.

**Powergrid may please update the status.**

**iv) Non submission of Meter data from Ara and Kishanganj BSPHCL**

In 152<sup>nd</sup> OCC meeting, It was informed that Modem at Arrah was defective. OCC further advised BSPTCL to download the meter data using DCD and submit to ERLDC till restoration of AMR. Till now data is not received at ERLDC end.

**BSPHCL may please respond.**

**v) Erroneous data of Energy meter**

Following meters at different substation of PGCIL and BSPTCL is recording erroneous reading since last few weeks. The problem was informed to the respective substation through e mail and telephonically. However the problem of erroneous data of meters is still persisting.

S. No.	Substation	Name of Feeder	Meter S.No	Date of start of problem (Date)	Issues
<b>PGCIL Substations</b>					
1	MALDA	132 KV SIDE OF MALDA 220/132 160 MVA ICT-2	ER-1103-A	03.12.18	Reverse Polarity
2	BIRPARA	132 KV SIDE OF BIRPARA 220/132 160 MVA ICT-1	ER-1041-A	03.12.18	Reverse Polarity
3	BIRPARA	132 KV SIDE OF BIRPARA 220/132 160 MVA ICT-2	NP-5891-A	03.12.18	Reverse Polarity
4	BOLANGIR	220 KV SIDE BOLANGIR 400/220 KV 500 MVA ICT-I	ER-1573-A	03.12.18	Wrong Connection of CT/PT
5	BOLANGIR	220 KV SIDE BOLANGIR 400/220 KV 500 MVA ICT-2	NP-7919-A	03.12.18	Wrong Connection of CT/PT
6	MOTIHARI	132kV SIDE OF 200MVA MOTIHARI(DMTCL) ICT-1	ER-1174-A	03.12.18	Reverse Polarity
7	SASARAM	400 KV SASARAM (PG)-BIHARSHARIFF(PG)-II	NP-6515-A	03.12.18	Wrong Connection of CT/PT
8	RANCHI	400 KV SIDE OF RANCHI ICT-2	NP-5873-A	27.12.18	Wrong Connection of CT/PT
9	BARIPADA	400 KV SIDE 500 MVA 400/220 BARIPADA ICT-3	ER-1564-A	26.12.18	Wrong Connection of CT/PT
<b>BSPTCL Substation</b>					
1	BEGUSARA I	220kV Begusarai-Purnea-1	ER-1344-A	19.12.18	Reverse Polarity

**PGCIL/BSPTCL may please update the status.**

**Item no. C.12: Transfer capability determination by the states**

In order to ensure, safe and secure operation of the grid, the states should carry out the power system study for operational planning and power transfer capability through their respective transmission links with the rest of the grid.

It was decided in the NPC meeting that to begin with, power system study for assessment of operational limits / power transfer capability for each state will be done by the concerned RLDC in association with concerned SLDC. Monthly TTC /ATC will be uploaded by the SLDCs at their respective websites and also communicated to concerned RLDC & NLDC subsequently.

**Latest status of State ATC/TTC declared by states for the month of May -2019**

Sl No	State/Utility	TTC import(MW)		RM(MW)		ATC (Import) MW		Remark
		Import	Export	Import	Export	Import	Export	
1	BSPTCL	4750	--	200	--	4550	--	Nov-18
2	JUSNL	1188	--	60	--	1128	--	April-19
3	DVC	1195.7	3141.3	62.02	48.68	1133.7	3092.6	May-19
4	OPTCL	2296	--	82	--	2207	--	May-19
5	WBSETCL	3985	--	300	--	3685	--	Jan-19
6	Sikkim	--	--	--	--	--	--	

Once again, it may kindly be notes that the SLDC has to calculate ATC/TTC and show the same on their website in line with approved “Detailed Procedure for Relieving Congestion in Real Time Operation” as per the CERC (Measures to relieve congestion in real time operation) Regulations, 2009 regulation.

**Members may update.**

**Item no. C.13: Replacement of GPRS communication with Optical Fiber for AMR**

In ER, 80% meters are connected through Automated Meter Reading (AMR). At present the communication system used for data transfer from each location is GPRS. It has been observed that many locations are not communicating with AMR system due to poor/no GPRS signal. Many substations have their own optical fiber which is also used for the LAN network of respective stations. TCS has successfully connected 02 locations (Subhasgram-PG and Binaguri-PG) in ER-II with PGCIL intranet and these two locations are smoothly reporting to AMR system after connecting with PGCIL LAN. The proposed network will not only provide better communication but also reduce the cost of GSM.

*In 152<sup>nd</sup> OCC, Powergrid informed that optical fiber for AMR had been implemented at 18 locations and rest of the locations would be completed by January 2019.*

**POWERGRID may please update the progress.**

**Item no. C.14: Mock Black start exercises in Eastern Region – ERLDC**

Tentative Schedule for mock black start exercise for FY 2018-19 is given below:

Sl no	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	U.Kolab	Last week of May, 2018	Completed on 8 <sup>th</sup> June, 2018	Last Week of January 2019	In Dec 2018
2	Maithon	1st week of June 2018	Completed on 6 <sup>th</sup> June, 2018	1st Week of February 2019	
3	Rengali	2nd week of June 2018	Done on 18 <sup>th</sup> August, 2018	Last week of November 2018	Jan 19
4	U. Indarvati	3rd week of June 2018	Planned in Oct, 2018.	2nd week of February 2019	In Dec 2018
5	Subarnarekha	1st week of October 2018	Done on 10 <sup>th</sup> August, 2018.	1st week of January 2019	
6	Balimela	3rd week of October 2018	Done on 21 <sup>st</sup> Dec, 2018	1st week of March 2019	
7	Teesta-V	2nd week of Nov 2018	Done on 3 <sup>rd</sup> May 2018	Last week of February 2019	

8	Chuzachen	Last Week of May 2018	In May 2018	2 <sup>nd</sup> week of January 2019	
9	Burla	Last Week of June 2018	Completed on 7 <sup>th</sup> June, 2018	Last week of February 2019	
10	TLDP-III	1 <sup>st</sup> Week of June 2018	After Monsoon	2 <sup>nd</sup> Week of January 2019	
11	TLDP-IV	Last Week of June 2018	After Monsoon	1 <sup>st</sup> Week of February 2019	
12	Teesta-III	Last week of Oct 2018	Done on 30 <sup>th</sup> Nov 2018	First Week of March 2019	
13	Jorthang	First Week of May 2018		First Week of Feb 2019	
14	Tasheding	2 <sup>nd</sup> Week of May 2018		2 <sup>nd</sup> Week of Feb 2019	
15	Dikchu	3 <sup>rd</sup> Week of May 2018		3 <sup>rd</sup> Week of Feb 2019	

**Members may update.**

**Item no. C.15: Submission of Thermal Loading of Transmission line and associated terminal equipment by ISTS licensee**

In line with the MoM of 4th NRCE Meeting dt.03-11-14 and “Operational Guidelines for determination Of TTC, ATC and TRM for the Short-Term Horizon (0-3 Months)” published by NRCE dt.20-02-15, thermal limit for transmission line has to be used for calculation of ATC/TTC. However, the thermal loading of transmission line depend on the Maximum Conductor Temperature, End equipment thermal rating. This has to be submitted by the Owner of the equipment. Further, the equipment owner also has to confirm that relay setting has been aligned so that the line can be operated up to its thermal limit. In the absence of complete details, ERLDC is utilising the data from the CEA Planning Criteria for thermal rating as given below :

Conductor Type	Ampacity per conductor(A)*	Thermal loading limit of line (MVA)
765 kV Quad ACSR_Bersimis	732	3880
765 kV HexaACSR_Zebra	560	4452
400 kV Twin ACSR_Moose	631	874
400 kV Quad ACSR_Moose	631	1749
400 kV Quad ACSR_Bersimis	732	2029
400 kV Triple Snowbird	630	1309
400 kV Twin ACSR_Lapwing	773	1071
220 kV Single AAAC_Zebra	557	212
220 kV Single ACSR_Zebra	560	213
220 kV Twin ACSR_Moose	631	481
132 kV Single ACSR_Zebra	560	128
132 kV Single ACSR_Panther	366	84

\*Ambient and Maximum conductor temperature are taken as 45°C and 75°C respectively.

Apart from above specifically mentioned in CEA transmission planning criteria following loading limit is considered for HTLS line while calculating ATC/TTC

Conductor Type	Ampacity per conductor(A)*	Thermal loading limit of line (MVA)
400 kV Twin HTLS	1262	1750

220 kV Single HTLS	1020	390
132 kV Single HTLS	732	168

**In view of this, it is desired that all ISTS Licensee and STU(for 400 kV and important 220 kV lines) may kindly submit the following details to ERLDC for utilisation in ATC/TTC calculation:**

- a) Transmission line wise Ampacity and Thermal loading along with Maximum Conductor Temperature and conductor type.
- b) End Equipment Rating and
- c) Confirmation whether the relay setting has been adopted in line with the thermal rating of the line
- d) Any constraint during thermal loading of line

*In 152<sup>nd</sup> OCC, ERLDC informed they received the details only from DVC.*

*OCC advised all the other ISTS licensees and STUs to submit the relevant data to ERLDC and ERPC.*

**Members may note and comply.**

## **PART D:: OPERATIONAL PLANNING**

### **Item no. D.1: Anticipated power supply position during February 19**

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of February 19 were prepared by ERPC Secretariat on the basis of Provisional LGBR for 2015-16 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc. is at **Annexure-D.1**.

**Members may confirm.**

### **Item no. D.2: Shutdown proposal of transmission lines and generating units for the month of February 19**

*In 151<sup>st</sup> OCC, it was observed that constituents had not submitting the shutdown requisition within stipulated time as a result ERLDC had been facing difficulty in properly analyzing the shutdown.*

*OCC decided the following procedure for submission of transmission elements outage requisition:*

- 1. Shutdown of Intra Regional Lines** - Transmission licensee/SLDCs/Transmission Asset owners shall apply shutdown of their respective Intra Regional Lines for the next month to ERLDC strictly by **8<sup>th</sup>** of every Month. Based on this, ERLDC shall prepare the list which would be placed in OCC Agenda. Any shutdown requisition received after **8<sup>th</sup>** of the month would not be normally considered for discussion in the OCC meeting unless it is considered to be an emergency requirement.
- 2. Shutdown of Inter Regional Lines** - Transmission licensee/ SLDCs/Transmission Asset owners shall send their shutdown requisition of Inter Regional Lines for the next month directly to NLDC strictly by **5<sup>th</sup>** of every month with a copy to respective RLDCs.

Members may finalize the Shutdown proposals of transmission lines and generating stations for the month of February 19.

Shutdown proposals of generating stations:

System	Station	Unit	Size (MW)	Period		No. of Days	Reason
				From	To		
DVC	MTPS	6	250	08.02.19	15.03.19	36	COH
WBPDC	Sagarighi TPS	4	500	01.02.19	20.02.19	20	Boiler Overhauling
CESC	TITAGARH	2	60	24.02.19	27.02.19	4	Not Specified

The list transmission line shutdown to be discussed on 18<sup>th</sup> January 2019 through VC is given at **Annexure-D2**.

**Members may confirm.**

#### **1. SLDC, West Bengal Agenda**

- Emergency shutdown of 400kV elements of STU system or tie-lines has to be allowed by ERLDC control room if immediate switching off the line is required to avoid subsequent hazard.



- Approval of all planned shutdowns by ERLDC outage coordination team may please be issued at least two working days in advance to mobilize the workforce.

**Members may discuss.**

## **2. Shutdown of 400kV Main Bus Darbhanga-- Alipurduar Transmission Limited**

Alipurduar Transmission Limited vide mail dated 5<sup>th</sup> December 2018 informed that the M/S TBEA Zonfa (China) has informed that due to change in Govt regulations , they would not receive the visa in the month of December 2018 , hence they are proposing the revised schedule as per the below dates for the connection of Main Bus -1 & Main Bus 2

1. 400KV Main bus I (DMTCL): – 5.01.2019 to 12.01.2019 .
2. 400KV Main bus II (DMTCL): – 14.01.2019 to 21.01.2019.
3. 400KV Main bus I (DMTCL) & 400KV Main bus II (DMTCL) – 21.01.2019 to 23.01.2019

*In 152<sup>nd</sup> OCC, BSPTCL informed that they had allowed the shutdown in December 2018 but Alipurduar Transmission Limited could not avail the shutdown.*

*OCC advised BSPTCL to allow the shutdown in this winter season.*

*BSPTCL agreed to give the shutdown in January 2019 after discussing with Alipurduar Transmission Limited.*

**BSPTCL may update.**

## **3. Maintenance schedule for 220kV Chhukha-Birpara feeders**

The annual/special maintenance schedule for 220kV Chhukha-Birpara feeders was initially proposed from 09.11.2018 starting with Feeder-II. Accordingly feeder was taken under shut down from the said date to carry out the numerical relay retro-fitting works. But till date the works could not be completed due to non availability of service engineer from M/S ABB. The revised shutdown schedule is as below.

<b>220kV Chhukha- Birpara Feeder shut down</b>				
<b>Feeder No.</b>	<b>Initial Schedule</b>		<b>Revised Schedule</b>	
	<b>Start Date</b>	<b>End date</b>	<b>Start Date</b>	<b>End Date</b>
I	21.11.2018	30.11.2018	25.01.2019	31.01.2019
II	09.11.2018	20.12.2018	09.11.2018	31.01.2019
III	21.12.2018	11.01.2019	01.02.2019	15.02.2019

The above schedule is tentative since the date for arrival of service engineer from M/S ABB is still not confirmed.

**Members may approve.**

### Item no. D.3: Prolonged outage of Power System elements in Eastern Region

#### (i) Thermal Generating units:

S.No	Station	Location	Owner	Unit No	Capacity	Reason(s)	Outage		Expected Revival Date
							Date	Time	
1	BARAUNI	BIHAR	BSPHCL	6	105	R & M WORK	17-Mar-12	13:15	NO DEFINITE PROGRAM
2	KOLAGHAT	WEST BENGAL	WBPDC	1	210	POLLUTION CONTROL PROBLEM	10-May-18	23:05	NO DEFINITE PROGRAM
3	KOLAGHAT	WEST BENGAL	WBPDC	3	210	POLLUTION CONTROL PROBLEM	23-Feb-17	11:51	NO DEFINITE PROGRAM
4	CTPS	JHARKHAND	DVC	3	130	TURBINE BLADE DAMAGE	30-Jul-17	00:00	NO DEFINITE PROGRAM
5	BANDEL	WEST BENGAL	WBPDC	5	210	ANNUAL OVERHAULING	5-Dec-18	10:05	16-Jan-19
6	TALCHER	ODISHA	NTPC	2	500	OVERHAULING	2-Dec-18	13:04	12-Jan-19
7	JITPL	ODISHA	JITPL	2	600	COAL SHORTAGE	26-Jun-18	00:03	SUBJECT TO COAL AVAILABILITY
8	MEJIA	WEST BENGAL	DVC	4	210	COAL SHORTAGE	2-Nov-18	22:05	SUBJECT TO COAL AVAILABILITY
9	KODERMA	Jharkhand	DVC	2	500	CLASS C TRIPPING	3-Jan-19	16:33	16-Jan-19
10	CTPS	JHARKHAND	DVC	7	250	COAL SHORTAGE	18-Dec-18	18:41	SUBJECT TO COAL AVAILABILITY
11	SAGARDIGHI	WEST BENGAL	WBPDC	3	500	COAL SHORTAGE	5-Dec-18	00:05	SUBJECT TO COAL AVAILABILITY
12	SAGARDIGHI	WEST BENGAL	WBPDC	2	300	COAL SHORTAGE	24-Dec-18	19:55	SUBJECT TO COAL AVAILABILITY
13	SAGARDIGHI	WEST BENGAL	WBPDC	1	300	COAL SHORTAGE	6-Jan-19	16:13	SUBJECT TO COAL AVAILABILITY
14	TENUGHAT	JHARKHAND	JUVNL	1	210	COAL SHORTAGE	11-Dec-18	00:11	SUBJECT TO COAL AVAILABILITY
15	KOLAGHAT	WEST BENGAL	WBPDC	5	210	STATOR EARTH FAULT	30-Dec-18	10:17	16-Jan-19
Total					4445				

#### (ii) Hydro Generating units:

S.No	Station	Location	Owner	Unit No	Capacity (MW)	Reason(s)	Outage Date
1	BURLA	ODISHA	OHPC	1	37.5	R & M WORK	25.10.16
2	BURLA	ODISHA	OHPC	2	37.5	R & M WORK	16.10.15
3	BURLA	ODISHA	OHPC	4	37.5	Annual Maintenance	25.10.18
4	BURLA	ODISHA	OHPC	6	37.5	R & M WORK	16.10.15
5	BALIMELA	ODISHA	OHPC	1	60	R & M WORK	05.08.16
6	BALIMELA	ODISHA	OHPC	2	60	R & M WORK	20.11.17
7	BALIMELA	ODISHA	OHPC	5	60	Annual Maintenance	12.10.17
8	U.KOLAB	ODISHA	OHPC	2	80	Repair of MIV & Draft tube gate	28.05.17

						leakage	
9	UPPER KOLAB	ODISHA	OHPC	3	80	Problem in Bypass valve of BF valve	
10	CHIMPLIMA	ODISHA	OHPC	1	24	FLOOD CONTROL	21.07.18
11	RENGALI	ODISHA	OHPC	1	50	Annual Maintenance	31.10.18
12	INDRAVATI	ODISHA	OHPC	4	150	Shear pin failure	

It is therefore seen that about 714 MW hydro capacity in Odisha is under forced outage / planned outage and therefore not available for providing the much needed peaking support during evening peak. SLDC / OHPC may please indicate restoration plan of the units.

### (iii) Transmission elements

SL NO	Transmission Element / ICT	Agency	Outage From		Reasons for Outage
			DATE	TIME (HRS)	
1	220 KV BALIMELA - U' SILERU	OPTCL / APSEB	10-03-18	22:45	LINE ANTITHEFT CHARGED FROM UPPER SILERU ON 17-04-18
2	400 KV IBEUL JHARSAGUDA D/C	IBEUL	29-04-18	17:30	TOWER COLLAPSE AT LOC 44,45
3	400KV NEW PURNEA-BIHARSARIFF(PG)-D/C	ENICL	10-08-18	10:28	TOWER COLLAPSE AT LOC 47/0
4	400 KV PATNA KISHANGANJ D/C	POWERGRID	01-09-2018	00:32	TOWER COLLAPSE AT LOC 129. PILING DAMAGED
5	400 KV KAHALGAON - BANKA II	POWERGRID	03-01-2019	08:54	NEW BUSBAR COMMISSIONING AT KAHALGAON
6	400 KV TALA- BINAGURI - II	POWERGRID	07-01-2019	18:53	ANTI THEFT CHARGED FROM BINAGURI END.
7	400 KV TALA BINAGURI - I	POWERGRID	03-01-2019	11:01	TO CONTROL OVER VOLTAGE AT TALA END
8	220 KV CHUKHA-BIRPARA-II	CHUKHA	12-11-2018	09:40	REPLACEMENT OF C&R PANELS AT CHUKHA END
9	765KV JHARSGUDA ANGUL IV	POWERGRID	01-01-2019	22:48	OPENED DUE TO HIGH VOLTAGE(CKT 1&2 ARE SINGLE CKT TOWER AND 3&4 D/C TOWER )
10	315 MVA ICT 3 AT JEERAT	WBSEB	30-12-2018	08:55	B PH MAIN TANK CAUGHT FIRE
11	220 KV NEW PURNEA BEGUSARAI I	BSPHCL	08-01-2019	12:02	LINE UNDER PATROLLING;B-N . 79 KA,66.6 KM FROM NEW PURNEA
12	220 KV NEW PURNEA BEGUSARAI II	BSPHCL	08-01-2019	15:26	SPURIOUS DT RECEIPT AT NEW PURNEA;PLCC CHECKING
13	400 KV NEW RANCHI CHANDWA I	POWERGRID	08-01-2019	22:32	SOTF AT 22:59 15.8 KM,13.8 KA ;B-N

(Reported as per Clause 5.2(e) of IEGC)

\*\* Transmission licensees whose line were out due to tower collapse/ bend, may please update the detail restoration plan and as on date work progress status in OCC.

Also Monthly progress report to be submitted to ERLDC/ERPC till restoration of the element.

**Members may update.**

## **PART E::ITEMS FOR INFORMATION**

The following agenda items are placed for information and necessary compliance:

### **Item No. E.1: Restricted Governor /Free Governor Mode Operation of generators in ER**

CERC vide their letter dated 05-06-2017 desired to know the present status of RGMO/FGMO response of all eligible thermal and hydro units. Accordingly ERLDC vide letter no.ERLDC/SS/FGMO/2017 dated 07-06-17 requested all concerned power stations and SLDCs to provide updated status of FGMO/ RGMO of units under their control.

The latest status of the RGMO/FGMO of ER generators is enclosed in **Annexure-E1**.

Generators may update.

### **Item No. E.2: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.**

The activity of the preparation of Crisis Management Plan for countering the cyber attacks and its implementation including the Mock Drills, audits etc. is being monitored by CEA regularly in line with crisis management plant of Ministry of Power. Power Utilities (including generation, transmission & distribution utilities) of eastern region are to furnish regularly the updated status to on the same to Chief Engineer, Distribution Planning & Development Division, CEA.

In 142<sup>nd</sup> OCC, ERLDC informed that, in line with Enquiry Committee Recommendation, cyber security audit is being conducted on regular basis for SCADA system installed at ERLDC and SLDC as well but cyber security audit for telecom infrastructure installed in Eastern Region is not being carried out.

OCC advised all the constituents to conduct the cyber security audit on telecom infrastructure installed in Eastern Region. It is further advised that compliance / mitigation of the points observed during the audit should also be completed for improvement of the telecom infrastructure in ER.

In 37<sup>th</sup> TCC meeting, it was decided that a workshop would be conducted by CEA at ERPC for further benefit of ER Constituents.

*In 144<sup>th</sup> OCC, ERLDC informed that they have already conducted a workshop with the help of NPTI, Durgapur on 21<sup>st</sup> March 2018.*

A workshop on cyber security was conducted by CEA at ERPC, Kolkata on 09-05-2018.

As suggested by CEA, a format would be circulated among ER constituents for furnishing the information of the their respective systems for discussion in OCC Meeting. The format is enclosed at **Annexure-E2**.

OCC advised all the constituents to submit the information to ERPC as per Annexure-E2.

### **Item No. E.3: Certification through BIS as per IS 18001:2007 to all generating/ transmission units.**

In 84<sup>th</sup> OCC meeting all constituents were requested to interact with BIS with intimation to ERPC and get certified as per CEA direction.

As per the information received from the constituents the following generators certified with IS 18001:

- All NTPC stations in Eastern Region
- Teesta, NHPC

- All OHPC generating units
- All CESC generating units
- All units of WBPDCCL
- DGPC units

**Item No. E.4: Status of Disturbance Recorder, Stand alone Event Logger and Time Synchronization equipment.**

The status of DR/EL and GPS as updated in previous OCCs is enclosed at **Annexure-E.4**.

Constituents are also requested to furnish their list of new DR/EL which are not included in the list.

*TeestaUrja Limited vide letter dated 8<sup>th</sup> September 2017 informed that Disturbance Recorder, Stand alone Event Logger and Time Synchronization equipments are available at Teesta III HEP.*

**Item No. E.5: Status of Emergency Restoration System (ERS Towers) for Eastern Region constituents**

CEA vide letter dated 21.07.2017 requested to send the status of state-wise availability of ERS towers and requirement of ERS towers.

*In 136<sup>th</sup> OCC, MS, ERPC informed that CEA vide letter dated 21.07.2017 has sought the latest status on ERS. Therefore, OCC advised all constituents to send the updated status to ERPC secretariat vide mail (mserpc-power@nic.in).*

Latest status is enclosed at **Annexure- E.5**.

In 138<sup>th</sup> OCC, WBSETCL informed that they are having total 10 ERS towers, 5 at Arambagh and 5 at Gokharno.

In 139<sup>th</sup> OCC, JUSNL informed that they are having eight 220/132kV ERS towers at following locations:

- Hatia – 3 nos
- Ranchi – 2 nos
- Dumka – 3 nos

**Item No. E.6: Status of 1<sup>st</sup> Third Party Protection Audit:**

The compliance status of 1<sup>st</sup> Third Party Protection Audit observations is as follows:

Name of Constituents	Total Observations	Complied	% of Compliance
<b>Powergrid</b>	54	46	85.19
<b>NTPC</b>	16	14	87.50
<b>NHPC</b>	1	1	100.00
<b>DVC</b>	40	26	65.00
<b>WB</b>	68	49	72.06
<b>Odisha</b>	59	42	71.19
<b>JUSNL</b>	34	25	73.53
<b>BSPTCL</b>	16	5	31.25
<b>IPP (GMR, Sterlite and MPL)</b>	5	5	100.00

*\* Pending observations of Powergrid are related to PLCC problems at other end.*

The substation wise status of compliance are available at ERPC website (Observations include PLCC rectification/activation which needs a comprehensive plan).

In 118<sup>th</sup> OCC, all the constituents were advised to comply the pending observations at the earliest. All the STUs informed that most of the observations are related to funding from PSDF. DPRs have been submitted to PSDF committee.

Members may comply.

#### **Item No. E.7: DATA FOR GEOSPATIAL ENERGY PORTAL OF NEETI AAYOG--CEA**

NITI Aayog is developing a user friendly GIS based Energy Map of India, which would provide true locations of all energy resources in India including power plants, coal and oil reserves, transmission lines etc.

CEA sought the information of name, voltage level, capacity, longitude and latitude of 33kV and 66 kV substations and lines.

The information may be shared with CEA vide email: [cedpd-cea@gov.in](mailto:cedpd-cea@gov.in).

Members may comply.

#### **Item No. E.8: Providing relevant data by Power Utilities I Stations in National Power Portal.**

CEA vide letter dated 26th June 2018 informed that National Power Portal (NPP) (URL: [npp.gov.in](http://npp.gov.in)), has been launched by Hon'ble Minister of Power on 14<sup>th</sup> November, 2017. NPP is modified and more user-friendly data portal than the existing Information Management System (IMS) in CEA. Reports prepared from NPP are of vital importance for Power Sector data analytics in order to frame policies, regulations, future road-map for Power Sector etc. at Central as well as at State level. Accordingly, all power utilities have been issued user ID and password, either organisation-wise or station-wise, based on their request, for providing their data on NPP.

**NPP has replaced IMS since 1<sup>st</sup> June, 2018. A Circular (which is available in Circular Section of CEA Website, i.e. [cea.nic.in](http://cea.nic.in)) has been issued by CEA to all power utilities/stations on 14.06.2018 for providing their data online in NPP only.**

In this regard, letters/emails have been issued to Utilities to provide their data online through NPP. A letter dated 20.06.2018 was also issued to all SLDC, requesting them to direct the power utilities I stations under their purview for providing data on NPP.

Any issue/problem faced by utilities may kindly be communicated to [itcea@nic.in](mailto:itcea@nic.in), [npp.support@gov.in](mailto:npp.support@gov.in), [ceopm-cea@gov.in](mailto:ceopm-cea@gov.in) and if required, IT Division, CEA may be contacted on 011-26732368 or 011-26732303

CEA requested to pursue the power utilities / stations under their purview for providing data on NPP. Further, a workshop/presentation may be arranged if required in each region in which IT Division, CEA will provide a brief demonstration regarding data entering process and report generation into NPP.

#### **Item No. E.9: Checklist for submission of updated data for Protection Database**

The network data in Protection Database needs to be updated on regular basis on account of commissioning of new elements in the CTU as well as STU networks. Accordingly, a checklist has been prepared which is enclosed in **Annexure-E9**.

All the constituents are requested to submit the checklist on monthly bases in every OCC/PCC meetings.

In 139<sup>th</sup> OCC, all the constituents were advised to submit the data to ERPC vide mail (mserpc-power@nic.in) as per the checklist for last three months.

*OCC advised all the constituents to submit the data to ERPC vide mail (mserpc-power@nic.in) as per the checklist for last three months.*

#### **Item No. E.10: Commissioning of new transmission elements in Eastern Region**

The details of new units/transmission elements commissioned in the month of December- 2018 & January-2019 (up to 11-01-2019) based on the inputs received from beneficiaries

<b>Monthly commissioning List of Tansmission element and generators: December 2018 &amp; January 2019 (upto 11-01-18)</b>					
<b>SL NO</b>	<b>Element Name</b>	<b>Owner</b>	<b>Charging Date</b>	<b>Charging Time</b>	<b>Remarks</b>
1	765Kv Angul-Jharsuguda III	PGCIL	28-12-2018	20:54	Along with 240MVAR L/R at both end.
2	765Kv Angul-Jharsuguda IV	PGCIL	30-12-2018	23:58	Along with 240MVAR L/R at both end.
3	50MVAR L/R of 400kV Sasaram-B'sariff-I at B'Sariff (non-switchable to switchable)	PGCIL	12-12-2018	13:24	
4	220Kv New Purnea – Begusarai-I	PGCIL	19-12-2018	16:13	
5	GT#4 (270X3 MVA) at IB-St#2 (OPGC)	OPGC	26-12-2018	17:57	
6	220kV Keonjhar(PG)-Keonjhar(OPTCL)-I	OPTCL	01-01-2019	19:15	
7	BRBCL-Nabinagar U#3	BRBCL	01-01-2019	02:43	Test Sync
8	1500MVA ICT 4 (765/400kV) at Gaya	PGCIL	03-01-2019	17:32	
9	400kV Teesta III-Kishanganj	TPTL	04-01-2019	17:07	

#### **Item No. E.11: UFR operation during the month of December'18**

System frequency touched a maximum of 50.25 Hz at 06:01Hrs of 02/12/18 & 06:03hrs of 16-12-18 and a minimum of 49.67 Hz at 09:17 Hrs of 16/12/18 & 07:57hrs 30/12/18. Hence, no report of operation of UFR has been received from any of the constituents.

#### **Item No. E.12: Non-compliance of directions issued by SLDC**

Vide clause no 5.5.1.(c)(h) of IEGC, non-compliance of SLDC directions by SEB/Distribution licenses/bulk consumers to curtail overdrawal are to be reported to ERLDC for incorporating the same in weekly report to be prepared and published by ERLDC.

All SLDCs are to inform ERLDC the instances of non-compliance of SLDC directions by SEB/Distribution licenses/bulk consumers to curtail overdrawal, within two days after the day of operation.

No report from any constituent has yet received. Hence, ERLDC would be considering 'Nil' report for all constituents for December 18.

#### **Item No. E.13: Grid incidences during the month of December, 2018**

<b>Sr No</b>	<b>GD/ GI</b>	<b>Date</b>	<b>Time</b>	<b>S/S involved</b>	<b>Summary</b>	<b>Load loss (MW)</b>	<b>Gen loss (MW)</b>
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1	GD-I	14-11-2018	16:31	Dikchu	At 16:30 hrs, 400 kV Teesta III – Dikchu S/C tripped from Teesta III end along with 400/132 kV ICT at Dikchu resulting tripping of all running units at Dikchu due to loss of evacuation path. As per DR received, ICT tripped in E/F (132 kV side current: IA = 387 A, IB = 316 A, IC = 525 A, IN = 171 A). At the same time, 400 kV Teesta III – Dikchu S/C tripped from Teesta III end due to operation of cable directional O/C protection (IB = 1.695 kA, IN = 1.6 kA).	0	90
2	GI-II	24-11-2018	02:05	Kahalgaon	At 02:05 Hrs, 400 KV Bus#1 tripped due to operation of Breaker Failure Relay (BFR) of Main Bay of GT#1, leading to outage of Unit#1 (210 MW). At the same time, U#7 also tripped as it was synchronized through bus#1 only.	0	700
3	GD-I	25-11-2018	16:31	BRBCL	At 16:31 hrs bus II at BRBCL tripped on bus bar protection due to mal-operation of bus bar differential relay. At the same time tie CB between ICT I & GT I tripped on operation of master trip signal due to logic error from Bus bar relay of Bus II, which again led to erroneous LBB retrip signal to main CB no. 401 connected to GT I leading to tripping of unit 1 generating 230 MW and ICT I. At same time, main bay 400 kV Sasaram BRBCL - I at BRBCL tripped on logic error and DT was sent to Sasaram end.	0	230
4	GI-II	27-11-2018	13:26	Sasaram	On 27th Nov 2018, at 13:26 Hrs 400 kV Sasaram-Allahabad & 400 kV Sasaram-Varanasi tripped due to Y-B phase fault. At the same time HVDC Sasaram also got blocked due to operation of inter-zone protection of Northern converter transformer as reported by ERLDC.	0	0
5	GD-I	29-11-2018	07:23	TTPS	At 07:23 Hrs, 220 KV Bus II tripped alongwith 2*110 MW U#5,U#6, 160 MVA 220/132 KV ICT I, ICT II, 220 KV TTPS-TSTPP S/C, 220 KV TTPS-Joda D/C, 220 KV TTPS-Rengali S/C, 220 KV TTPS-Meramundali II.	0	200

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**Eastern Regional Power Committee, Kolkata**

**Minutes of Special Meeting on Islanding Scheme of IB-TPS held at ERPC, Kolkata on**

**12<sup>th</sup> December 2018 at 11:00hrs**

List of participants is enclosed at **Annexure-A**.

Member Secretary, ERPC chaired the meeting. He welcomed participants from OPTCL, OPGC, Bakreswar TPS, Bandel TPS, ERLDC and ERPC. He informed that in line with discussion of 73<sup>rd</sup> PCC Meeting, this special meeting on Islanding Scheme of IB-TPS has been called.

At the start of the meeting, OPTCL and OPGC explained the draft islanding scheme with a detailed presentation. The presentation is enclosed at **Annexure-I**. OPTCL and OPGC had presented two cases for designing the islanding scheme as follows:

- Two units (2 X 210 MW) of IB TPS with 239 MW load
- One unit (210 MW) of IBTPS with the selected loads of 149 MW

Members from Bandel and Bakreswar opined that the difference in generation and load is more in case of islanding Two units (2 X 210 MW) of IB TPS with 239 MW load. The units are to be backing down at a higher rate in order to balance the generation with load. They suggested OPGC to interact with OEM regarding ramping down rate of the units. OPGC agreed to interact with M/s BHEL, OEM to assess the ramping down rate of the units.

OPGC also informed that the unit tripping of IB TPS generators is at 47.5 Hz with 1 sec delay and at 52 Hz with 2 sec delay.

Members discussed both the cases in details and decided to consider the islanding scheme with one unit (210 MW) of IBTPS with the selected loads of 149 MW in view of the following merits:

- Load-Generation balance at the time islanding can be easily achievable
- Traction load at Jharsuguda can be excluded from the islanding scheme
- 149 MW radial loads can be easily segregated at 220/132kV Budhipadar S/s and transferring the trip command to remote substations is not required except 132kV Kalunga S/s to trip 132kV Kalunga-Tarkera line.
- Islanding scheme can survive even with outage of one 220/132kV ATR at 220kV Budhipadar S/s

After detailed discussion the following were decided:

- The alarm for islanding scheme shall be initiated at 49.2 Hz at both Budhipadar and IB TPS to alert the operators
- Islanding of one unit (210 MW) of IBTPS with the selected loads of 149 MW connected through 132 kV level at Budhipadar substation will be initiated at 47.8 Hz of grid frequency with 250msec time delay.
- The islanding relay Micom P341 at Budhipadar will give trip command to all 220KV feeders connected to Bus-I and Bus II along with Bus coupler except Auto transformer- I & II and selected islanding IB TPS ckts either (IB -1 & 3) or (IB-2 & 4).

- Give trip command to circuit breakers of 132kV Budhipadar-Lapanga S/c line, 132kV Budhipadar-Jharsuguda D/C line and 132kV Budhipadar-Rajgangpur S/C lines at Budhipadar end.
- It will send carrier command to both Kalunga and Tarkera end to trip 132kV Kalunga-Tarkera S/c line from both the ends to make radial load at Kalunga.
- It will send carrier signal to IB TPS to start ramping and adjust IB TPS (one unit) generation to match the load.

**OPTCL and OPGC were advised to present final islanding scheme in the OCC Meeting of January 2019.**

Regarding implementation, OPTCL and OPGC informed the following:

- The islanding relay Micom P341 is already installed at bus coupler panel of 220kV Budhipadar S/s
- OPGW is available for 220 kV lines
- Installation of OPGW is in progress for 132kV lines
- Logic for generation control of islanding after receiving the command from Budhipadar is to be implemented at IB TPS

Meeting ended with vote of thanks to the chair.

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## ERPC:KOLKATA

**Proposed Maintenance Schedule of Thermal Generating Units of ER during 2019-20**  
**(as finalised in LGBR meeting dated 18.12.2018)**

System	Station	Unit	Capacity (MW)	Period		No. of Days	Reason
				From	To		
Jharkhand	TVNL, Tenughat	1	210	15.07.19	10.08.19	27	Annual Overhauling
		2	210	12.08.19	08.09.19	28	Annual Overhauling
DVC	MTPS	1	210	11.12.19	15.01.20	36	COH (Blr,Turb-RLA,Gen.)
		2	210	29.10.19	03.12.19	36	COH (Blr-RLA,Turb-RLA,Gen.)
		3	210	25.06.19	30.07.19	36	COH (Blr-RLA,Turb-RLA,Gen.)
		7	500	14.05.19	18.06.19	36	COH (Blr,Turb,Gen.)
		8	250	22.02.20	28.03.20	36	COH (Blr,Turb,Gen.)
	DSTPS	1	500	16.08.19	20.09.19	36	COH (Blr,Turb,Gen.)
	KTPS	1	500	16.01.20	19.02.20	35	COH (Blr,Turb,Gen.)
ODISHA	TTPS	1	60	01.02.20	15.02.20	15	AOH
		2	60	25.06.19	09.07.19	15	AOH
		3	60	20.07.19	03.08.19	15	AOH
		4	60	13.08.19	27.08.19	15	AOH
		5	110	09.09.19	28.09.19	20	AOH
		6	110	09.10.19	28.10.19	20	AOH
	IB TPS	1	210	11.07.19	31.07.19	21	AOH
		2	210	06.06.19	30.06.19	25	AOH
		3	660	01.12.19	25.12.19	25	AOH
		4	660				NO MAINTENANCE
WBPDC	Kolaghat TPS	1	210	07.06.18	30.06.19	91	R&M
		2	210	01.08.19	31.03.20	122	R&M
		4	210	01.02.20	15.03.20	44	Capital Overhauling
		5	210	24.11.19	30.11.19	7	Boiler License renewal
		6	210	01.11.19	28.11.19	28	Boiler Overhauling
	Bakreswar TPS	1	210	16.11.19	05.12.19	20	Boiler Overhauling
		2	210	21.08.19	27.08.19	7	Boiler License renewal
		3	210	01.11.19	07.11.19	7	Boiler License renewal
		4	210	01.07.19	07.07.19	7	Boiler License renewal
		4	210	01.01.20	07.02.20	38	COH
		5	210	24.06.19	30.06.19	7	Boiler License renewal
	Bandel TPS	1	60	16.06.19	14.08.19	60	Capital Overhauling
		2	60	25.12.19	31.12.19	15	Boiler License renewal
		5	210	12.11.19	18.11.19	7	Boiler License renewal
	Santalidih TPS	5	250	01.11.19	05.12.19	35	Capital Overhauling
		6	250	15.09.19	21.09.19	7	Boiler License renewal
	Sagarighi TPS	1	300	12.07.19	15.08.19	35	Capital Overhauling
		2	300	01.07.19	07.07.19	7	Boiler License renewal
		3	500	01.05.19	07.05.19	7	Boiler License renewal
		4	500	20.12.19	26.12.19	7	Boiler License renewal
CESC	BUDGE-BUDGE	1	250	10.11.19	14.11.19	4	Not Specified
		2	250	16.11.19	30.11.19	15	Not Specified
		3	250	02.12.19	19.12.19	18	Not Specified
	TITAGARH	1	60	02.01.20	05.01.20	4	Not Specified
		2	60	22.02.20	07.03.20	15	Not Specified
		3	60	12.12.19	26.12.19	15	Not Specified
		4	60	27.12.19	30.12.2019	4	Not Specified
	SOUTHERN	1	67.5	01.01.20	15.01.20	15	Not Specified
		2	67.5	17.01.20	20.01.20	4	Not Specified
							Not Specified
HEL	HALDIA	1	300	21.12.19	03.02.20	45	AOH
		2	300				NO MAINTENANCE
DPL	DPPS	7	300	17.08.19	31.08.19	15	Boiler License renewal & Maintenance of Boiler
		8	250	23.12.19	31.01.20	40	BTG OH
NTPC	FSTPP	1	200	01.09.19	25.09.19	25	AOH
		3	200	20.07.19	23.08.19	35	AOH
		4	500	11.03.20	05.04.20	26	AOH
		5	500	11.03.19	05.04.19	26	AOH
		6	500	01.11.19	05.12.19	35	AOH
	KhSTPP	1	210	27.08.19	30.09.19	35	AOH
		2	210	10.11.19	09.12.19	30	AOH
		4	210	25.07.19	23.08.19	30	AOH
		7	500	06.04.19	30.04.19	25	AOH
	Barh	4	660	01.11.19	04.01.20	65	Boiler Modification
		5	660	15.01.20	19.03.20	65	AOH
	TSTPS	1	500	01.12.19	04.01.20	35	AOH
		3	500	03.09.19	27.09.19	25	AOH
		4	500	21.06.19	15.07.19	25	AOH
	KBUNL	3	195	15.11.19	20.12.19	35	LP rotor inspection,Boiler OH & Com.Modifi/NOX
	MTPS	4	195	01.03.19	04.04.19	35	LP rotor inspection,Boiler OH
BRBCL	Nabinagar TPP	1	250	26.07.19	19.08.19	25	LP turbine inspection,Rotor threading,Generator inspection.
		2	250	16.04.19	30.04.19	15	Boiler and TG PG Test,Boiler License Renewal
		3	250				No planned maintenance
							Turbine Overhauling
IPP	GMR	1	350	01.06.19	05.07.19	35	No planned maintenance
		2	350				No planned maintenance
		3	350				No planned maintenance
	JITPL	1	600	01.04.19	05.05.19		AOH
		2	600				No planned maintenance
	MPL	1	525	01.11.19	14.11.19	14	AOH
		2	525	06.04.19	03.05.19	28	AOH
	APNRL	1	270				No planned maintenance
		2	270				No planned maintenance

## Notes:

1) Considering the Secondary School Exam., on-set of summer load and expected Lok Sabha election, NTPC was requested to defer/prepone their S/D proposal of FSTPS U#4 & 5 to after festival month / to winter months as convenient to NTPC. But NTPC did not agree to that and they opined that due to water sharing agreement with Bangladesh in the month of March & April, water availability would be less and they would be compelled to take shut down the units during that period. In such a situation NTPC would be allowed to take opportunity shut down during that period. However, Constituents did not agree to that.

2) Also NTPC did not agree the shut down programme of Barh STPS unit#4&5(660 MW each) due to mobilization/ tie up with agency for major boiler modification. but the LGBR Committee decided the above S/D as per Grid load pattern/ requirement.



पूर्वी क्षेत्र-I मुख्यालय / Eastern Region-I Headquarters

To,

The Member Secretary,  
Eastern Regional Power Committee,  
14, Golf Club Road, Kolkata-700 033

**Subject – Revised Overhauling Schedule proposal of NTPC ER-I stations for consideration in 153<sup>rd</sup> OCC meeting**

Dear Sir,

In view of changing scenario in 2019-24 tariff period, NTPC is committed to support customer demand in a better way. For enhanced reliability of the Units, following planned maintenance is proposed for approval in 153<sup>rd</sup> OCC meeting and making it a part of LGBR for 2019-20:

Station	Unit	As per draft LGBR for 2019-20		Proposed Revised schedule		Scope	Remarks
		Start date	Dur. days	Start date	Dur. days		
FSTPS	1	01.09.19	25	11.10.19	35	Boiler+DDCMIS	Shifted after Durga Puja.
	3	20.07.19	35	20.07.19	45	Boiler+Turbine+Gen	Same start day.
	4	11.03.20	26	11.03.20	30	Boiler	Not feasible in 26 days. Earlier proposal was for 30 days. NTPC is perusing with West Bengal.
	5	11.03.19	26	01.04.19	30	Boiler	
	6	01.11.19	35	01.06.19	45	Boiler+Turbine+Gen	Overhauling long due, it will not be safe to run upto Nov'19.
KhSTPS	1	27.08.19	35	27.08.19	45	Blr.+Turb.+ESP R&M	Same start day.
	2	10.11.19	30	10.11.19	30	Boiler+Gen+ESP R&M	Same start day.
	4	25.07.19	30	25.07.19	30	Boiler+Gen+ESP R&M	Same start day.
	7	06.04.19	25	06.04.19	30	Boiler	Same start day.
Barh	4	01.11.19	65	01.03.19	80	Boiler modification	Boiler modification plan is tied up with OEM. NTPC is perusing with Bihar.
	5	15.01.20	65	01.03.19	80	Boiler modification	

The above proposal may please be put up as agenda for 153<sup>rd</sup> OCC meeting.

With warm regards,

H. P. Joshi

GM(OS)

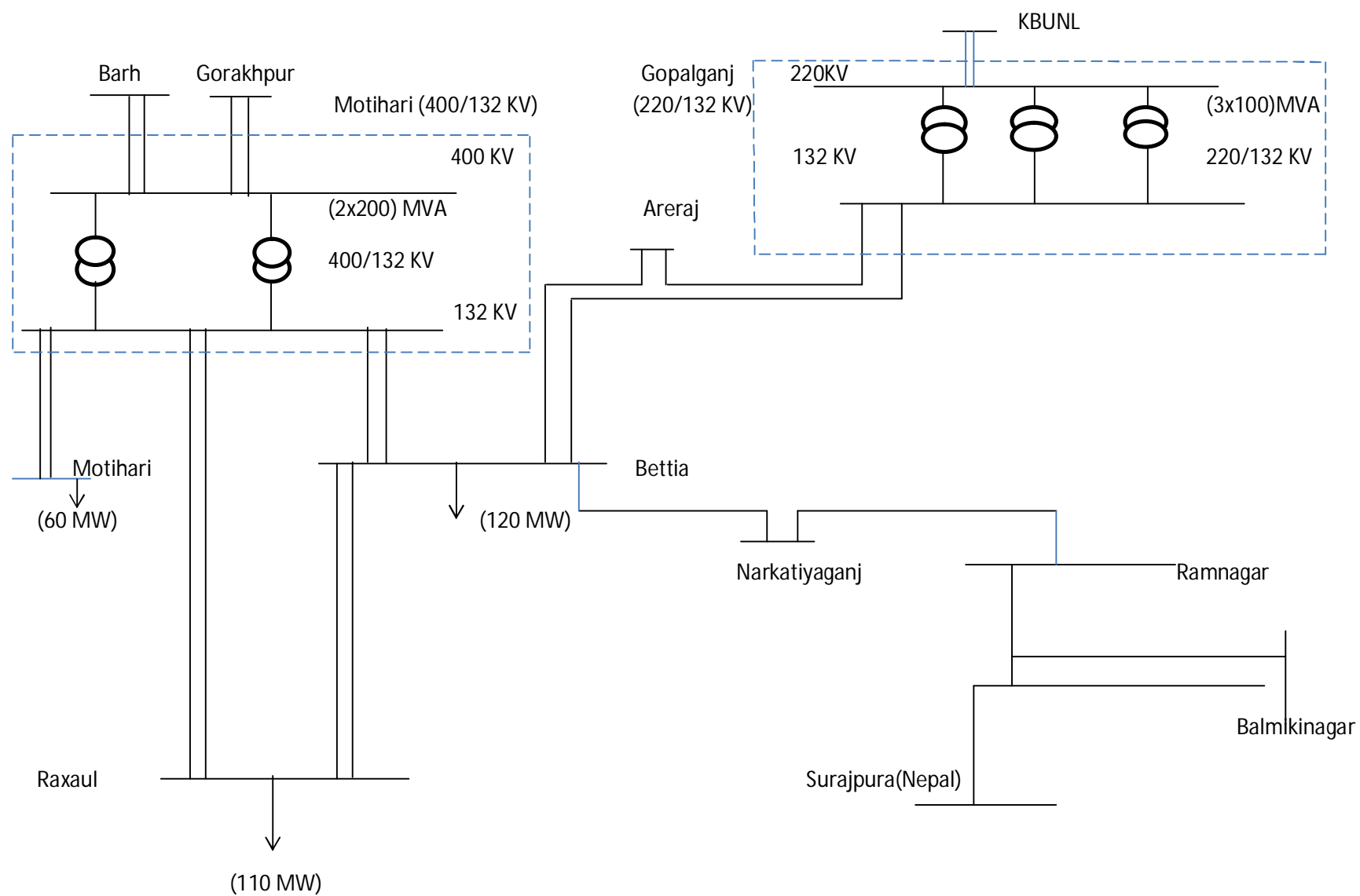
ER-I HQ, NTPC

पूर्वी क्षेत्र-I मुख्यालय, लोकनायक जयप्रकाश भवन, द्वितीय मंजिल, डाक बंगला चौक, फ्रेजर रोड, पटना-800 001  
Eastern Region - I Headquarters Loknayak Jalprakash Bhawan, 2nd Floor, Dak Bungalow Chowk, Fraser Road, Patna-800 001  
फोन / Telephone No. : 0612-2232127, 223130, फैक्स / Fax : 0612-2230035 वेबसाइट / Website : www.ntpc.co.in  
पंजीकृत कार्यालय : एनटीपीसी भवन, स्कोप कॉम्प्लेक्स, 7 इंस्टीट्यूशनल एरिया, लोदी रोड, नई दिल्ली-110003  
Registered Office : NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110 003  
Corporate Identification Number : L40101DL1975GOI007966, Website : www.ntpc.co.in



ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE ENERGY REQUIREMENT- vs- AVAILABILITY IN EASTERN REGION FOR THE PERIOD FROM APRIL-2019 TO MARCH-2020													
(ALL FIGURES IN MU & NET)													
SL.NO	PARTICULARS	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	TOTAL 2019-20
1	BIHAR												
i)	NET ENERGY REQUIREMENT	2600	2800	2880	2950	3050	2985	2850	2350	2500	2810	2380	33015
ii)	NET ENERGY AVAILABILITY- Own	207	171	175	251	252	244	245	270	278	240	235	2808
iii)	Central Sector+Bi-Lateral	2067	2239	2236	2414	2359	2265	2368	1740	1713	1988	1749	25108
iv)	SURPLUS(+)/DEFICIT(-)	-326	-390	-469	-285	-440	-476	-238	-340	-509	-582	-396	-5099
2	JHARKHAND												
i)	NET ENERGY REQUIREMENT	810	825	820	825	810	800	810	800	810	820	770	9730
ii)	NET ENERGY AVAILABILITY- Own Source	237	237	213	214	200	259	254	240	235	236	231	2777
iii)	Central Sector+KBUNL	502	542	553	601	594	572	610	467	488	527	474	6450
iv)	SURPLUS(+)/DEFICIT(-)	-71	-45	-54	-9	-16	31	53	-93	-87	-58	-65	-503
3	DVC												
i)	NET ENERGY REQUIREMENT (OWN)	1880	1960	1915	1970	1890	1785	1875	1870	1885	1890	1710	22520
ii)	NET ENERGY AVAILABILITY- OWN SOURCE	3305	3254	3144	3347	3329	3175	3437	3213	3344	3131	2896	38873
iii)	Central Sector+MPL+KBUNL	263	316	333	383	361	374	351	267	269	268	242	3697
iv)	Bi- lateral export by DVC	1206	1318	1246	1223	1053	1056	923	1041	1253	1243	1227	14102
v)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	482	292	317	537	747	707	991	570	475	266	200	5948
4	ODISHA												
i)	NET ENERGY REQUIREMENT	2660	2944.8	2905	2684.68	3225.2	2989.6	3285.3	2834.6	2529.6	2705	2500	34174
ii)	NET ENERGY AVAILABILITY- OWN+IPP+CPP	2371	2498	2047	2309	2608	2447	2305	2213	1740	2188	2057	27078
iii)	Central Sector+KBUNL	987	1054	1033	1099	1091	1027	1331	1116	1093	1212	1121	13374
iv)	SURPLUS(+)/DEFICIT(-)	698	608	175	723	474	485	351	494	304	695	677	6279
5	WEST BENGAL												
5.1	WBSEDCL												
i)	WBSEDCL'S OWN REQUIREMENT	3630	3678	3837	3992	4102	3896	3481	2744	2704	2940	2963	41840
ii)	SUPPLY TO IPCL	61	64	60	62	62	60	62	58	59	59	57	726
iii)	TOTAL WBSEDCL's Energy Requirement (incl.B'Desh+Sikkim+IPCL)	3839	3895	4048	4210	4320	4107	3699	2953	2919	3003	3023	43955
iv)	NET ENERGY AVAILABILITY- OWN SOURCE	2460	2477	2412	2497	2600	2467	2787	2173	2381	2653	2466	30119
v)	Contribution from DPL	110	111	81	78	-9	67	95	114	23	23	79	882
vi)	Central Sector+Bi-lateral+IPP&CPP+TLDP	1300	1449	1559	1791	1773	1590	1635	1233	1269	1297	1216	17411
vii)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	32	142	4	155	43	17	818	568	753	970	738	4457
viii)	EXPORT (TO B'DESH & SIKKIM)	148	153	151	156	156	151	156	151	156	4	3	1389
5.2	DPL												
i)	NET ENERGY REQUIREMENT	200	210	210	210	212	205	200	190	195	195	190	2422
ii)	NET ENERGY AVAILABILITY	310	321	291	288	203	272	295	304	218	218	269	3304
iii)	SURPLUS(+)/DEFICIT(-)	110	111	81	78	-9	67	95	114	23	23	79	882
5.3	CESC												
i)	NET ENERGY REQUIREMENT	980	1103	1105	1070	1060	1080	985	775	713	703	720	11266
ii)	NET ENERGY AVAILABILITY - Own Source	498	536	525	510	508	507	499	364	363	452	420	5665
iii)	FROM OTHER SOURCE (INCL. IPP/CPP-29-30 MU/M)	115	176	197	172	166	194	118	100	92	96	50	125
iv)	FROM HEL	367	391	383	388	386	379	368	311	258	155	250	4000
v)	TOTAL AVAILABILITY OF CESC	980	1103	1105	1070	1060	1080	985	775	713	703	720	11266
vi)	SURPLUS(+)/DEFICIT(-)	0	0	0	0	0	0	0	0	0	0	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)												
i)	NET ENERGY REQUIREMENT	4871	5055	5212	5334	5436	5241	4728	3767	3671	3897	3930	56254
ii)	NET POWER AVAILABILITY- Own Source	3269	3334	3228	3295	3311	3246	3581	2841	2961	3323	3155	39087
iii)	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	1782	2016	2139	2351	2325	2163	2121	1644	1619	1548	1516	23012
iv)	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP.	180	295	155	311	199	168	974	719	909	974	741	5846
v)	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	32	142	4	155	43	17	818	568	753	970	738	4457
7	SIKKIM												
i)	NET ENERGY REQUIREMENT	50	45	45	46	44	44	48	61	61	62	63	624
ii)	NET POWER AVAILABILITY- Own Source	3	3	3	3	3	3	3	1	1	1	1	27
iii)	Central Sector+KBUNL	83	99	107	118	114	113	112	82	70	75	68	1119
iv)	SURPLUS(+)/DEFICIT(-)	36	57	64	74	73	72	66	22	11	15	6	522
8	EASTERN REGION												
i)	NET ENERGY REQUIREMENT OF ER	12870	13630	13777	13810	14456	13844	13596	11682	11456	12184	11353	156316
ii)	BILATERAL EXPORT BY DVC	1206	1318	1246	1223	1053	1056	923	1041	1253	1243	1227	14102
iii)	EXPORT BY WBSEDCL	148	153	151	156	156	151	156	151	156	4	3	1389
iv)	NET TOTAL ENERGY AVAILABILITY OF ER (INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)	15076	15765	15212	16384	16547	15888	16717	14095	13812	14737	13743	183412
v)	ENERGY SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv - i - ii - iii)	851	664	38	1195	882	836	2042	1222	947	1306	1161	11605

## Annexure-B12





पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



प्लॉट नं.- 4, युनिट - 41, निलाद्री विहार, चन्द्रसेखरपुर - 751021

दुरभाष : 0674 - 2720754

Plot. No. 4, Unit - 41, Niladri Vihar, Chandrasekharpur,  
Bhubaneswar-751021, Tel: 0674-2720754

Ref: ODP/BB/AM/TLM

12517

Date: 24<sup>th</sup> Dec 2018

To

The Member Secretary

Eastern Regional Power Committee

14, Golf Club Road

Tollygunge, Kolkata-700033

Sub: Intimation regarding replacement of Porcelain insulator by Long Rod Polymer Insulator in transmission line of POWERGRID in Odisha

Dear Sir,

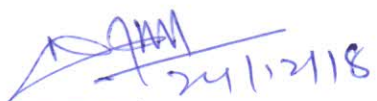
During Insulator de-capping, Conductor is grounded and if such incident occurs in crossing span of other transmission line/Railway line/Road/River, consequential effects are much higher. To minimize consequential effects in case of de-Capping the following lines will be provided with Composite Long Road Polymer Insulator for which no incident of de-capping has been reported. Few insulator strings will also be changed in these lines where insulator strings found defective during PID test and also de-capping of porcelain insulator incidents occurred in the past.

The list of the lines for which Long Rod polymer insulators has already been procured and contract has been awarded for replacement work is mentioned as below:

SI NO	Name of the line	Remark
1	400KV Rourkela-Talcher ckt-1&2	Material has already been procured and contract has been awarded for Installation of Long Rod Polymer insulators. Insulators will be replaced from Jan 2019 to May 2019 in stages after taking due shutdown approval of the lines in OCC.
2	400KV Bolangir-Angul	
3	400KV Jeypore-Bolangir	
4	400KV Jeypore-Indravati	
5	400KV Jeypore-Gazuwaka ckt-1 & 2	

This is for your kind information.

Regards.

  
(R.P. RATH)

Chief General Manager(AM)  
POWERGRID, Odisha Projects

CC: For kind information

1.ED, Odisha Projects

2.ED, ERLDC, POSOCO, Kolkata

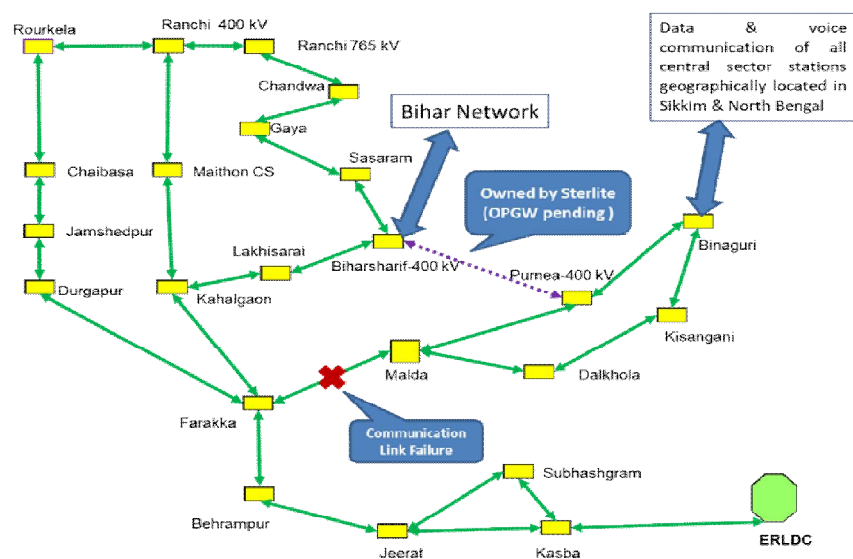


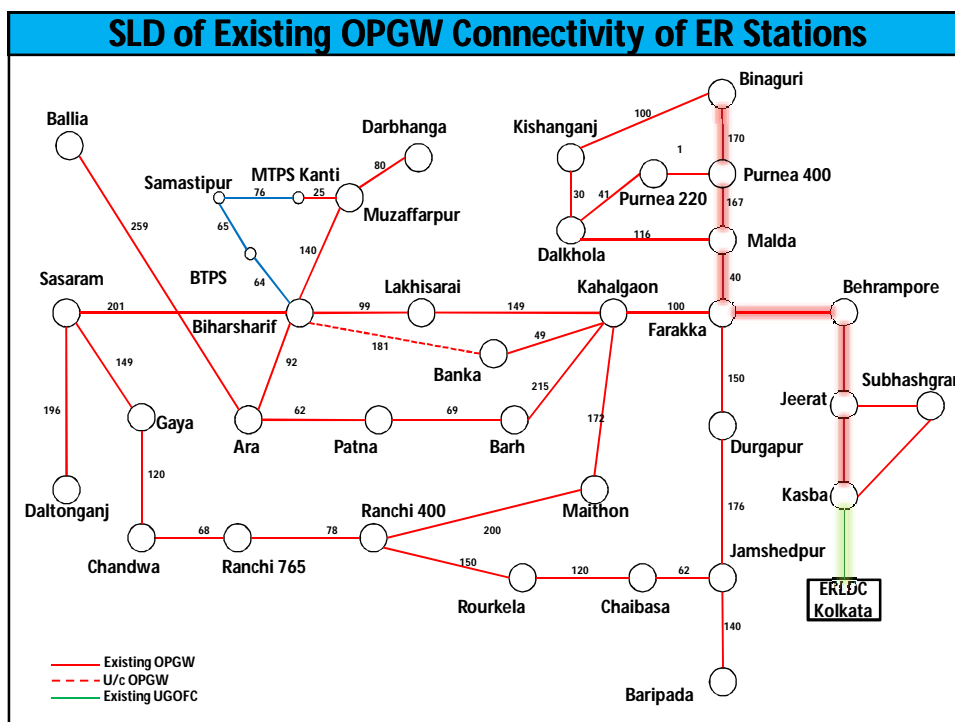
# "Alternate Route for Malda- Farakka OPGW Link"

(OCC Agenda tem No. C.9 iii.)

Presentation by-  
**POWERGRID/ERTS-I**

## Criticality of Malda- Farakka OPGW Connectivity



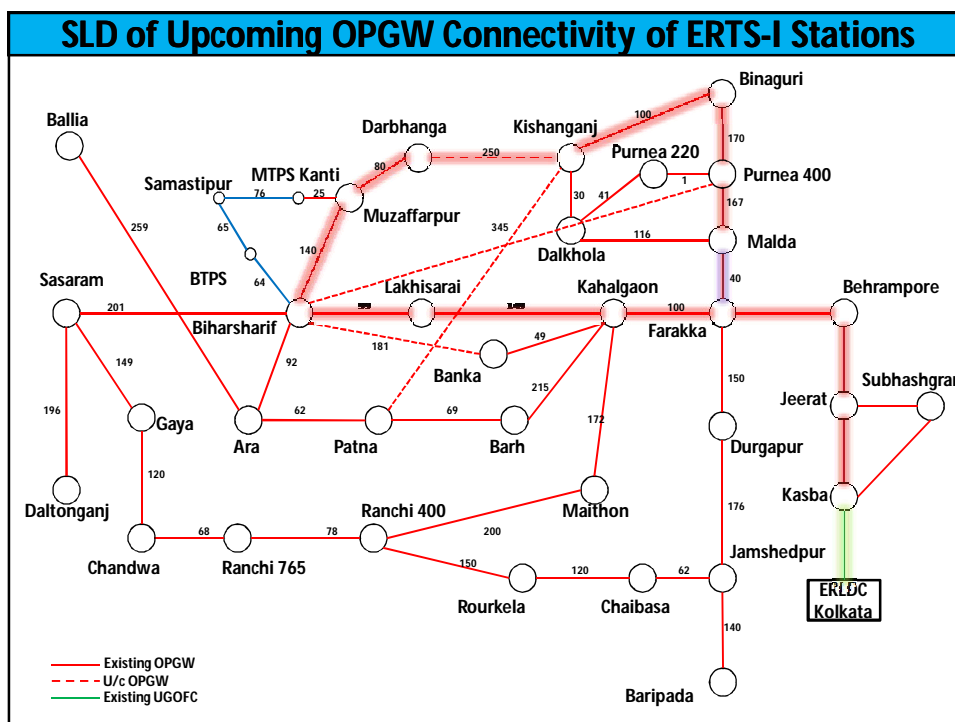


### Existing OPGW Connectivity of ER : Issue of alternate TRANS-GANGA OPGW Connectivity

- At present, there are four (04) trans-Ganga T/L in ER:
  - a. 400 kV D/C Malda- Farakka T/L (PG).
  - b. 400 kV D/C Muzaffarpur- Bihar Sharif T/L (PG).
  - c. 400 kV D/C Purnea- Bihar Sharif T/L (ENICL).
  - d. 400 kV D/C Kishanganj- Patna T/L (PG).
- Out of the above, only Malda- Farakka & Muzaffarpur- Bihar Sharif has an existing OPGW connectivity.
- Purnea- Bihar Sharif T/L of ENICL is having OPGW installed on it, however the same is yet to be terminated at both Bihar Sharif & Purnea end by ENICL.

### Existing OPGW Connectivity of ER : Issue of alternate TRANS-GANGA OPGW Connectivity (contd..)

- Presently Purnea- Biharsharif T/L (ENICL) is under breakdown. However, the restoration of said T/L will not enable provisioning of alternate route to Malda- Farakka, as the termination of OPGW at both Biharsharif & Purnea end is yet to be done by ENICL.
- Kishanganj- Patna T/L of (PG) is not having OPGW as of now, however, OPGW is proposed to be implemented in the said line under Fiber Expansion Package (Additional Requirement) with target completion by Oct'20.
- The issue of alternate route for Malda- Farakka T/L was raised by ERLDC in 20th SCADA O&M Meeting held on 30th Oct'18 and subsequent TCC/ERPC held on 16-17th Nov'18.



### **Existing OPGW Connectivity of ER : Issue of alternate TRANS-GANGA OPGW Connectivity (contd..)**

- 400 kV D/C Kishenganj- Darbhanga T/L is being constructed by M/s KPTL between Kishenganj (PG) & Darbhanga (DMTCL). The said line is having provision for OPGW connectivity and the said T/L is likely to be commissioned by KPTL by Jan'19.
- Further, there is an existing OPGW connectivity over 400 kV D/C Darbhanga- Muzaffarpur T/L of DMTCL, which may facilitate connectivity of Kishenganj to Muzaffarpur (PG), through Darbhanga (DMTCL), thus providing alternate path for Malda- Farakka.

### **Existing OPGW Connectivity of ER : Alternate TRANS-GANGA OPGW Connectivity (Contd..)**

#### **Provisioning of alternate path for Malda- Farakka OPGW link:**

- OPGW connectivity between Kishenganj (PG) and Darbhanga (DMTCL) shall be provisioned by M/s KPTL.
- Six (06) nos. Fibers between the two sub-stations shall be spared by KPTL for ULDC Communication purpose.
- Six (06) nos. Fibers shall be spared by M/s DMTCL between Darbhanga (DMTCL) & Muzaffarpur (PG) for ULDC Communication purpose.
- POWERGRID shall Install/ Upgrade the Communication Equipments at Kishenganj, Darbhanga (DMPTCL) and Muzaffarpur for commissioning the back-up path.

### Existing OPGW Connectivity of ER : Alternate TRANS-GANGA OPGW Connectivity

#### Provisioning of alternate path for Malda- Farakka OPGW link:

- The commissioning of above communication link between Kishenganj (PG) and Muzaffarpur (PG) via Darbhanga (DMTCL) thus shall provide alternate path for Malda- Farakka through Kishenganj- Darbhanga- Muzaffarpur- Biharsharif- Kahalgaon- Farakka.
- Further, the commissioning of Patna- Kishenganj OPGW link shall facilitate second alternate path for Malda- Farakka OPGW connectivity.

### Existing OPGW Connectivity of ER : Alternate TRANS-GANGA OPGW Connectivity

- As evident from above, there are two possible alternate OPGW route for Malda- Farakka OPGW link :
  - a) Kishenganj- Darbhanga- Muzaffarpur:** Likely provisioning time- Four (04) months.
  - b) Kishenganj- Patna:** Completion time- Oct'2020 (as per LOA Schedule).
- For provisioning of Route "a", Infrastructure support such as Power Supply (48 V DC), Space for Communication Equipment Erection, PTW etc. shall be in scope of respective Constituent Utility.

**Existing OPGW Connectivity of ER : Alternate TRANS-GANGA OPGW Connectivity**

- Alternately, POWERGRID may arrange one bandwidth connectivity between Binaguri/ Kishenganj and Farakka through POWERTEL/ 3<sup>rd</sup> Party Bandwidth Leasing, bypassing Malda-Farakka OPGW link.
- The tentative completion time for the same shall be Three (03) months i.e. March 2019.

**Annexure-D.1**

**Anticipated Power Supply Position for the month of  
Feb-19**

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	<b>BIHAR</b>		
	i) NET MAX DEMAND	3900	2246
	ii) NET POWER AVAILABILITY- Own Source (including bilateral)	632	307
	- Central Sector	3179	1609
	iii) SURPLUS(+)/DEFICIT(-)	-89	-330
2	<b>JHARKHAND</b>		
	i) NET MAX DEMAND	1250	750
	ii) NET POWER AVAILABILITY- Own Source (including bilateral)	341	147
	- Central Sector	830	390
	iii) SURPLUS(+)/DEFICIT(-)	-79	-213
3	<b>DVC</b>		
	i) NET MAX DEMAND (OWN)	2825	1595
	ii) NET POWER AVAILABILITY- Own Source	5000	2507
	- Central Sector	316	138
	Long term Bi-lateral (Export)	1474	991
	iii) SURPLUS(+)/DEFICIT(-)	1017	58
4	<b>ODISHA</b>		
	i) NET MAX DEMAND	4200	2150
	ii) NET POWER AVAILABILITY- Own Source	2963	1396
	- Central Sector	1278	620
	iii) SURPLUS(+)/DEFICIT(-)	41	-134
5	<b>WEST BENGAL</b>		
5.1	<b>WBSEDCL</b>		
	i) NET MAX DEMAND (OWN)	5507	2901
	ii) CESC's DRAWAL	0	0
	iii) TOTAL WBSEDCL's DEMAND	5507	2901
	iv) NET POWER AVAILABILITY- Own Source	3449	1800
	- Import from DPL	218	0
	- Central Sector	2064	1106
	v) SURPLUS(+)/DEFICIT(-)	224	5
	vi) EXPORT (TO B'DESH & SIKKIM)	5	3
5.2	<b>DPL</b>		
	i) NET MAX DEMAND	247	150
	ii) NET POWER AVAILABILITY	465	172
	iii) SURPLUS(+)/DEFICIT(-)	218	22
5.3	<b>CESC</b>		
	i) NET MAX DEMAND	1650	675
	ii) NET POWER AVAILABILITY - OWN SOURCE	670	454
	FROM HEL	540	314
	FROM CPL/PCBL	0	0
	Import Requirement	440	0
	iii) TOTAL AVAILABILITY	1650	768
	iv) SURPLUS(+)/DEFICIT(-)	0	93
6	<b>WEST BENGAL (WBSEDCL+DPL+CESC)</b> <b>(excluding DVC's supply to WBSEDCL's command area)</b>		
	i) NET MAX DEMAND	7404	3726
	ii) NET POWER AVAILABILITY- Own Source	4584	2427
	- Central Sector+Others	3044	1420
	iii) SURPLUS(+)/DEFICIT(-)	224	121
7	<b>SIKKIM</b>		
	i) NET MAX DEMAND	90	35
	ii) NET POWER AVAILABILITY- Own Source	1	0
	- Central Sector+Others	157	54
	iii) SURPLUS(+)/DEFICIT(-)	68	19
8	<b>EASTERN REGION</b> <b>At 1.03 AS DIVERSITY FACTOR</b>		
	i) <b>NET MAX DEMAND</b>	19096	10502
	Long term Bi-lateral by DVC	1474	991
	EXPORT BY WBSEDCL	5	3
	ii) <b>NET TOTAL POWER AVAILABILITY OF ER</b> <b>(INCLUDING C/S ALLOCATION)</b>	22324	11014
	iii) <b>PEAK SURPLUS(+)/DEFICIT(-) OF ER</b> <b>(ii)-(i)</b>	1749	-482

## ERLDC, KOLKATA

## TRANSMISSION ELEMENTS OUTAGE PROPOSED IN 153rd OCC MEETING OF ERPC

Sl. No	NAME OF THE ELEMENTS	FROM		TO		REMARKS	S.D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
		DATE	TIME	DATE	TIME				
1	132 KV Gangtok-Chuzachen Line	10/01/19	9:00 Hrs/	10/02/19	12:00 Hrs/	ODB	POWERGRID,ER-II	For AnnualAMP Works & DCRM	SIKKIM
2	66 KV Gangtok-Tadong Line	16/01/19	9:00 Hrs/	16/12/19	12:00 Hrs/	ODB	POWERGRID,ER-II	For AnnualAMP Works	SIKKIM
3	66 KV Gangtok-Bulbulay Line	18/01/19	9:00 Hrs/	18/12/19	12:00 Hrs/	ODB	POWERGRID,ER-II	For AnnualAMP Works	SIKKIM
4	66 KV Gangtok-LLHP Line	20/01/19	9:00 Hrs/	20/12/19	12:00 Hrs/	ODB	POWERGRID,ER-II	For AnnualAMP Works	SIKKIM
5	220KV D/C Birpara - Salakati	20/01/19	9 A/M/ (09/00 Hrs/)	21/01/19	M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	NLDC
6	765 kV Sasaram - fatehpur	22/01/19	08:00	29/01/19	18:00	OCB	POWERGRID NR3	Strengthening of suspension towers Delta Configuration (419 Nos)	NLDC
7	765KV Angul- Srikakulam ckt-I	22/01/19	07:00	22/01/19	18:00	ODB	ER-II/Odisha/Talcher TLM	AMP Work	NLDC
8	400 KV Tisco- Baripada Line	22/01/19	09:00	22/01/19	18:00	ODB	DVC	Line side CVT(409) testing and Gaurd wire adjustment at span between tower no . 3 to 3A & 3 to 2	
9	400KV D/C Binaguri - Alipurduar	24/01/19	9 A/M/ (09/00 Hrs/)	25/01/19	M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	
10	400KV D/C Binaguri - Bongaigaon Ckt. 1 & 2	24/01/19	9 A/M/ (09/00 Hrs/)	25/01/19	M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	NLDC
11	220KV D/C Birpara - Siliguri	24/01/19	9 A/M/ (09/00 Hrs/)	25/01/19	M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	
12	400 KV Subhasgram Jeerat Line	25/01/19	09:00	26/01/19	17:00	OCB	POWERGRID,ER-II	For termination of Jeerat-Subhasgram line into Rajarhat Gantry for 1st time charging and making Earthwire Diamond Crossing under FBSS-V	WB
13	400 KV Subhasgram Sagardighi Line.	25/01/19	09:00	26/01/19	17:00	ODB	POWERGRID,ER-II	For termination of Jeerat-Subhasgram line into Rajarhat Gantry for 1st time charging and making Earthwire Diamond Crossing under FBSS-V	WB
14	A/R 400KV Bharsarif - Koderma CKT -I	26/01/19	09:00	25/02/19	18:00	ODB	POWERGRID ER-1	Auto recloser Put in Non Auto Mode for PID testing .	DVC
15	A/R 400KV Bharsarif - Koderma CKT -II	26/01/19	09:00	25/02/19	18:00	ODB	POWERGRID ER-1	Auto recloser Put in Non Auto Mode for PID testing and OPGW installation work	DVC
16	A/R OF 400KV BIHARSHARIF-KODERMA-II	27/01/19	08:00	28/02/19	18:00	ODB	POWERGRID ER-1	OPGW INSTALLATION WORK.	DVC
17	400KV D/C Tala - Binnaguri(New Siliguri) T/L 1	27/01/19	9 A/M/ (09/00 Hrs/)	30/01/19	5 P/M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	NLDC
18	400KV D/C Tala - Binnaguri (New Siliguri) T/L 2	27/01/19	9 A/M/ (09/00 Hrs/)	28/01/19	5 P/M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	NLDC
19	220KV D/C Birpara - Siliguri	27/01/19	9 A/M/ (09/00 Hrs/)	28/01/19	5 P/M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	
20	Talcher HVDC Pole-1	30/01/19	06:00	31/01/19	17:00	OCB	ER-II/Odisha/Talcher TLM	Insulator replacement with CLR & Bi-Pole shutdown for Electrode Line Shifting at Talcher station for Railway Line	NLDC
21	132KV Earth Electrode Mathabhanga - Alipurduar	30/01/19	9 A/M/ (09/00 Hrs/)	31/01/19	5 P/M/ (17/00 Hrs/)	ODB	ATL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	NLDC
22	400 KV TIE BAY OF RNC-I & BR-II AT NEW RANCHI	01/02/19	09:00	01/02/19	17:00	ODB	POWERGRID ER-1	AMP	
23	400KV MAIN BAY OF ICT-II AT CHAIBASA	01/02/19	09:30	01/02/19	17:30	ODB	POWERGRID ER-1	AMP work	
24	400KV BUS-I AT KISHANGANJ	01/02/19	10:00	05/02/19	18:00	OCB	POWERGRID ER-1	CONNECTION NEW ( Darbhanga - kishanganj Line) BUS WITH EXISTING BUS	BIHAR
25	400KV TIE BAY OF KAHALGAON-II AND B/R-I AT LAKHISARAI AT LAKHISARAI	01/02/19	10:00	01/02/19	14:00	ODB	POWERGRID ER-1	AMP of Tie Bay of 400 kV LKR-KHG-2 & 80MVAR Bus Reactor	
26	765 /400 kV ICT-I at Gaya ss	01/02/19	09:00	01/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	NLDC
27	400 KV Biharharif - Varanasi CKT- I	01/02/19	08:00	25/02/19	18:00	OCB	POWERGRID ER-I	Realignmnet works of 400KV Biharharif - Varanasi & 400KV Biharharif - Sasaram Line due to Construction of New Railway Line by ECR from Natesar to Islampur	NLDC
28	400 KV Biharharif - Varanasi CKT- II	01/02/19	08:00	25/02/19	18:00	OCB	POWERGRID ER-I	Realignmnet works of 400KV Biharharif - Varanasi & 400KV Biharharif - Sasaram Line due to Construction of New Railway Line by ECR from Natesar to Islampur	NLDC
29	400KV BSF - SASARAM -I	01/02/19	08:00	20/02/19	18:00	OCB	POWERGRID ER-I	Realignmnet works of 400KV Biharharif - Varanasi & 400KV Biharharif - Sasaram Line due to Construction of New Railway Line by ECR from Natesar to Islampur	NLDC
30	400KV BSF - SASARAM -II	01/02/19	08:00	20/02/19	18:00	OCB	POWERGRID ER-I	Realignmnet works of 400KV Biharharif - Varanasi & 400KV Biharharif - Sasaram Line due to Construction of New Railway Line by ECR from Natesar to Islampur	NLDC
31	400KV Bus -1 AT PATNA	01/02/19	09:30	02/02/19	17:30	ODB	POWERGRID ER-1	For Construction activity for Nabinagar bay under under Nabinagar - 2 Project.	BIHAR
32	400/220KV 500MVA ICT 1 AT PATNA	01/02/19	09:30	15/02/19	17:30	OCB	POWERGRID ER-1	Construction of firewall under ICT 2 package and For Construction activity for Nabinagar bay under Nabinagar - 2 Project	BIHAR
33	400KV 80MVAR Bus reactor AT PATNA	01/02/19	09:30	15/03/19	17:30	OCB	POWERGRID ER-1	For Construction activity for Nabinagar bay under under Nabinagar - 2 Project.	
34	400KV TIE BAY OF ICT-I AND 80MVAR B/R AT PATNA	01/02/19	09:30	03/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	



35	3*110MVAR 765kV Bus Reactor Bay at Pusauli	01/02/19	08:00	01/02/19	18:00	ODB	POWERGRID ER-1	AMP work	NLDC
36	765kV Gaya-Varanasi-I	01/02/19	09:00	28/02/19	18:00	OCB	POWERGRID ER-1	for replacement of tower no.448 due to bend tower	NLDC
37	400 kV SASARAM - NABINAGAR - I	01/02/19	09:00	15/02/19	18:00	OCB	POWERGRID ER-1	For replacement of leg of tower location no 70 which found bend during the routine patrolling.	
38	765 kV Gaya - Balia	01/02/19	08:00	04/02/19	18:00	OCB	POWERGRID NR3	Strengthening of suspension towers Delta Configuration (82 Nos)	NLDC
39	400 KV Bus -1 at Binaguri	01/02/19	09:00	07/02/19	18:00	ODB	POWERGRID,ER-II	400 KV Busbar relay Replacement Under ERSS-XX.	
40	132 KV kurseong-Rangit	01/02/19	09:00	01/02/19	17:00	ODB	POWERGRID,ER-II	Sag/Tension correction between Loc 51-52, due to land slide. Complete release of tension required.	WB
41	220 KV BIRPARA-SLG FDR-I (ONE)	01/02/19	08:00 Hrs	02/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	A/H replacement of various Suspension towers along with VD Adjustment, CC ring tightening etc.	
42	220KV CESC CKT#2 (Bay No.203) at Powergrid,Subhasgram	01/02/19	09:00	01/02/19	17:00	ODB	POWERGRID,ER-II	AMP work	WB
43	315 MVA ICT-II at Durgapur	01/02/19	09:00	01/02/19	17:00 hrs	ODB	POWERGRID,ER-II	Bushing tan delta & AMP works	DVC
44	400KV Maithon-Right Bank #2	01/02/19	08:00	15/02/19	18:00	OCB	POWERGRID,ER-II	Re conducting work	
45	160 MVA ICT#2	01/02/19	09:00	01/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	GRIDCO
46	407 MAIN BAY ( ICT I)	01/02/19	09:00	01/02/19	17:00	ODB	ER-II/Odisha /Jeypore	For AMP Works of 407 MAIN BAY (ICT I)	
47	765KV Sundargarh-Angul Ckt #4 with LR	01/02/19	09:00	01/02/19	12:00	ODB	ER-II/Odisha/Sundergarh	To take spare Reactor in to service in place of B-Ph Reactor for attending oil leakage in B-Ph reactor	NLDC
48	40708 Bus Reactor Tie bay	01/02/19	09:00	01/02/19	18:00	ODB	ER-II/Odisha/Keonjhar	AMP activity of Bay	
49	Talcher HVDC Bipole	01/02/19	06:00	03/02/19	17:00	OCB	ER-II/Odisha/Talcher TLM	Insulator replacement with CLR & Bi-Pole shutdown for Electrode Line Shifting at Talcher station for Railway line	NLDC
50	At Durgapur 400 kv ss :400 Kv B-bus along with 400kv DURGAPUR-PGCIL CKT-II	01/02/19	07:00	01/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
51	At GOKARNA 400 KV SS: 400/220KV 315 MVA TR 1 Winter Maintainance	01/02/19	07:00	01/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
52	At JEERAT 400KV SS: 400KV Main Bus-II & Diversion of 400kv elements to 400KV Transfer Bay O.A.A	01/02/19	07:00	01/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
53	400KV MAIN BAY OF RNC-I AT NEW RANCHI	02/02/19	09:00	02/02/19	17:00	ODB	POWERGRID ER-1	AMP	
54	400KV MAIN BAY OF ICT-I AT CHAIBASA	02/02/19	09:30	02/02/19	12:00	ODB	POWERGRID ER-1	DCRM TEST OF 40352 CB	
55	400KV MAIN BAY OF JSR-I AT CHAIBASA	02/02/19	13:00	02/02/19	17:00	ODB	POWERGRID ER-1	DCRM TEST OF 40152 CB	
56	765 /400 kv ICT-II at Gaya ss	02/02/19	09:00	02/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	NLDC
57	330MVAR 765kV Bus-Reactor at Pusauli	02/02/19	08:00	02/02/19	18:00	ODB	POWERGRID ER-1	AMP work	NLDC
58	132 KV siliguri Melli	02/02/19	09:00	02/02/19	17:00	ODB	POWERGRID,ER-II	For 3-Ph A/R implementation.	SIKKIM
59	220KV NEWTOWN LINE (Bay No.205) at Powergrid,Subhasgram	02/02/19	09:00	02/02/19	17:00	ODB	POWERGRID,ER-II	AMP work	WB
60	132kv BUS-1 Shutdown at Rangpo	02/02/19	09:00	12/02/19	17:00	OCB	POWERGRID,ER-II	For Bus extension to new Chuzachen bays (Construction works)	SIKKIM
61	400 kv Bus-3 at Powergrid,Maithan	02/02/19	10:00	02/02/19	14:00	ODB	POWERGRID,ER-II	Project Work under ERSS-XVII (Dismantling of Jumpers)	
62	400KV,Balangir-Jeypore Line TIEBAY(40304 BAY)	02/02/19	09:00	02/02/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 40304 52CB & 40304 CT	
63	400 KV 401R keonjhar line Reactor main bay	02/02/19	09:00	02/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works & Reactor Air Cell Replacement Works	
64	3X166.67MVA coupling transformer (STATCOM)	02/02/19	09:30	02/02/19	12:30	ODB	ER-II/Odisha /Jeypore	For unit change over from Unit-I,II, III to Unit-I , II & IV	
65	400kv Sundargarh-Rourkela Ckt #3 & 4	02/02/19	08:00	02/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works (Shut down of Sundargarh - Rourkela Ckt-III & IV is required together for maint. of Multi circuit / I II O portion).	
66	765KV Bus-I at Sundargarh	02/02/19	08:00	05/02/19	18:00	OCB	ER-II/Odisha/Sundergarh	Erection of busduct and SF6 to Air bushing of 765KV GIS bus sectionalizer for commissioning of 765KV GIS and Stringing of Jack bus of 765KV Rainur Ckt-1&2 i.e. Bay 709	NLDC
67	At 400KV JEERAT 400KV SS: 400KV Main Bus-II & Diversion of 400kv Sagardighi Feeder to 400kv Bus Transfer Bay & 400kv Bus-Coupler Bus Transfer Bay	02/02/19	07:00	02/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
68	220KV BIRPARA-SLG FDR-II (TWO)	03/02/19	08:00 Hrs	04/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	VD Adjustment, CC ring tightening and repair sleeve at various locations .	
69	220KV KLC Bantala Line (Bay No.206) at Powergrid,Subhasgram	03/02/19	09:00	03/02/19	17:00	ODB	POWERGRID,ER-II	AMP work	WB
70	400 KV 406 Main Bay of 315 MVA ICT-II	03/02/19	09:00	03/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
71	400kv Sundargarh-Raigarh Ckt#3	03/02/19	08:00	14/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	For PID Testing of Porcelain Insulator. Only Auto reclose relay will be off. Line will be in service	NLDC
72	Tie bay (709) of ANGUL 4	03/02/19	08:00	04/02/19	18:00	OCB	ER-II/Odisha/Sundergarh	Raipur- II Bay extn works	
73	At JEERAT 400KV SS: 400KV Main Bus-II & Diversion of 400kv Subhasgram,100MVAR Bus Reactor & 315MVA ICT 4 to 400KV Bus Transfer Bay O.A.A	03/02/19	07:00	03/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
74	400kv JSR -DURGAPUR LINE	04/02/19	09:30	04/02/19	17:30	ODB	POWERGRID ER-1	Static Auto reclose relay to be replaced with numerical relay at JSR	

75	765/400 KV, 1500 MVA, ICT-I AT NEW RANCHI	04/02/19	09:00	05/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
76	400/220kV 315 MVA ICT-1 AT DALTANGANJ	04/02/19	09:30	04/02/19	17:30	ODB	POWERGRID ER-1	CSD Commissioning work	JSEB
77	400kV BUS-II AT NEW PURNEA	04/02/19	09:30	04/02/19	18:00	ODB	POWERGRID ER-1	Bus AMP	
78	220 KV MAIN BUS-1 AT PURNEA	04/02/19	09:00	04/02/19	16:00	ODB	POWERGRID ER-1	AMP	BIHAR
79	400KV MAIN BAY OF RANCHI-RAURKELA-I AT RANCHI	04/02/19	10:00	04/02/19	17:00	ODB	POWERGRID ER-1	AMP	
80	400KV MAIN BAY OF RKL-I AT CHAIBASA	04/02/19	09:30	04/02/19	12:00	ODB	POWERGRID ER-1	DCRM TEST OF 40452 CB	
81	400KV TIE BAY OF RKL-I & ICT-II AT CHAIBASA	04/02/19	13:00	04/02/19	17:00	ODB	POWERGRID ER-1	DCRM TEST OF 40552 CB	
82	400/132KV 200 MVA ICT-1 AT LAKHISARAI	04/02/19	09:00	05/02/19	17:00	OCB	POWERGRID ER-1	Checking of Air Cell & AMP works. (132 kV Bay No.-109 and 33 kV Tertiary bay will also remain out of service.)	BIHAR
83	400KV BUS-I AT CHANDWA	04/02/19	09:00	06/02/19	18:00	OCB	POWERGRID ER-1	HV & PD Test of Northkarpura - I GIS Bay No. 403 with extended Bus-I. Removal of shield & fixing of Main Bus - I section conductor vacuuming ,gas filling & energizing .	JSEB
84	765 /400 kV ICT-III at Gaya ss	04/02/19	09:00	04/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	NLDC
85	400kV Bus 2 AT PATNA	04/02/19	09:30	05/02/19	17:30	ODB	POWERGRID ER-1	For Construction activity for Nabinagar bay under under Nabinagar - 2 Project.	BIHAR
86	400KV TIE BAY OF Barh -2 Ballia-1 AT PATNA	04/02/19	09:30	08/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
87	132 KV siliguri kurseong	04/02/19	09:00	04/02/19	17:00	ODB	POWERGRID,ER-II	Line defect rectification & Line AMP works.	WB
88	400kV Berhampore-Bheramara-1	04/02/19	09/00Hrs	04-02-2019	17/00Hrs	ODB	POWERGRID,ER-II	Modified SPS scheme implementation	NLDC
89	220KV Subhasgram Ckt#1 (Bay No.207) at Powergrid,Subhasgram	04/02/19	09:00	04/02/19	17:00	ODB	POWERGRID,ER-II	AMP work	WB
90	400 KV Rangpo-KISHANGANJ	04/02/19	08:00	08/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work by HYOSUNG/KOREA.	
91	400/220kV 315 MVAICT -3 at Rangpo	04/02/19	08:00	08/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work	
92	125 MVAR BR-IV at Durgapur	04/02/19	09:00	04/02/19	17/00 hrs	ODB	POWERGRID,ER-II	Reactor Isolator balance works under ERSS-XIV	
93	400 kV Bus-4 at Powergrid,Maithan	04/02/19	10:00	04/02/19	14:00	ODB	POWERGRID,ER-II	Project Work under ERSS-XVII (Dismantling of Jumpers)	
94	400 KV Farakka- Kahalgaon-I line	04/02/19	09:00	04/02/19	18:00	ODB	POWERGRID,ER-II	For bay stability between bay-22 (Main Bay of 400 KV Farakka- Kahalgaon-I) & bay-23	
95	400/220/33kv 315MVA ICT- II at Alipurduar	04/02/19	08:00	06/02/19	18:00	OCB	POWERGRID,ER-II	Attending Oil leakage (Oil leakage of OLTC diverter compartment).	
96	220KV 203 Bus Coupler Bay	04/02/19	09:00	04/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	GRIDCO
97	416 MAIN BAY (63MVar Bus Reactor)	04/02/19	09:00	04/02/19	17:00	ODB	ER-II/Odisha /Jeypore	For AMP Works of 416 MAIN BAY OF 63MVAR BR	
98	400 KV ROURKELA-SUNDARGARH#1	04/02/19	09:00	04/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK LINE BAY & LINE REACTOR	
99	50 MVAR Line Reactor	04/02/19	09:00	04/02/19	18:00	ODB	ER-II/Odisha /Indravati	AMP work of 50MVAR LR.Power flow will be interrupt for this shutdown .	
100	Main Bay (404) of 400KV Bus Reactor-3 at Angul	04/02/19	09:00	04/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
101	405 Main bay	04/02/19	09:00	04/02/19	18:00	ODB	ER-II/Odisha/Keonjhar	AMP activity of Bay	
102	Talcher HVDC Pole-2	04/02/19	06:00	05/02/19	17:00	OCB	ER-II/Odisha/Talcher TLM	Insulator replacement with CLR & Bi-Pole shutdown for Electrode Line Shifting at Talcher station for Raibazar line.	NLDC
103	Maintenance work for BUS Reactor	04/02/19	09:30hrs	11/02/19	18:00 hrs	OCB	BARH	Annual Maintenance & Testing of BUS Reactor	
104	Maintenance work for BUS Reactor Bay	04/02/19	09:30hrs	11/02/19	18:00 hrs	OCB	BARH	Annual Maintenance & Testing of Bays Equipments	
105	400KV FKK-SGD Line-2	04/02/19	09:00hrs	09/02/19	17:00 hrs	OCB	FARAKKA	CT replacement	WB
106	At JEERAT 400KV SS: 400KV Main Bus-I & Diversion of 400kv 315MVA ICT3,ICT2 & ICT1 to 400kv Bus Transfer Bus R1 & B	04/02/19	07:00	04/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
107	At GOKARNA 400 KV SS: 400/220 kv ,315MVA TR 1 winter maintainance	04/02/19	07:00	04/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
108	400KV MTPS-Maithon L#1	04/02/19	09:00	04/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
109	400kV BUS-I AT BANKA	05/02/19	09:30	22/02/19	17:30	ODB	POWERGRID ER-1	AMP	BIHAR
110	TIE BAY OF 400KV RAURKELA-I & RAGHUNATHPUR-2 AT RANCHI	05/02/19	10:00	05/02/19	17:00	ODB	POWERGRID ER-1	AMP	
111	400KV MAIN BAY OF JSR-I AT CHAIBASA	05/02/19	09:30	05/02/19	11:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
112	400KV TIE BAY OF JSR-I UNE & ICT-I AT CHAIBASA	05/02/19	11:30	05/02/19	01:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
113	400KV MAIN BAY OF ICT-I AT CHAIBASA	05/02/19	13:30	05/02/19	15:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
114	400KV MAIN BAY OF RKL-I AT CHAIBASA	05/02/19	15:30	05/02/19	17:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	

115	400kV Koderma - Bokaro CKT -I	05/02/19	09:00	05/02/19	18:00	ODB	POWERGRID ER-1	Replacement of insulators damaged by miscreants at Location no 195 and 196	DVC
116	765 KV BUS-I at Gaya S/S	05/02/19	09:00	05/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	NLDC
117	400 kV Koderma-Gaya-1 & 2 Line	05/02/19	09:00	19/02/19	18:00	OCB	POWERGRID ER-1	Destringing, erection & re-stringing of multi ckt. Tower Loc. 80 (Brassing member and legs of tower no 80 is found bend during the routine patrol line)	DVC
118	400 kV Maithon-Gaya-1 & 2 Line	05/02/19	09:00	19/02/19	18:00	OCB	POWERGRID ER-1	Destringing, erection & re-stringing of multi ckt. Tower Loc. 80 (Brassing member and legs of tower no 80 is found bend during the routine patrol line)	DVC
119	400kV Tie bay of koderma-2 and Future at Bihashariff	05/02/19	10:00	05/02/19	18:00	ODB	POWERGRID ER-I	Bay AMP	
120	220kV Bus-I at Pusauli	05/02/19	09:00	05/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	BIHAR
121	220kV Pusauli-Sahapuri	05/02/19	08:00	05/02/19	13:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	NLDC
122	220kV Pusauli-Ara	05/02/19	13:00	05/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	BIHAR
123	400/220kV 500MVA ICT-I at Pusauli	05/02/19	09:00	08/02/19	18:00	OCB	POWERGRID ER-1	Shiting of new 500 MVA ICT for replacement of ICT - II	BIHAR
124	132KV main Bus at Malda	05/02/19	08:00	05/02/19	17:00	ODB	POWERGRID,ER-II	Main Bus CVT replacement	WB
125	400kV Berhampore-Bheramara-2	05/02/19	09/00Hrs	05-02-2019	17/00Hrs	ODB	POWERGRID,ER-II	Modified SP5 scheme implementation	NLDC
126	220KV Subhasgram Ckt#2 (Bay No.209) at Powergrid,Subhasgram	05/02/19	09:00	05/02/19	17:00	ODB	POWERGRID,ER-II	AMP work	WB
127	220 KV BIRPARA-SALAKATH-I (ONE)	05/02/19	08:00 Hrs	05/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	Replacement of LA.	NLDC
128	400 KV BUS-I at Durgapur	05/02/19	09:00	05/02/19	17/00 hrs	ODB	POWERGRID,ER-II	Bus bar relay testing	DVC
129	400KV Maithan-Jamshedpur Line (413)	05/02/19	09:00	06/02/19	18:00	ODB	POWERGRID,ER-II	Replacement of Main Bay and Line Bay CT and To replaced Punctured disc Insulator	
130	400 KV Farakka- Berhampur-II	05/02/19	09:00	05/02/19	18:00	ODB	POWERGRID,ER-II	For balance protection scheme checking of bay-23 ( Tie bay of 400 KV Fkk- Bhp-II and 400 KV Fkk- Khg-I) with respect with bus-24 & to carry out punch point works in	
131	132 KV D/C Purulia - Jamshedpur (TL-	05/02/19	00:00	06/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 765 KV RMTL-AP 95/0 ,(DD+9)-96/0( DD+18). Span Length-258 mtr	
132	220 KV Main BUS # 1	05/02/19	09:00	05/02/19	17:00	ODB	ER-II/Odisha/Rengali	AMP Work	
133	50 MVAR, Jeyore Line Reactor	05/02/19	09:00	05/02/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 50 MVAR Jeyore L/R &NGR and AMP for 403R 52 CB	
134	400 kV 407 main Bay of Baripada-Duburi line	05/02/19	09:00	06/02/19	17:30	OCB	ER-II/Odisha/BARIPADA S/S	Gasket replacement	
135	400 KV ROURKELA-SUNDARGARH#3	05/02/19	09:00	05/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK LINE BAY & LINE REACTOR	
136	Tie Bay (405) of 400kV B/R-3 & Meramundali Line-1 at Angul	05/02/19	09:00	05/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
137	400kV Sundargarh-Raigarh Ckt#2&4	05/02/19	07:00	16/02/19	18:00	OCB	ER-II /ODISHA/SUNDERGARH	1) Lara Railway Diversion work 2) OPGC Line diversion (Rectification work at Railway crossing)	NLDC
138	Tie bay (712) of ANGUL 3	05/02/19	08:00	06/02/19	18:00	OCB	ER-II/Odisha/Sundergarh	Raipur- II Bay extn works	
139	At JEERAT 400KV SS: 400KV Main Bus-I & Diversion of 400kv Subhasgram,100MVAR Bus Reactor & 315MVA ICT 4 to 400kv Bus Transfer Bay O.A.A	05/02/19	07:00	05/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
140	At GOKARNA 400 KV SS:400/220KV 315MVA TR 2 winter maintainance	05/02/19	07:00	05/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
141	At Arambag 400 kv ss:400KV ARAMBAG-BKTPP line	05/02/19	07:00	05/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
142	At KLC BANTALA 220KV SS:220KV KLC-SUBHASGRAM PGCIL ckt	05/02/19	07:00	05/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
143	400KV MTPS-Maithon L#1	05/02/19	09:00	05/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
144	400kV JSR - Mejia LINE	06/02/19	09:30	06/02/19	17:30	ODB	POWERGRID ER-1	Static Auto reclose relay to be replaced with numerical relay AT JSR	
145	765 KV MAIN BAY OF DMG-I AT NEW RANCHI	06/02/19	09:00	06/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
146	400/220kV 315 MVA ICT-2 AT DALTANGANJ	06/02/19	09:30	06/02/19	17:30	ODB	POWERGRID ER-1	CSD Commissioning work	JSEB
147	400KV NEW PURNEA- MALDA-I	06/02/19	09:30	06/02/19	18:00	ODB	POWERGRID ER-1	R-ph CVT to be replaced at Npm due to secondary voltage violation	
148	220 KV MAIN BUS-2 AT PURNEA	06/02/19	09:00	06/02/19	16:00	ODB	POWERGRID ER-1	AMP	BIHAR
149	400kV BUS-II AT BANKA	06/02/19	09:30	23/02/19	17:30	ODB	POWERGRID ER-1	AMP	BIHAR
150	400KV MAIN BAY OF RANCHI - RAGHUNATHPUR - 2 AT RANCHI	06/02/19	10:00	06/02/19	17:00	ODB	POWERGRID ER-1	AMP	
151	400KV TIE BAY OF RKL-I LINE& ICT-II AT CHAIBASA	06/02/19	09:30	06/02/19	11:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
152	400KV MAIN BAY OF ICT-II AT CHAIBASA	06/02/19	11:30	06/02/19	01:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
153	400KV TIE BAY OF BR-I & RKL-II AT CHAIBASA	06/02/19	13:30	06/02/19	15:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	

154	400KV MAIN BAY OF BR-I AT CHAIBASA	06/02/19	15:30	06/02/19	17:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
155	400KV BUS-II AT KISHANGANJ	06/02/19	10:00	10/02/19	19:00	OCB	POWERGRID ER-1	CONNECTION NEW BUS ( Darbhanga - kishanganj Line) WITH EXISTING BUS	BIHAR
156	400/132KV 200 MVA ICT-2 AT LAKHISARAI	06/02/19	09:00	07/02/19	17:00	OCB	POWERGRID ER-1	Checking of Air Cell & AMP works.	BIHAR
157	400kv Koderma - Bokaro CKT -II	06/02/19	09:00	06/02/19	18:00	ODB	POWERGRID ER-1	Replacement of insulators damaged by miscreants at Location no199 and 200	DVC
158	765 KV BUS-II at Gaya S/S	06/02/19	09:00	06/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	NLDC
159	400KV MAIN BAY OF KODERMA-II AT BIHARSHARIFF	06/02/19	10:00	06/02/19	18:00	ODB	POWERGRID ER-I	Bay AMP	
160	220kv Main Bus-II at Pusauli	06/02/19	08:00	06/02/19	20:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	BIHAR
161	400/220kv 500MVA ICT-II at Pusauli	06/02/19	08:00	06/02/19	13:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	BIHAR
162	220kv Pusauli-Dehri	06/02/19	13:00	06/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	BIHAR
163	315 MVA ICT#1 at Subhasgram S/s	06/02/19	09:00	06/02/19	17:00	ODB	POWERGRID,ER-II	Retrofitting of Numerical REF Relay.	WB
164	220 KV BIRPARA-SALAKATI-II (TWO)	06/02/19	08:00 Hrs	06/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	Replacement of LA.	NLDC
165	400 KV BUS-II at Durgapur	06/02/19	09:00	06/02/19	17/00 hrs	ODB	POWERGRID,ER-II	Bus bar relay testing	
166	220 KV Main BUS # 2	06/02/19	09:00	06/02/19	17:00	ODB	ER-II/Odisha/Rengali	AMP Work	
167	(+) 300/(-) 550 MVAR STATCOM SYSTEM	06/02/19	09:00	06/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK & TIGHTENING WORKS OF CLAMPS & CONNECTORS	
168	765/400kv, 3*500MVA ICT-4 at Angul	06/02/19	09:00	06/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	NLDC
169	80 MVAR Bus Reactor	06/02/19	09:00	06/02/19	18:00	ODB	ER-II/Odisha/Keonjhar	AMP activity of Bus Reactor	
170	At 400KV JEERAT 400KV SS: 400KV Main Bus-I & 400kv Bus-Coupler, Bus Transfer Bay O.A.A	06/02/19	07:00	06/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
171	At GOKARNA 400KV SS: 400/220KV 315 MVA TR 2 winter maintanance	06/02/19	07:00	06/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
172	400KV MTPS-Maithon L#1	06/02/19	09:00	06/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
173	765 KV MAIN BAY OF B/R-I AT NEW RANCHI	07/02/19	09:00	07/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
174	400KV NEW PURNEA- MALDA-II	07/02/19	09:30	07/02/19	18:00	ODB	POWERGRID ER-1	R-ph CVT to be replaced at Npm due to secondry voltage violation	
175	132 KV Main BUS AT BANKA	07/02/19	09:30	07/02/19	17:30	ODB	POWERGRID ER-1	FOR AMP ( ALL 132KV LINES WILL BE OUT DURING THE S/D)	BIHAR
176	TIE BAY OF 400KV RNC-3 & 125MVAR B/R AT RANCHI	07/02/19	10:00	07/02/19	17:00	ODB	POWERGRID ER-1	AMP	
177	400KV MAIN BAY OF KGP-I AT CHAIBASA	07/02/19	09:30	07/02/19	11:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
178	400KV TIE BAY OF BR-II & KGP-I AT CHAIBASA	07/02/19	11:30	07/02/19	01:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
179	400KV MAIN BAY OF KGP-II AT CHAIBASA	07/02/19	13:30	07/02/19	15:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
180	400KV TIE BAY OF KGP-II LINE & FUTURE BAY AT CHAIBASA	07/02/19	15:30	07/02/19	17:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
181	400KV BUS-II AT CHANDWA	07/02/19	09:00	09/02/19	18:00	OCB	POWERGRID ER-1	HV & PD Test of Northkamura -II GIS Bay No. 403 extended Bus-II. Removal of shield & fixing of Main Bus - II section conductor vacuuming ,gas filling & energizing	JSEB
182	765kv 240MVAR L/R Of Varanasi-2 AT GAYA	07/02/19	09:00	07/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	NLDC
183	400KV TIE BAY OF BANKA-I & II AT BIHARSHARIFF	07/02/19	10:00	07/02/19	18:00	ODB	POWERGRID ER-I	Bay AMP	
184	400KV PATNA - BARH CKT 1	07/02/19	08:00	07/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	
185	400KBV MAIN BAY OF BARH-I AT PATNA	07/02/19	09:30	08/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
186	765kv Pusauli-Fatehpur Line	07/02/19	09:00	08/02/19	18:00	ODB	POWERGRID ER-1	For Polymer Anchoring Connection Work	NLDC
187	400kv East Side Bus-I at Pusauli	07/02/19	08:00	07/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	NLDC
188	50MVA ICT-IV at Malda	07/02/19	08:00	07/02/19	17:00	ODB	POWERGRID,ER-II	AMP OF ICT.	WB
189	315 MVA ICT#2 at Subhasgram S/s	07/02/19	09:00	07/02/19	17:00	ODB	POWERGRID,ER-II	Retrofitting of Numerical REF Relay.	WB
190	425 bay ( BR-IV main Bay) at Durgapur	07/02/19	9/00 hrs	07/02/19	17/00 hrs	ODB	POWERGRID,ER-II	BAY AMP	
191	400KV Maithan-Meja-1 Line (415)	07/02/19	09:00	09/02/19	18:00	ODB	POWERGRID,ER-II	Replacement of Main Bay and Line Bay CT	
192	400KV Meja-Jamshedpur line	07/02/19	09:00	08/02/19	18/00	ODB	POWERGRID,ER-II	To replaced Punctured disc Insulator	
193	400 KV Farakka- Berhampur-I	07/02/19	09:00	07/02/19	18:00	ODB	POWERGRID,ER-II	For Jumper connection and Bay stability between Bay- 34 & 33 after upgradation of bay-34 under ERSS-XV projects & to carry out nunch point works in TI	

194	220 KV Bus Coupler Bay (Bay No-204)	07/02/19	09:00	07/02/19	17:00	ODB	ER-II/Odisha/Rengali	AMP Work	
195	400 kV 411 Tie Bay of Baripada-Pandiabli & Baripada-TISCO line	07/02/19	09:00	08/02/19	17:30	OCB	ER-II/Odisha/BARIPADA S/S	Gasket replacement	
196	400 kV Jeypore-Bolangir S/C Line	07/02/19	08:00	08/02/19	18:00	ODB	ER-II/Odisha /Jeypore	For attending shutdown nature defects & AMP of Bolangir L/R	NLDC
197	400 KV ROURKELA-CHAIBASA#2	07/02/19	09:00	07/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK LINE BAY & LINE REACTOR	
198	Main Bay (406) of 400KV Meramundali Line-1 at Angul	07/02/19	09:00	07/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
199	765KV Bus-II at Sundargarh	07/02/19	08:00	10/02/19	18:00	OCB	ER-II/Odisha/Sundergarh	Erection of busduct and SF6 to Air bushing of 765KV GIS bus sectionalizer for commissioning of 765KV GIS under construction head	NLDC
200	At JEERAT 400KV SS: 315MVA ICT 4 & 400kv Bus Transfer Bay O.A.A	07/02/19	07:00	07/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
201	At ARAMBAG 400 KV SS: 400KV ARAMBAG-DURGAPUR line	07/02/19	07:00	07/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
202	At GOKARNA 400 KV SS:400 KV 80 MVAR BUS REACTOR winter maintance	07/02/19	07:00	07/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
203	400KV MTPS-Maithon L#2	07/02/19	09:00	07/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
204	400kv JSR - Maithon Line	08/02/19	09:30	08/02/19	17:30	ODB	POWERGRID ER-1	Static Auto reclose relay to be replaced with numerical relay AT JSR	
205	765 KV TIE BAY OF B/R-I AND FUTURE AT NEW RANCHI	08/02/19	09:00	08/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
206	220KV TRANSFER BAY AT NEW PURNEA	08/02/19	09:30	08/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
207	132 KV PURNEA-PURNEA-I	08/02/19	09:00	08/02/19	16:00	ODB	POWERGRID ER-1	AMP	BIHAR
208	220 KV CHAIBASA-CHAIBASA-I	08/02/19	09:30	08/02/19	11:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	JSEB
209	220 KV CHAIBASA-CHAIBASA-II	08/02/19	11:30	08/02/19	01:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	JSEB
210	220KV BAY OF 400/220KV 315 MVA ICT-II AT CHAIBASA	08/02/19	13:30	08/02/19	15:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
211	220KV BAY OF 400/220KV 315 MVA ICT-I AT CHAIBASA	08/02/19	15:30	08/02/19	17:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
212	220KV BUS COUPLER BAY AT CHAIBASA	08/02/19	17:30	08/02/19	19:00	ODB	POWERGRID ER-1	CT OIL SAMPLING	
213	400KV MAIN BAY OF 80MVAR B/R AT LAKHISARAI	08/02/19	10:00	08/02/19	14:00	ODB	POWERGRID ER-1	AMP of Main Bay of 80 MVAR Bus Reactor	
214	400 /220 kV ICT-I at Gaya ss	08/02/19	09:00	08/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	BIHAR
215	400KV MAIN BAY OF BANKA-II AT BIHARSHARIFF	08/02/19	10:00	08/02/19	18:00	ODB	POWERGRID ER-1	Bay AMP	
216	400 KV PATNA - BARH CKT 2	08/02/19	08:00	08/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	
217	400KV East Side Bus-II at Pusauli	08/02/19	08:00	08/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	NLDC
218	400 KV Bus -2 at Binaguri	08/02/19	09:00	14/02/19	18:00	ODB	POWERGRID,ER-II	400 KV Busbar relay Replacement Under ERSS-XX.	
219	220KV D/C BIRPARA -Chukha FEEDER I	08/02/19	08:00 Hrs	09/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	Placement of New A/H at all Tension Tower	NLDC
220	315 MVA ICT#3 at Powergrid,Subhasgram	08/02/19	09:00	08/02/19	17:00	ODB	POWERGRID,ER-II	AMP of 315 MVA ICT#3.	WB
221	426 Bay ( BR-IV & Future Tie bay) at Durgapur	08/02/19	9/00 hrs	08/02/19	17/00 hrs	ODB	POWERGRID,ER-II	BAY AMP	
222	400 KV Farakka- Kahalgaon-III line	08/02/19	09:00	08/02/19	18:00	ODB	POWERGRID,ER-II	For Jumper coonnection and Bay stability between Bay-34 & 35 after upgradation of bay-34 under ERSS-XV projects	
223	400 KV Farakka-Gokarna-I	08/02/19	09:00	09/02/19	18:00	ODB	POWERGRID,ER-II	For Event Logger commissioning (Integration with NTPC system) under ERSS-V.	WB
224	125 MVAR BR- II at Alipurduar	08/02/19	08:00	09/02/19	18:00	OCB	POWERGRID,ER-II	Attending Oil leakage (Oil leakage from Conservator tank) and Associated Bay AMP work	
225	400 KV Keonjhar - Talcher # 2 Tie Bay (Bay No-402)	08/02/19	09:00	08/02/19	17:00	ODB	ER-II/Odisha/Rengali	AMP Work	
226	220KV, Balangir-Kantapali line (203 BAY)	08/02/19	09:00	08/02/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 203 52 CB and 203 CT	
227	400KV Talcher-Rengali ckt-II	08/02/19	10:00	08/02/19	13:00	ODB	ER-II/Odisha	PMU Connectivity under URTDSM Project at Talcher NTPC end	
228	125 MVAR BUS REACTOR-II	08/02/19	09:00	08/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK	
229	Tie Bay (408) of 400KV ICT-2 & Talcher Line at Angul	08/02/19	09:00	08/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
230	765KV Angul- Srikulam ckt-I	08/02/19	07:00	08/02/19	18:00	ODB	ER-II/Odisha/Talcher TLM	AMP Work (Shut down is required if not approved for 22/01/2019)	NLDC
231	400KV MTPS-Maithon L#2	08/02/19	09:00	08/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
232	At JEERAT 400KV SS: 315MVA ICT 1 & 400kv Bus Transfer Bay O.A.A	08/02/19	07:00	08/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	

233	At GOKARNA 400 KV SS:400KV,80 MVAR BUS REACTOR winter maintance	08/02/19	07:00	08/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
234	400 kv New Ranchi-Ranchi CKT-3.	09/02/19	09:00	09/02/19	18:00	ODB	POWERGRID ER-1	For Insulation sleeve installation work at Loc 054-055 OF 400 kv Ranchi-New Ranchi CKT-3 & 4.	
235	401 kv New Ranchi-Ranchi CKT-4.	09/02/19	09:00	09/02/19	18:00	ODB	POWERGRID ER-1	For Insulation sleeve installation work at Loc 054-055 OF 400 kv Ranchi-New Ranchi CKT-3 & 4.	
236	400 Ranchi-Maithan ckt-I	09/02/19	09:00	09/02/19	18:00	ODB	POWERGRID ER-1	For Insulation sleeve installation work at Loc 054-055 OF 400 kv Ranchi-New Ranchi CKT-3 & 4.	
237	400 kv Ranchi-Raghunathpur CKT-I	09/02/19	09:00	09/02/19	18:00	ODB	POWERGRID ER-1	For Insulation sleeve installation work at Loc 054-055 OF 400 kv Ranchi-New Ranchi CKT-3 & 4.	DVC
238	400 /220 kV ICT-II at Gaya ss	09/02/19	09:00	09/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	BIHAR
239	400KV MAIN BAY OF BALIA-II AT PATNA	09/02/19	09:30	11/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
240	400kv North Side Bus- I at Pusauli	09/02/19	08:00	09/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	NLDC
241	400/220kV 315MVA ICT-II at Pusauli	09/02/19	09:00	16/03/19	18:00	OCB	POWERGRID ER-1	Replacement of 315 MVA ICT with 500 MVA ICT	BIHAR
242	400 KV Binaguri Bongaigaon Ckt-1	09/02/19	09:00	09/02/19	17:00	ODB	POWERGRID,ER-II	A/R relay retrofitting works in main & Tie bay.	NLDC
243	315 MVA ICT#4 at Powergrid,Subhasgram	09/02/19	09:00	09/02/19	17:00	ODB	POWERGRID,ER-II	AMP of 315 MVA ICT#4.	WB
244	220 KV BUS-1 at Rangpo	09/02/19	08:00	11/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work(both Shutdown needed on same dates).	
245	220KV Rangpo NEW MELLI	09/02/19	08:00	13/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work(both Shutdown needed on same dates).	
246	404 Bay ( B' Nagar-II Main bay) at Durgapur	09/02/19	9/00 hrs	09/02/19	17/00 hrs	ODB	POWERGRID,ER-II	BAY AMP	
247	400 kv 405 Tie Bay of Baripada-Kharagpur line & 315 MVA ICT-2	09/02/19	09:00	09/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
248	400KV Talcher-Meramundali Ckt-I	09/02/19	10:00	09/02/19	13:00	ODB	ER-II/Odisha	PMU Connectivity under URTDSM Project at Talcher NTPC end	GRIDCO
249	765KV Angul- Srikakulam ckt-II	09/02/19	07:00	09/02/19	18:00	ODB	ER-II/Odisha/Talcher TLM	AMP Work.(If shutdown for ckt-I is approved for 22/01/2019 , then it is not required)	NLDC
250	New 400KV Bus #1 & 400KV Bus#3	09/02/19	09:30hrs	09/02/19	17:30 hrs	ODB	KAHALGAON	For 400KV Bus sectionizer Bay#1 commissioning	NLDC
251	At JEERAT 400KV SS: 315MVA ICT 2 & 400kv Bus Transfer Bay O.AA	09/02/19	07:00	09/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
252	At ARAMBAG 400KV SS:315 MVA ICT 1	09/02/19	07:00	09/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
253	400KV MTPS-Maithon L#2	09/02/19	09:00	09/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
254	400KV Barh- Motihari CKT-1	10/02/19	08:00	25/02/19	18:00	OCB	POWERGRID ER-I	Realignmnet works of 400KV Barh- Motihari Line due to Construction of Barh Bypass by NHAI	
255	400KV Barh- Motihari CKT-II	10/02/19	08:00	25/02/19	18:00	OCB	POWERGRID ER-I	Realignmnet works of 400KV Barh- Motihari Line due to Construction of Barh Bypass by NHAI	
256	220 KV S/C Birpara-Malbase Feeder	10/02/19	08:00 Hrs	10/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	Placement of New A/H at all Tension Tower	NLDC
257	220KV D/C BIRPARA -Chukha FEEDER II	10/02/19	08:00 Hrs	11/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	Placement of New A/H at all Tension Tower	NLDC
258	500 MVA ICT#5 at Powergrid,Subhasgram	10/02/19	09:00	10/02/19	17:00	ODB	POWERGRID,ER-II	CSD FINE TUNING.	WB
259	400KV Maithan KHG-2 Line Bay	10/02/19	09:00	11/02/19	18:00	ODB	POWERGRID,ER-II	Replacement of Main Bay and Line Bay CT	
260	400 KV Farakka-Gokarna-I	10/02/19	09:00	11/02/19	18:00	ODB	POWERGRID,ER-II	For Event Logger commissioning (Integration with NTPC system) under ERSS-V.	WB
261	132KV 109 Main Bay of Baripada Line	10/02/19	09:00	10/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
262	63 MVAR DUBURI LINE REACTOR AT BARIPADA SS	10/02/19	09:00	10/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
263	Tie Bay-705 of 765KV 240MVAR B/R-II & 765/400KV ICT-II at Sundargarh	10/02/19	09:00	10/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
264	400kv JSR - Chaibasa 1 Line	11/02/19	09:30	11/02/19	17:30	ODB	POWERGRID ER-1	Static Auto reclose relay to be replaced with numerical relay AT JSR	
265	765/400 KV, 1500 MVA, ICT-II, AT NEW RANCHI	11/02/19	09:00	12/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
266	400KV DALTANGANJ-SASARAM LINE-2	11/02/19	09:30	11/02/19	17:30	ODB	POWERGRID ER-1	Erection of Bushing of 50 MVAR Line Reactor at Daltanganj	
267	220 kv Main Bus-I AT ARA	11/02/19	10:00	11/02/19	17:00	ODB	POWERGRID ER-1	AMP	BIHAR
268	220KV Main bay of Purnea - 1 AT NEW PURNEA	11/02/19	09:30	11/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
269	132 KV PURNEA-PURNEA-II	11/02/19	09:00	11/02/19	16:00	ODB	POWERGRID ER-1	AMP	BIHAR
270	400KV MAIN BAY OF 125MVAR B/R AT RANCHI	11/02/19	10:00	11/02/19	17:00	ODB	POWERGRID ER-1	AMP	
271	400KV MAIN BAY OF KAHALGAON-I	11/02/19	10:00	11/02/19	14:00	ODB	POWERGRID ER-1	AMP of Main Bay of 400 kv LKR-KHG Line -1	

272	220 KV BUS-1 AT MUZAFFARPUR	11/02/19	09:30	12/02/19	17:30	ODB	POWERGRID ER-1	AMP WORK	BIHAR
273	220KV MAIN BAY OF 400/220KV 500MVA ICT-1 AT PATNA	11/02/19	09:30	11/02/19	17:30	ODB	POWERGRID ER-1	AMP	
274	220KV Bus Coupler at Pusaui	11/02/19	08:00	11/02/19	18:00	ODB	POWERGRID ER-1	AMP work	
275	400kv North Side Bus-II at Pusaui	11/02/19	08:00	11/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Misalignment Problem & Reley retrofitting Job	NLDC
276	400kv Gaya -Varanasi-II	11/02/19	09:00	12/02/19	18:00	ODB	POWERGRID ER-1	for washing of polluted insulator and defect rectification	NLDC
277	765/400kv, 1500MVA, ICT at Pusaui	11/02/19	09:00	13/02/19	18:00	OCB	POWERGRID ER-1	02 days for stability test and changing of Delta connection in LV side and 01 day for idle charging (without load) for 24 hrs due to first time charging of 500MVA R-Phase	NLDC
278	400 KV Binaguri Bongaiaon Ckt-2	11/02/19	09:00	11/02/19	17:00	ODB	POWERGRID,ER-II	Line defect rectification & Line AMP works.	NLDC
279	220KV Bus-II(with BC CB) at Malda	11/02/19	08:00	11/02/19	17:00	ODB	POWERGRID,ER-II	Rectification and Maintanance to attend Hotspot in Bus and DCRM in CB	WB
280	125MVAR BUS REACTOR at Baharampore	11/02/19	09/00Hrs	11-02-2019	17/00Hrs	ODB	POWERGRID,ER-II	For balance construction activity (Fire fighting ring modification) pertaining to ERSS-XV.	
281	50 MVAR Sagardighi Line Reactor at Subhasgram S/s	11/02/19	09:00	11/02/19	17:00	ODB	POWERGRID,ER-II	Retrofitting of Numerical REF Relay and AMP of 50 MVAR Line Reactor	
282	409 bay ( ICT-I Main bay ) at Durgapur	11/02/19	9/00 hrs	11/02/19	17/00 hrs	ODB	POWERGRID,ER-II	BAY AMP	
283	400 KV BUS-I of NTPC Farakka	11/02/19	09:00	11/02/19	18:00	ODB	POWERGRID,ER-II	For disconnecting BUS isolator of bay no-22 from BUS-I (For augmentation of BUS Isolator from 2000A to 3150 A rating under ERSS-XV projects).	
284	220KV,Main BUS-1	11/02/19	09:00	11/02/19	18:00	ODB	ER-II/Odisha/Balangir	Replacement of 203 89A, R- PH Dropper connected to 220kv main BUS-1 due to damage of some strands of conductor and also higher temperature found during	
285	400 KV 415 Main bay of 125 MVAR	11/02/19	09:00	11/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
286	400KV Talcher-Angul ckt	11/02/19	10:00	11/02/19	13:00	ODB	ER-II/Odisha	PMU Connectivity under URTDSM Project at Talcher NTPC end	
287	400 kv Jeypore-Gazuwaka I S/C Line	11/02/19	08:00	11/02/19	18:00	ODB	ER-II/Odisha /Jeypore	For replacement of porcelain insulator strings at major crossings with new Polymer strings.	NLDC
288	125 MVAR BR	11/02/19	09:00	11/02/19	13:00	ODB	ER-II/Odisha /Indravati	To Replace Terminal Box of PRD.	
289	Main Bay (419) of 400KV side ICT-4 at Angul	11/02/19	09:00	11/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
290	Main Bay-706 of 765/400KV ICT-II at Sundargarh	11/02/19	09:00	11/02/19	18:00	ODB	ER-II/Odisha/Sundargarh	AMP Work	
291	Mendhasal-Pandiabili CKT-1 at Mendhasal along with Main bay & Tie Bay NB-DIA WILL BE IN OPENED CONDITION	11/02/19	08:30	11/02/19	18:00	ODB	ER-II/Odisha/ Pandiabili GIS	Maintenance of ISOLATORS at Mendhasal	
292	125 MVAR Bus Reactor	11/02/19	09:00	14/02/19	18:00	OCB	ER-II/Odisha/Keonjhar	For replacement of defective radiator of Bus Reactor	
293	400KV FKK-DGP Line#1	11/02/19	09:00hrs	14/02/19	17:00 hrs	OCB	FARAKKA	Numerical Relay retrofitting of non-switchable Shunt Reactor	
294	At ARAMBAG 400KV SS:315 MVA ICT 2	11/02/19	07:00	11/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
295	400KV MTPS-Maithon L#3	11/02/19	09:00	11/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
296	400 KV BIHARSHARIF - BALIA -1	12/02/19	08:00	13/02/19	18:00	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	NLDC
297	220 kv Main Bus-II AT ARA	12/02/19	10:00	12/02/19	17:00	ODB	POWERGRID ER-1	AMP	BIHAR
298	220KV Main bay of Purnea - 2 AT NEW PURNEA	12/02/19	09:30	12/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
299	400KV 125 Bus Recator AT RANCHI	12/02/19	10:00	12/02/19	17:00	ODB	POWERGRID ER-1	AMP	
300	400KV TIE BAY OF BR-I & RKL-II AT CHAIBASA	12/02/19	09:30	12/02/19	17:30	ODB	POWERGRID ER-1	AMP work	
301	400KV BUS-I AND BUS-II AT CHANDWA	12/02/19	09:00	12/02/19	18:00	ODB	POWERGRID ER-1	HV & PD Test of NORTH KARNPURA-II GIS BAY NO 406.	NLDC
302	765 kv Gaya-Balia Line	12/02/19	09:00	12/02/19	18:00	ODB	POWERGRID ER-1	For Replacement of Insulators Damaged by Miscreant.	NLDC
303	400KV TIE BAY OF VARANASI-II AND FUTURE AT BIHARSHARIFF	12/02/19	10:00	12/02/19	18:00	ODB	POWERGRID ER-I	Bay AMP	
304	400KV MAIN BAY OF BARH-III AT PATNA	12/02/19	09:30	12/02/19	17:30	ODB	POWERGRID ER-1	AMP	
305	400KV TIE BAY OF Barh -1 Ballia-2 AT PATNA	12/02/19	09:30	14/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
306	400\220kv 315 MVA ICT-2 at Rangpo	12/02/19	08:00	15/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work,	
307	132KV Rangpo-Gangtok line	12/02/19	09:00	12/02/19	18:00	ODB	POWERGRID,ER-II	Line A/R implementation .For DCRM & AMP at Gangtok	SIKKIM
308	500MVA ICT-1 at Powergrid, Maithan	12/02/19	07:00	13/02/19	18:00	OCB	POWERGRID,ER-II	Rectification of MOG, CT replacement Main and X-mer bay, and AMP	DVC
309	400 KV D/C Maithan - Jamshedpur(TATA) (TL -(316-317)	12/02/19	00:00	14/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 765 KV RMTL-AP 85/0, (DD+25)-86/0( DD+25+1.5 RC). Span Length-262 mtr	
310	400 KV Talcher # 2 Main Bay (Bay No-403)	12/02/19	09:00	12/02/19	17:00	ODB	ER-II/Odisha/Rengali	AMP Work	
311	160MVA ICT#1	12/02/19	09:00	12/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	GRIDCO

312	400 kV Jeypore-Gazuwaka II S/C Line	12/02/19	08:00	12/02/19	18:00	ODB	ER-II/Odisha /Jeypore	For replacement of porcelain insulator strings at major crossings with new Polymer strings.	NLDC
313	400 KV BUS-I	12/02/19	09:00	12/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK	
314	Tie Bay (420) of 400KV ICT-4 & Future Line at Angul	12/02/19	09:00	12/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
315	Main Bay-707 of 765KV Angul L/R-IV at Sundargarh	12/02/19	09:00	12/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	
316	Mendhasal-Pandiabli CKT-2 at Mendhasal along with Main bay & Tie Bay NR-DIA WILL BE IN OPENED CONDITION	12/02/19	08:30	12/02/19	18:00	ODB	ER-II/Odisha/ Pandiabli GIS	Maintenance of ISOLATOR at Mendhasal	GRIDCO
317	400KV MTPS-Maithon L#3	12/02/19	09:00	12/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
318	400kV JSR - Chaibasa 2 Line	13/02/19	09:30	13/02/19	17:30	ODB	POWERGRID ER-1	Static Auto reclose relay to be replaced with numerical relay AT JSR	
319	765KV MAIN BAY OF ICT-II AT NEW RANCHI	13/02/19	09:00	13/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
320	400KV MAIN BAY OF BUS REACTOR AT DALTANGANJ	13/02/19	09:30	13/02/19	17:30	ODB	POWERGRID ER-1	AMP	
321	132KV Main Bus AT ARA	13/02/19	10:00	13/02/19	17:00	ODB	POWERGRID ER-1	AMP & Replacement of R and B-Phase Corona Ring of Dumraon Bay's Bus Isolator. All 132kv lines will be out of service	BIHAR
322	220KV BUS COUPLER BAY AT NEW PURNEA.	13/02/19	09:30	13/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
323	132 KV PURNEA-PURNEA-III	13/02/19	09:00	13/02/19	16:00	ODB	POWERGRID ER-1	AMP	BIHAR
324	400KV TIE BAY OF 400KV RNC-4 & FUTURE AT RANCHI	13/02/19	10:00	13/02/19	17:00	ODB	POWERGRID ER-1	AMP	
325	400KV TIE BAY OF KHG-I AND FUTURE AT LAKHISARAI	13/02/19	10:00	13/02/19	14:00	ODB	POWERGRID ER-1	AMP of Tie Bay of 400 kV LKR-KHG-1 & Future Bay	
326	220 KV BUS-2 AT MUZAFFARPUR	13/02/19	09:30	14/02/19	17:30	ODB	POWERGRID ER-1	AMP WORK	BIHAR
327	400 KV BUS-II at Gaya S/S	13/02/19	09:00	18/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	BIHAR
328	400 KV GAYA-NABINAGAR -1 line	13/02/19	09:00	15/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	
329	400KV MAIN BAY OF VARANASI-II AT BIHARSHARIFF	13/02/19	10:00	13/02/19	18:00	ODB	POWERGRID ER-I	Bay AMP	
330	400KV PATNA - BALIA CKT 1	13/02/19	08:00	13/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	NLDC
331	220KV MAIN BAY OF 400/220KV ICT- 2 AT PATNA	13/02/19	09:30	13/02/19	17:30	ODB	POWERGRID ER-1	AMP	
332	132kv Pusaui-Dehri	13/02/19	09:00	13/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Problem at Dehri.	BIHAR
333	400 KV Malda Farakka-I	13/02/19	08:00	13/02/19	17:00	ODB	POWERGRID,ER-II	AMP	
334	132KV Rangpo-Chuzachen line	13/02/19	09:00	13/02/19	18:00	ODB	POWERGRID,ER-II	Line A/R implementation	SIKKIM
335	160 MVA ICT-1 at Birpara	13/02/19	08:00 Hrs	13/02/19	17:30 Hrs	ODB	POWERGRID,ER-II	Arresting of Oil seepage from PRD as well as providing double earthing for 220KV side LA.	GRIDCO
336	400 KV Talcher # 1 Main Bay (Bay No-404)	13/02/19	09:00	13/02/19	17:00	ODB	ER-II/Odisha/Rengali	AMP Work	
337	220KV,Future Line-III BAY (207 BAY)	13/02/19	09:00	13/02/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 207 52 CB and 207 CT	
338	132KV Baripada-Bangriposi Line	13/02/19	09:00	13/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	CT Junction Box Replacement	GRIDCO
339	220KV Jeypore- JEYNAGAR-I Line	13/02/19	08:00	13/02/19	18:00	ODB	ER-II/Odisha /Jeypore	For Isolator Retrofitting works (220KV Jeynagar-I TBC Isolator) & AMP Works	GRIDCO
340	765kv, 3*110MVAR Bus Reactor-1 at Angul	13/02/19	09:00	13/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	NLDC
341	765KV Sundargarh-Angul Ckt #4 with LR	13/02/19	09:00	13/02/19	12:00	ODB	ER-II/Odisha/Sundergarh	To take B-Ph reactor in service in place of spare Reactor after attending oil leakage in B-Ph Reactor	NLDC
342	Bus-I along with Main bay of Mendhsal- Pandiabli CKT-1at Mendhsal	13/02/19	08:30	13/02/19	18:00	ODB	ER-II/Odisha/ Pandiabli GIS	Maintenance of ISOLATOR at Mendhasal	GRIDCO
343	At ARAMBAG 400KV SS:315 MVA ICT 3	13/02/19	07:00	13/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
344	At JEERAT 400KV SS: 400kv JEERAT-BKTPP bay & Line & 400KV Bus Transfer Bay	13/02/19	07:00	13/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
345	400KV MTPS-Maithon L#3	13/02/19	09:00	13/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
346	400 KV BIHARSHARIF - BALIA -2	14/02/19	08:00	15/02/19	18:00	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	NLDC
347	220KV SIDE MAIN BAY OF 400/220KV 500MVA ICT-II AT NEW PURNEA	14/02/19	09:30	14/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
348	400KV MAIN BAY OF 80MVAR B/R AT RANCHI	14/02/19	10:00	14/02/19	17:00	ODB	POWERGRID ER-1	AMP	
349	400/220KV 315 MVA ICT-I AT CHAIBASA	14/02/19	09:30	14/02/19	17:30	ODB	POWERGRID ER-1	AMP work	JSEB
350	400 kv Koderma-Gaya-1 Line	14/02/19	09:00	14/02/19	18:00	ODB	POWERGRID ER-1	For Replacement of Insulators Damaged by Miscreant.	DVC
351	400KV MAIN BAY OF KODERMA-I AT BIHARSHARIFF	14/02/19	10:00	14/02/19	18:00	ODB	POWERGRID ER-I	Bay AMP	



352	400KV PATNA - BALIA CKT 2	14/02/19	08:00	14/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	NLDC
353	400KV MAIN BAY OF BARH-IV AT PATNA	14/02/19	09:30	14/02/19	17:30	ODB	POWERGRID ER-1	AMP	
354	132kV Pusauli-Karmanasha	14/02/19	09:00	14/02/19	18:00	ODB	POWERGRID ER-1	To attend Isolator Problem at karmanasa .	BIHAR
355	132kV BUS-2 Shutdown at Rangpo	14/02/19	09:00	24/02/19	17:00	OCB	POWERGRID,ER-II	For Bus extension to new Chuzaichen bays (Construction works)	SIKKIM
356	408 Bay ( B' Nagar-I & ICT-I tie bay) at Durgapur	14/02/19	9/00 hrs	14/02/19	17/00 hrs	ODB	POWERGRID,ER-II	BAY AMP	
357	400 KV Farakka- Kahalgaon-I line	14/02/19	09:00	14/02/19	18:00	ODB	POWERGRID,ER-II	For disconnecting bay-22 (Main Bay of 400 KV Farakka- Kahalgaon-I) from line side for augmentation of Isolator & CT from 2000A to 3150 A	
358	Main bay of 400 KV Farakka- Kahalgaon-I (Bay- 22)	14/02/19	09:00	28/02/19	18:00	ODB	POWERGRID,ER-II	Bay-22 will be taken into shutdown for bay upgradation work under ERSS-XV. 400 KV Farakka- Kahalgaon-I will be chartered through tie bay.	
359	400 KV Talcher # 1 Tie Bay (Bay No-406)	14/02/19	09:00	16/02/19	17:00	OCB	ER-II/Odisha/ Rengali	Pole Overhauling of DCRM violated CB pole Y-Ph and AMP Work.	
360	315MVA ICT #1	14/02/19	09:00	14/02/19	17:30	ODB	ER-II/Odisha/ BARIPADA S/S	CT Junction Box Replacement & AMP	GRIDCO
361	220KV Jeypore-JEYNAGAR-II Line	14/02/19	08:00	14/02/19	18:00	ODB	ER-II/Odisha /Jeypore	For Isolator Retrofitting works (220KV Jeypnagar-II TBC Isolator) & AMP Works	GRIDCO
362	400 KV BUS-II	14/02/19	09:00	14/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK	
363	765KV Sundargarh-Angul Ckt #3 with LR	14/02/19	09:00	14/02/19	12:00	ODB	ER-II/Odisha/Sundergarh	To take spare Reactor in to service in place of Y-Ph Reactor for attending oil leakage in Y-Ph reactor	NLDC
364	BUS-II along with Main bay of Mendhsal-Pandiabli CKT-II at Mendhsal	14/02/19	08:30	14/02/19	18:00	ODB	ER-II/Odisha/ Pandiabli GIS	Maintenance of Line ISOLATOR at Mendhasal	GRIDCO
365	At JEERAT 400KV SS: 400kv JEERAT-New Chanditala bay & Line & 400KV Bus Transfer Bay	14/02/19	07:00	14/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
366	400KV MTPS-Jamshedpur	14/02/19	09:00	14/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
367	400KV MAIN BAY OF SASARAM LINE-1 AT DALTANGANJ	15/02/19	09:30	15/02/19	17:30	ODB	POWERGRID ER-1	AMP	
368	220KV SIDE MAIN BAY OF 400/220KV 500MVA ICT-I AT	15/02/19	09:30	15/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
369	132 KV PURNEA- KISHANGANJ -S/C	15/02/19	09:00	15/02/19	16:00	ODB	POWERGRID ER-1	AMP	BIHAR
370	80 MVAR Bus Reactor AT LAKHISARAI	15/02/19	09:00	15/02/19	17:00	ODB	POWERGRID ER-1	AMP of 80 MVAR Bus Reactor	
371	400 kv Maithon-Gaya-1 Line	15/02/19	09:00	15/02/19	18:00	ODB	POWERGRID ER-1	For Replacement of Insulators Damaged by Miscreant.	
372	50MAR L/R of Varanasi-1 at Biharsharif	15/02/19	10:00	15/02/19	18:00	ODB	POWERGRID ER-1	AMP work	
373	400KV PATNA - BALIA CKT 3	15/02/19	08:00	15/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	NLDC
374	400KV Bus -1 AT PATNA	15/02/19	09:30	16/02/19	17:30	ODB	POWERGRID ER-1	For Construction activity for Nabinagar bay under under Nabinagar - 2 Project.	BIHAR
375	400KV MAIN BAY OF BALIA-I AT PATNA	15/02/19	09:30	15/02/19	17:30	ODB	POWERGRID ER-1	AMP	
376	400KV PATNA BARH-I	15/02/19	09:30	28/02/19	17:30	OCB	POWERGRID ER-1	For erection, testing and commissioning of 80 MVAR L/R to be installed with this line under Nabinagar - 2 Project.	
377	220KV MAIN BAY OF SIPRA -I AT PATNA	15/02/19	09:30	17/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
378	400KV Binaguri Kishanganj Ckt-1	15/02/19	09:00	15/02/19	17:00	ODB	POWERGRID,ER-II	A/R relay retrofitting works at Binaguri end.	
379	400 KV Malda Farakka-II	15/02/19	08:00	15/02/19	17:00	ODB	POWERGRID,ER-II	AMP	
380	220KV, Transfer Bay (210BAY)	15/02/19	09:00	15/02/19	18:00	OCB	ER-II/Odisha/Balangir	AMP for 210 52 CB and 210 CT	
381	400 kV 403 Baripada-Duburi Line Main Bay at Duburi SS	15/02/19	09:00	15/02/19	17:30	ODB	ER-II/Odisha/ BARIPADA S/S	AMP works	
382	ICT-I (3x 105 MVA) at Jeypore	15/02/19	08:00	15/02/19	18:00	ODB	ER-II/Odisha /Jeypore	For changing ICT-I combination form Unit-I,III, IV to Unit-I , II & IV for charging Unit-II & To carry Insulation sleeves work Teritiru side of ICT 1	GRIDCO
383	125 MVAR BUS REACTOR-I	15/02/19	09:00	15/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP OF BUS REACTOR & COMMISSIONING OF CSD IN ITS TIE BAY CB (42352 CB)	
384	Main Bay-715 of 765KV Dharamjaygarh Ckt-3 at Sundargarh	15/02/19	09:00	15/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
385	ARAMBAG-NEW PPSP 1 400KV LINE	15/02/19	07:00	15/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
386	AT BKTTP-400 KV BUS REACTOR BAY	15/02/19	07:00	16/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
387	400KV MTPS-Jamshedpur	15/02/19	09:00	15/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
388	400 kv New Ranchi-Ranchi CKT-1.	16/02/19	09:00	16/02/19	18:00	ODB	POWERGRID ER-1	For balance Insulation sleeve installation work at Loc 017-018 and 053-054 OF 400 kv Ranchi-New Ranchi CKT-1 & 2 and Fixing of stool on Bus CVT Ynh - 400 kv NBNC - RNC -1	
389	400 kv New Ranchi-Ranchi CKT-2.	16/02/19	09:00	16/02/19	18:00	ODB	POWERGRID ER-1	For balance Insulation sleeve installation work at Loc 017-018 and 053-054 OF 400 kv Ranchi-New Ranchi CKT-1 & 2 and Fixing of stool on Bus CVT Ynh - 400 kv NBNC - RNC -1	
390	400 Ranchi-Maithan ckt-I	16/02/19	09:00	16/02/19	18:00	ODB	POWERGRID ER-1	For balance Insulation sleeve installation work at Loc 017-018 and 053-054 OF 400 kv Ranchi-New Ranchi CKT-1 & 2 and Fixing of stool on Bus CVT Ynh - 400 kv NBNC - RNC -1	

391	400 kv Ranchi-Raghuathpur CKT-I	16/02/19	09:00	16/02/19	18:00	ODB	POWERGRID ER-1	For balance Insulation sleeve installation work at Loc 017-018 and 053-054 OF 400 kv Ranchi-New Ranchi CKT-1 & 2 and Fixing of stool on Bus CVT Yph. 400 kv NRNC - RNC -1	DVC
392	400KV BUS-II AT RANCHI	16/02/19	09:00	16/02/19	18:00	ODB	POWERGRID ER-1	Fixing of stool on Bus CVT Yph. 400 kv NRNC - RNC -1 AND 2 WILL BE UNDER S/D due to unavailability of its TIE bay.	
393	400 KV GAYA-NABINAGAR -2 line	16/02/19	09:00	18/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	
394	400KV PATNA - BALIA CKT 4	16/02/19	08:00	16/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	NLDC
395	220KV MAIN BAY OF SIPARA-II AT PATNA	16/02/19	09:30	16/02/19	17:30	ODB	POWERGRID ER-1	AMP	
396	220/132 Kv 100 MVA ICT-2 at Rangpo	16/02/19	08:00	19/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work.	
397	400KV Maithon-Right Bank #1	16/02/19	08:00	31/02/19	18:00	OCB	POWERGRID,ER-II	Re conducting work	
398	400 kV 4034 Tie Bay of Baripada Line & Bus Reactor at Duburi SS	16/02/19	09:00	16/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
399	220 kV Bus -I at Jeypore & 220 kV Bus Coupler CB(202 52)	16/02/19	08:00	18/02/19	18:00	OCB	ER-II/Odisha /Jeypore	Isolator Retrofitting Works of Bus-I side Isolators of Jeypore I, Jeypore-2 & ICT-1 & Bus Coupler Bay	GRIDCO
400	Tie Bay-717 of 765KV Dharamjaygarh Ckt-4 at Sundargarh	16/02/19	09:00	16/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
401	400KV Bus Reactor#1	16/02/19	09:00hrs	16/02/19	17:00 hrs	ODB	FARAKKA	Reactor Testing	
402	400KV MTPS-Jamshedpur	16/02/19	09:00	16/02/19	17:00	ODB	DVC	Preventive maintenance of bay & tan delta test of CT	
403	400KV FARAKKA-GOKARANA-D/C	17/02/19	09:00	18/02/19	18:00	OCB	POWERGRID ER-1	For termination with Farakka & Gokarna line of 400KV D/C Rajarhat-Purnea Line (Bihar Section)	WB
404	400 kv Bus-3 at Powergrid, Maithan	17/02/19	10:00	17/02/19	14:00	ODB	POWERGRID,ER-II	Project Work under ERSS-XVII (Reconnection of Jumper)	
405	400 kV 404 Main Bay of 80 MVAR Bus Reactor at Duburi SS	17/02/19	09:00	17/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
406	400kv Sundargarh-Raigarh Ckt #3 & 4	17/02/19	08:00	18/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works (Shut down of Sundargarh -Raigarh Ckt-III & IV is required together for maint. of Multi circuit/ III C section)	NLDC
407	Main Bay-718 of 765KV Dharamjaygarh Ckt-4 at Sundargarh	17/02/19	09:00	17/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
408	400KV TIE BAY OF ICT-1 AND FUTURE AT DALTANGANJ	18/02/19	09:30	18/02/19	17:30	ODB	POWERGRID ER-1	AMP	
409	400KV TIE BAY OF SIUGURI-II ANC ICT-I AT NEW PURNEA	18/02/19	09:30	18/02/19	18:00	ODB	POWERGRID ER-1	BAY AMP	
410	400/220KV 315MVA ICT-II AT RANCHI	18/02/19	10:00	20/02/19	17:00	OCB	POWERGRID ER-1	OVERHAULING OF OLTC	JSEB
411	400KV 50MVAR L/R OF KAHALGAON-I AT LAKHISARAI	18/02/19	09:00	18/02/19	17:00	ODB	POWERGRID ER-1	AMP of 50 MVAR kahalgaoon - I LR	
412	400KV KAHALGAON-LAKHISARAI-I	18/02/19	09:00	18/02/19	09:10	ODB	POWERGRID ER-1	for taking 50 MVAR Line Reactor out of service for AMP works.	
413	400KV KAHALGAON-LAKHISARAI-I	18/02/19	16:50	18/02/19	17:00	ODB	POWERGRID ER-1	for taking 50 MVAR Line Reactor-in service after AMP works.	
414	400/220KV 315 MVA ICT-1 AT MUZAFFARPUR	18/02/19	09:30	21/02/19	17:30	OCB	POWERGRID ER-1	OLTC OVERHAULING WORK	BIHAR
415	400kv Bus 2 AT PATNA	18/02/19	09:30	19/02/19	17:30	ODB	POWERGRID ER-1	For Construction activity for Nabinagar bay under under Nabinagar - 2 Project.	BIHAR
416	220KV BUS COUPLER BAY AT PATNA	18/02/19	09:30	18/02/19	17:30	ODB	POWERGRID ER-1	AMP	
417	220KV MAIN BAY OF KHAGAUJ AT PATNA	18/02/19	09:30	20/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
418	400kv Varanasi Main Bay (East Side) at Pusauli	18/02/19	09:00	18/02/19	18:00	ODB	POWERGRID ER-1	AMP work	NLDC
419	400kv Biharsharif-Varanasi-I	18/02/19	09:00	19/02/19	18:00	ODB	POWERGRID ER-1	for washing of polluted insulator	NLDC
420	400KV Binaguri Kishanganj Ckt-2	18/02/19	09:00	18/02/19	17:00	ODB	POWERGRID,ER-II	A/R relay retrofitting works at Binaguri end.	
421	132KV Rangpo Melli	18/02/19	09:00	21/02/19	18:00	ODB	POWERGRID,ER-II	TLM insulator changing works at specified locations.	SIKKIM
422	132kv Bus Sectionalizer-2 110 Bay at Rangpo	18/02/19	09:00	18/02/19	18:00	ODB	POWERGRID,ER-II	Scheduled AMP	
423	400 kv Bus-4 at Powergrid, Maithan	18/02/19	10:00	18/02/19	14:00	ODB	POWERGRID,ER-II	Project Work under ERSS-XVII (Reconnection of Jumper)	
424	400 KV S/C Durgapur - Jamshedpur TL - ( TL-329-330)	18/02/19	00:00	19/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 765 KV RMTL-AP 102/0 (DD+25+1.5 RC)-103/0( DD+9). Span Length-208 mtr	
425	400KV,Balangir-Angul Line Main BAY (401 BAY)	18/02/19	09:00	18/02/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 401 52 CB and 401 CT	NLDC
426	400 kv 402 Main Bay of Duburi-Pandiabilli Line at Duburi SS	18/02/19	09:00	18/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
427	400 KV Indravati-Jeypore Main Bay (401)	18/02/19	09:00	18/02/19	18:00	ODB	ER-II/Odisha /Indravati	AMP work of 400 KV Indravati-Jeypore Main Bay (401)	NLDC
428	Main Bay (430) of 400KV GMR Line-2 at Angul	18/02/19	09:00	18/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
429	Main Bay-719 of 765KV Darlipali Ckt-2	18/02/19	09:00	18/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC

430	400KV/200KV Auto Transformer	18/02/19	09:00hrs	27/02/19	17:00 hrs	OCB	FARAKKA	Numerical Relay retrofitting and 220KV Lalmatia Line breaker O/H	JSEB
431	AT BKTTP:400/220/33KV IBT#1 S/D	18/02/19	07:00	19/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
432	765 kV New Ranchi - Dharamjaygarh CKT-I	19/02/19	09:00	23/02/19	18:00	ODB	POWERGRID ER-1	For replacement of spacer damper 131 nos., CC ring loose 67, rigid spacer missing 23 nos.	NLDC
433	400/220KV 500MVA ICT-I AT NEW PURNEA	19/02/19	09:30	19/02/19	18:00	ODB	POWERGRID ER-1	ICT AMP	
434	400KV Biharsarif - Koderma CKT -I	19/02/19	09:00	20/02/19	18:00	ODB	POWERGRID ER-1	replacement of insulators damaged by miscreants at Location no 65 and 66	DVC
435	400 KV BUS-I at Gaya S/S	19/02/19	09:00	21/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	BIHAR
436	50MAR L/R of Varanasi-II at Biharsharif	19/02/19	10:00	19/02/19	18:00	ODB	POWERGRID ER-I	AMP work	
437	400KV MAIN BAY OF ICT-I AT PATNA	19/02/19	09:30	19/02/19	17:30	ODB	POWERGRID ER-1	AMP	
438	400KV Binaguri Purnea Ckt-1	19/02/19	09:00	20/02/19	17:00	ODB	POWERGRID,ER-II	A/R relay & Digital PLCC retrofitting works.	
439	400 KV Malda Purnea-I	19/02/19	08:00	19/02/19	17:00	ODB	POWERGRID,ER-II	AMP/Recification of OPGW peak bend	
440	220 KV bus coupler-1 206 Bay at Rangpo	19/02/19	09:00	19/02/19	18:00	ODB	POWERGRID,ER-II	Scheduled AMP	
441	400 KV Rengali-Indravati Line	19/02/19	09:00	19/02/19	17:00	ODB	ER-II/Odisha/Rengali	Auto Reclose Relay Retrofitting and AMP Work	NLDC
442	400 kv 4012 Tie Bay of Duburi-Pandiabili Line at Duburi SS	19/02/19	09:00	19/02/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	
443	220 kV Bus -II at Jeypore & 220 kV Bus Coupler CB(202 52)	19/02/19	08:00	21/02/19	18:00	OCB	ER-II/Odisha /Jeypore	Isolator Retrofitting Works of Bus-II side Isolators of Jeynagar I, Jeynagar-2 & ICT-I & Bus Coupler Bay	
444	220 KV BUS-I	19/02/19	09:00	19/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK	
445	Main Bay 9707) of 765KV side ICT-2 at Angul	19/02/19	09:00	19/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
446	765 KV DC Sundargarh - Darlipali (NTPC) Ckt-I	19/02/19	08:00	19/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works	NLDC
447	Main Bay-721 of 765KV Dharamjaygarh Ckt-1 at Sundargarh	19/02/19	09:00	19/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
448	Barh Kahalgaon LINE # 1	19/02/19	09:30hrs	20/02/19	18:00 hrs	OCB	BARH	For Leveling of Land & Annual Maintenance & Testing of Bays Equipments	
449	AT ARAMBAG 400KV SS:ARAMBAG-PPSP2 400KV LINE	19/02/19	07:00	19/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
450	132KV DALTANGANJ-DALTONGANJ LINE-1	20/02/19	09:30	20/02/19	17:30	ODB	POWERGRID ER-1	LINE BAY AMP	JSEB
451	400 KV CHAIBASA-KGP-I	20/02/19	09:30	20/02/19	17:30	ODB	POWERGRID ER-1	CSD AND AUTO RECLOSE TEST	WB
452	400/220KV 315MVA ICT-3 at Biharsharif	20/02/19	10:00	22/02/19	18:00	OCB	POWERGRID ER-I	OLTC Overhauling work with AMP	BIHAR
453	400KV MAIN BAY OF 80 MVAR B/R AT PATNA	20/02/19	09:30	20/02/19	17:30	ODB	POWERGRID ER-1	AMP	
454	400kV Biharsharif-Varanasi-II	20/02/19	09:00	21/02/19	18:00	ODB	POWERGRID ER-1	for washing of polluted insulator	NLDC
455	400/220KV 315 MVAICT -1 at Rangpo	20/02/19	08:00	24/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work,	
456	220KV Maithan Dhanbad Line 2	20/02/19	09:00	20/02/19	17:00	ODB	POWERGRID,ER-II	CVT Y-P Replacement	DVC
457	220 KV Arambag - Midnapore LINE-DA+0-TL12SDA+0) (TL 128-	20/02/19	00:00	22/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 400 KV CKTL-Loop OUT-AP-13/0-(DD+18)- AP-13A/0-( DD+18)- SPAN-280 MTR	WB
458	400 KV 401R keonjhar line Reactor main bay	20/02/19	09:00	21/02/19	17:30	OCB	ER-II/Odisha/BARIPADA S/S	Gasket replacement	
459	220 KV BUS-II	20/02/19	09:00	20/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK	
460	765kv, 3*80MVAR Line Reactor of Sundargarh Line-3 at Angul	20/02/19	09:00	20/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	NLDC
461	765 KV DC Sundargarh - Darlipali (NTPC) Ckt-II	20/02/19	08:00	20/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works	NLDC
462	Main Bay-722 of 765KV Darlipali Ckt-1	20/02/19	09:00	20/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
463	Future ICT main bay 400 kv (410)	20/02/19	10:00	20/02/19	17:00	ODB	ER-II/Odisha/ Pandiabili GIS	Timing & CRM of Breaker	
464	AT BKTTP:400/220/33KV IBT#2 S/D	20/02/19	07:00	21/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
465	400KV RTPS-Ranchi Line-1	20/02/19	10:00	20/02/19	17:00	ODB	DVC	Annual Relay Maintenance work by CRITM, Maithon	
466	400kv BUS-I AT NEW PURNEA	21/02/19	09:30	21/02/19	18:00	ODB	POWERGRID ER-1	BUS AMP	
467	400KV MAIN BAY OF RNC-SIPAT-2 AT RANCHI	21/02/19	10:00	21/02/19	17:00	ODB	POWERGRID ER-1	AMP	
468	400 KV CHAIBASA-KGP-II	21/02/19	09:30	21/02/19	17:30	ODB	POWERGRID ER-1	CSD AND AUTO RECLOSE TEST	WB
469	400KV Biharsarif - Koderma CKT -II	21/02/19	09:00	22/02/19	18:00	ODB	POWERGRID ER-1	replacement of insulators damaged by miscreants at Location no 67 and 70	DVC

470	400 KV PATNA - BARH CKT 3	21/02/19	08:00	21/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	
471	400KV TIE BAY OF 80 MVAR B/R -I AND ICT 2 AT PATNA	21/02/19	09:30	21/02/19	17:30	ODB	POWERGRID ER-1	AMP	
472	220KV MAIN BAY OF FATUHA AT PATNA	21/02/19	09:30	23/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
473	400KV Binaguri Purnea Ckt-2	21/02/19	09:00	22/02/19	17:00	ODB	POWERGRID,ER-II	A/R relay & Digital PLCC retrofitting works.	
474	400 KV Malda Purnea-II	21/02/19	08:00	21/02/19	17:00	ODB	POWERGRID,ER-II	AMP	
475	132 KV Rangit-Rangpo Ckt	21/02/19	09:00	21/02/19	17:00	ODB	POWERGRID,ER-II	Insulator replacement.	SIKKIM
476	430 Bay ( JSR-I main bay ) at Durgapur	21/02/19	9/00 hrs	21/02/19	17/00 hrs	ODB	POWERGRID,ER-II	BAY AMP	
477	400 KV D/C Durgapur - Jamshedpur (TL-286-287)	21/02/19	00:00	23/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 765 KV RMTL-AP 101/0 (DD+25+1.5 RC)-102/0( DD+25+1.5 RC). Span Length-208 mtr	
478	315 MVA ICT#1	21/02/19	09:00	21/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	RETROFITTING OF EXISTING OLD ICT PROTECTION RELAYS WITH NEW NUMERICAL RELAYS.	
479	ICT-II Main Bay (205)	21/02/19	09:00	21/02/19	18:00	ODB	ER-II/Odisha /Indravati	AMP work of ICT-II Main Bay (205) at OHPC S/Y.	
480	ICT-II Main Bay (403)	21/02/19	09:00	21/02/19	18:00	ODB	ER-II/Odisha /Indravati	AMP work of ICT-II Main Bay (403) at OHPC S/Y.	
481	Tie Bay (714) of 765KV ICT-4 & B/R-2 at angul	21/02/19	09:00	21/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	NLDC
482	Tie Bay-723 of 765KV Darlipali Ckt-1 & Dharamjaygarh Ckt-2 at Sundargarh	21/02/19	09:00	21/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
483	220 kv Pandiabili-Samagra ckt-1(204)	21/02/19	10:00	21/02/19	17:00	ODB	ER-II/Odisha/ Pandiabili GIS	Timing & CRM of Breaker	GRIDCO
484	400kv Talcher- Meramundali Line	21/02/19	08:00	21/02/19	17:00	ODB	ER-II/Odisha/Talcher TLM	Line maintenance work (To attend camera Patrolling defects)	GRIDCO
485	AT ARAMBAG SS: 315MVA ICT 3	21/02/19	07:00:00	21/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
486	400KV RTPS-Ranchi Line-1	21/02/19	10:00	21/02/19	17:00	ODB	DVC	Annual Relay Maintenance work by CRITM, Maithon	
487	400KV GAYA - CHANDWA-I	22/02/19	10:00	22/02/19	18:00	ODB	POWERGRID ER-1	FOR SHIFTING OF 132KV LINE OF JUSNL CROSSING UNDER THE 400KV CHANDWA-GAYA-D/C DUE TO LESS CLEARANCE	NLDC
488	400KV GAYA - CHANDWA-II	22/02/19	10:00	22/02/19	18:00	ODB	POWERGRID ER-1	FOR SHIFTING OF 132KV LINE OF JUSNL CROSSING UNDER THE 400KV CHANDWA-GAYA-D/C DUE TO LESS CLEARANCE	NLDC
489	132KV DALTANGANJ-DALTONGANJ LINE-2	22/02/19	09:30	22/02/19	17:30	ODB	POWERGRID ER-1	LINE BAY AMP	JSEB
490	400/220KV 315 MVA ICT-2 AT MUZAFFARPUR	22/02/19	09:30	25/02/19	17:30	OCB	POWERGRID ER-1	OLTC OVERHAULING WORK	BIHAR
491	220 KV BUS-I at Gaya S/5	22/02/19	09:00	22/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	BIHAR
492	400KV PATNA - BARH CKT 4	22/02/19	08:00	22/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	
493	400KV Bus-I at Malda	22/02/19	08:00	22/02/19	17:00	ODB	POWERGRID,ER-II	Hot Spot	
494	132kv Bus Sectionalizer-1 109 Bay at Rangpo	22/02/19	09:00	22/02/19	18:00	ODB	POWERGRID,ER-II	Scheduled AMP	
495	400KV Rengali-Keonjhar Line	22/02/19	09:00	22/02/19	17:00	ODB	ER-II/Odisha/Rengali	Auto Reclose Relay Retrofitting and AMP Work	
496	315 MVA, ICT-1 Main BAY (402 BAY)	22/02/19	09:00	22/02/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 402 52 CB and 402 CT	
497	400 kv 408 Tie Bay of Baripada-Duburi & Baripada-Jamshedpur line	22/02/19	09:00	23/02/19	17:30	OCB	ER-II/Odisha/BARIPADA S/S	Gasket replacement	
498	413 MAIN BAY (JEYPORE-GAZ II MAIN BAY)	22/02/19	09:00	24/02/19	17:00	OCB	ER-II/Odisha /Jeypore	Overhauling of 41352 (CB)(JEYPORE-GAZ II MAIN BAY)	
499	315 MVA ICT#2	22/02/19	09:00	22/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	RETROFITTING OF EXISTING OLD ICT PROTECTION RELAYS WITH NEW NUMERICAL RELAYS	
500	Main Bay (715) of 765KV Bus reactor-2 at Angul	22/02/19	09:00	22/02/19	17:00	ODB	ER-II/Odisha/Angul SS	AMP Work.	
501	765 KV DC Sundargarh - Dharamjaygarh Ckt-I	22/02/19	08:00	22/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works	NLDC
502	Main Bay-724 of 765KV Dharamjaygarh Ckt-2	22/02/19	09:00	22/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
503	220 kv Pandiabili-Samagra ckt-2 (205)	22/02/19	10:00	22/02/19	17:00	ODB	ER-II/Odisha/ Pandiabili GIS	Timing & CRM of Breaker	GRIDCO
504	400kv Talcher- Angul Line	22/02/19	08:00	22/02/19	17:00	ODB	ER-II/Odisha/Talcher TLM	Line maintenance work (To attend camera Patrolling defects)	
505	New 400KV Bus#2 & 400KV Bus#4	22/02/19	09:30hrs	22/02/19	17:30 hrs	ODB	KAHALGAON	For 400KV Bus sectionizer Bay#1 commissioning	
506	AT DALKHOLA SS: 220KV DALKHOLA(TCL)-DALKHOLA(PGCIL) CKT 1	22/02/19	07:00:00	22/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	
507	400KV RTPS-Ranchi Line-2	22/02/19	10:00	22/02/19	17:00	ODB	DVC	Annual Relay Maintenance work by CRITM, Maithon	
508	220 KV BUS-II at Gaya S/5	23/02/19	09:00	23/02/19	18:00	ODB	POWERGRID ER-1	For uprating of bay equipment under Nabinagar -2 Project.	BIHAR
509	400KV BARH - KAHALGAON CKT 1	23/02/19	08:00	23/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	

510	400KV 80 MVAR B/R AT PATNA	23/02/19	09:30	23/02/19	17:30	ODB	POWERGRID ER-1	AMP	
511	132 KV SC Rangit - Rammam Line	23/02/19	09:00	23/02/19	17:00	ODB	POWERGRID,ER-II	To attend conductor damage in loc 21 to 22 in 3 phase	WB
512	765 KV DC Sundargarh - Darlipali (NTPC) Ckt-II	23/02/19	08:00	23/02/19	17:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works	NLDC
513	765KV Sundargarh-Angul Ckt #3 with LR	23/02/19	09:00	23/02/19	12:00	ODB	ER-II/Odisha/Sundergarh	To take Y-Ph reactor in service in place of spare Reactor after attending oil leakage in Y-Ph Reactor	NLDC
514	220 Kv Pandiabili-Atri ckt-2 (208)	23/02/19	10:00	23/02/19	17:00	ODB	ER-II/Odisha/ Pandiabili GIS	Timing & CRM of Breaker	GRIDCO
515	AT DALKHOLA(TCL)-DALKHOLA(PGCIL)CKT 2	23/02/19	07:00:00	23/02/19	15:00	ODB	WB	WINTER MAINTENANCE WORK	WB
516	400kV RTPS-Ranchi Line-2	23/02/19	10:00	23/02/19	17:00	ODB	DVC	Annual Relay Maintenance work by CRITM, Maithon	
517	400KV BARH - KAHALGAON CKT 2	24/02/19	08:00	24/02/19	17:30	ODB	POWERGRID ER-1	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER	
518	220KV DLK-DLK(WB) - I	24/02/19	08:00	24/02/19	17:00	ODB	POWERGRID,ER-II	AMP	WB
519	132 KV D/C CK Road - Medinipur TL	24/02/19	00:00	25/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 765 KV RMTL-AP 162/0 (DD+9)-163/0( DD+9). Span Length-265 mtr	WB
520	220KV ICT-2 Main Bay( Bay no- 209)	24/02/19	09:00	25/02/19	17:00	ODB	ER-II/Odisha/Rengali	Pole Overhauling of DCRM violated B-Ph pole of 220KV ICT-2 CGL CB.	
521	400 KV 410 main Bay of Baripada-Pandiabili line	24/02/19	09:00	25/02/19	17:30	OCB	ER-II/Odisha/BARIPADA S/S	Gasket replacement	
522	765KV 240 MVAR Bus Reactor-1	24/02/19	08:00	24/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP works and To take spare Reactor in to service in place of R-Ph Reactor for attending oil leakage in R-Ph reactor	NLDC
523	765 KV BUS-II AT NEW RANCHI	25/02/19	09:00	26/02/19	17:00	ODB	POWERGRID ER-1	AMP	NLDC
524	400KV MAIN BAY OF ICT-1 AT DALTANGANJ	25/02/19	09:30	25/02/19	17:30	ODB	POWERGRID ER-1	AMP	
525	400KV BUS-I AT RANCHI	25/02/19	10:00	25/02/19	17:00	ODB	POWERGRID ER-1	Errection & Commissioning of Jack bus for Tie Bay of Ranchi-New Ranchi-I & II)	JSEB
526	132KV LAKHISARAI -LAKHISARAI-I	25/02/19	10:00	25/02/19	14:00	ODB	POWERGRID ER-1	AMP works of Bay Equipments.	BIHAR
527	220 KV Gaya- Bodhgaya-1 line	25/02/19	09:00	25/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	BIHAR
528	400KV 125 MVAR B/R AT PATNA	25/02/19	09:30	25/02/19	17:30	ODB	POWERGRID ER-1	AMP	
529	400KV TIE BAY OF Future & ICT 2 AT PATNA	25/02/19	09:30	26/02/19	17:30	OCB	POWERGRID ER-1	AMP and to resolve the DCRM signature , SF6 leakage issue	
530	400KV SAGARDIGHI-JEERAT	25/02/19	09/00Hrs	25-02-2019	17/00Hrs	ODB	POWERGRID,ER-II	A/R Relay retrofitting at WBSETCL Jeerat end.	WB
531	400KV SAGARDIGHI-JEERAT Tie Bay at SgTPP.	25/02/19	12/00Hrs	25-02-2019	14/00Hrs	ODB	POWERGRID,ER-II	For CT Oil Sampling	
532	400KV SAGARDIGHI-FARAKKA-2 Main Bay at SgTPP.	25/02/19	15/00Hrs	25-02-2019	17/00Hrs	ODB	POWERGRID,ER-II	For CT Oil Sampling	
533	400/220KV 315 MVAICT -4 at Rangpo	25/02/19	08:00	29/02/19	17:00	OCB	POWERGRID,ER-II	For rectification of SF6 gas leakage repair work,	
534	132 KV SC Rangit -Rammam Line	25/02/19	09:00	25/02/19	17:00	ODB	POWERGRID,ER-II	To attend conductor damage in loc 21 to 22 in 3 phase	WB
535	400KV Maithon-Durgapur#2	25/02/19	09:00	25/02/19	18:00	ODB	POWERGRID,ER-II	Jumper rectification .	
536	220KV Jeypore-JEYNAGAR-I Line	25/02/19	10:00	25/02/19	12:00	ODB	ER-II/Odisha /Jeypore	For Change over of Jeynagar Line from TBC CB to Jeynagar-I Bay(204 CB) after Isolator Retrofitting works of 204 RC ( Jeynagar-I Line Isolator)	GRIDCO
537	400 KV TALCHER#1 MAIN BAY (BAY NO.-406)	25/02/19	09:00	25/02/19	18:00	ODB	ER-II/ODISHA/ROURKELA	AMP WORK	
538	400KV Angul-Meramundali S/C Line-1	25/02/19	09:00	23/02/19	17:00	ODB	ER-II/Odisha/ Angul TLO	Line Maintenance Work.	GRIDCO
539	765KV 240 MVAR Bus Reactor-2	25/02/19	08:00	25/02/19	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work	NLDC
540	220 KVBus Coupler (206)	25/02/19	10:00	25/02/19	17:00	ODB	ER-II/Odisha/ Pandiabili GIS	Timing & CRM of Breaker	
541	400kV RTPS-Ranchi Line-3	25/02/19	10:00	25/02/19	17:00	ODB	DVC	Annual Relay Maintenance work by CRITM, Maithon	
542	Main bay of 400KV DALTANGANJ-SASARAM LINE-2 at Daltonganj	26/02/19	09:30	26/02/19	17:30	ODB	POWERGRID ER-1	AMP	
543	400KV Ranchi- Maithan (RB)-II	26/02/19	10:00	26/02/19	17:00	ODB	POWERGRID ER-1	for replacement of porcelain insulator with polymer insulator	
544	220 KV Gaya-Bodhgaya-2 line	26/02/19	09:00	26/02/19	18:00	ODB	POWERGRID ER-1	For AMP Work	BIHAR
545	400 KV BSF- Banka CKT- I	26/02/19	08:00	26/02/19	18:00	ODB	POWERGRID ER-I	For Replacement of Insulators Damaged by Miscreant.	
546	50Mvar Sasaram-1 LR at Biharsharif	26/02/19	10:00	26/02/19	18:00	ODB	POWERGRID ER-I	CSD Commissioning work	
547	400/220KV 500MVA ICT-3 AT PATNA	26/02/19	08:00	26/02/19	17:30	ODB	POWERGRID ER-1	AMP	BIHAR
548	220 KV Malda Dalkola-I	26/02/19	08:00	26/02/19	17:00	ODB	POWERGRID,ER-II	AMP	
549	132 KV D/C Bishnupur - Khatra (TL-180-181)	26/02/19	00:00	27/02/19	00:00	ODB	POWERGRID,ER-II	For Powerline crossing of 765 KV RMTL-AP 134/4 (DD+9+3 RC)-135/0( DD+9). Span Length-320 mtr	WB



Details of stations/Units required to operate under RGMO/FGMO as per IEGC							Whether operating under RGMO	indicate in case of status is not available
Name of State	Type	Name of Utility	Sector (CS/SS/Private)	Name of Station	Name of Stage/ Unit	Installed capacity (MW)		
JHARKHAND	Thermal	TVNL	SS	Tenughat	1	210	No	Difficulties in implementing RGMO & exemption not
			SS		2	210	No	
	Hydro	JSEB	SS	Subarnrekha	1	65	Yes	
			SS		2	65	Yes	
WEST BENGAL	Thermal	WBPDC	SS	Bandel TPS	1	82.5	No	
			SS		2	82.5	No	
			SS		3	82.5	No	
			SS		4	82.5	No	
			SS	Santalidih	5	250	No	Unit#6 could not be implemented because of some technical problem
			SS		6	250	No	
			SS	Kolaghat	1	210	No	Nil
			SS		2	210	No	Nil
			SS		3	210	No	Nil
			SS		4	210	No	Nil
			SS		5	210	No	Nil
			SS		6	210	No	Nil
			SS	Bakreshwar	1	210	Yes	
			SS		2	210	Yes	
			SS		3	210	Yes	
			SS		4	210	Yes	
			SS		5	210	Yes	
			SS	Sagardighi	1	300	No	Without OEM support it is not possible to put in FGMO/RGMO. At present OEM support is not
			SS		2	300	No	
	Hydro		SS	PPSP	1	225	Yes	In 134th OCC WBPDC informed that the units are in RGMO/FGMO mode
			SS		2	225	Yes	
			SS		3	225	Yes	
			SS		4	225	Yes	
	Thermal	CESC	SS	Budge-Budge	1	250	Yes	
			SS		2	250	Yes	
			SS		3	250	Yes	
			SS	Haldia	1	300	Yes	
			SS		2	300	Yes	
			SS		7	300	Yes	
Orissa		OPGC	SS	IB TPS	1	210	No	Not adequate response in RGMO
			SS		2	210	No	
	Hydro	OHPC	SS	Burla	1	49.5	No	
			SS		2	49.5	No	
			SS		3	32	No	
			SS		4	32	No	
			SS		5	37.5	No	
			SS		6	37.5	No	
			SS		7	37.5	No	
			SS	Balimela	1	60	No	
			SS		2	60	No	
			SS		3	60	No	
			SS		4	60	No	
			SS		5	60	No	
			SS		6	60	No	
			SS		7	75	No	
			SS		8	75	No	
			SS	Rengali	1	50	No	
			SS		2	50	No	
			SS		3	50	No	
			SS		4	50	No	
			SS		5	50	No	
			SS	Upper Kolab	1	80	No	
			SS		2	80	No	
			SS		3	80	No	
			SS		4	80	No	
			SS	Indravati	1	150	No	
			SS		2	150	No	

			SS		3	150	No				
			SS		4	150	No				
			64								
Central Sector	Thermal	DVC	CS	Bokaro-A	1	500	Yes				
			CS	Bokaro-B	3	210	No	Not possible due to non availability of Electro hydraulic governing. The units will be decommissioned shortly.			
			CS	CTPS	3	130	No	Not possible due to non availability of Electro hydraulic governing. The units will be decommissioned shortly.			
			CS		7	250	Yes				
			CS		8	250	Yes				
			CS		DTPS	4	210	No	Not possible due to non availability of Electro hydraulic governing. The units will be decommissioned shortly.		
			CS	Mejia	1	210	No	Not possible due to non availability of Electro			
			CS		2	210	No	Action has been initiated to put in RGMO, but testing is not yet completed.			
			CS		3	210	No				
			CS		4	210	Yes				
			CS		5	250	Yes				
			CS		6	250	Yes				
			CS	Mejia - B	7	500	Yes				
			CS		8	500	Yes				
			CS	DSTPS	1	500	Yes				
			CS		2	500	Yes				
			CS	KODERMA	1	500	Yes				
			CS		2	500	Yes				
			CS	RTPS	1	600	Yes				
			CS		2	600	Yes				
			Hydro		CS	Panchet	1	40	No	RGMO mode of operation would not be possible for	
					CS		2	40	No		
		Thermal	NTPC	CS	Farakka STPP-I	1	200	Yes			
				CS		2	200	Yes			
				CS		3	200	Yes			
				CS	Farakka STPP-II	1	500	Yes			
				CS		2	500	Yes			
				CS	Farakka-U#6		500	Yes	Kept in RGMO mode from April, 2014		
	CS			Kahalgaoan STPP	1	210	Yes				
	CS				2	210	Yes				
	CS				3	210	Yes				
	CS				4	210	Yes				
	CS				5	500	Yes				
	CS				6	500	Yes				
	CS				7	500	Yes				
	CS			Talcher STPP Stg-I	1	500	Yes				
	CS				2	500	Yes				
	CS			Barh	5	660	Yes				
	CS			Barh	6	660	Yes				
	Hydro			NHPC	CS	Teesta HEP	1	170	Yes		
					CS		2	170	Yes		
					CS		3	170	Yes		
				42							
IPP	Thermal	IPP	PS	Maithon RB TPP	1	525	Yes				
			PS		2	525	Yes				
			PS	Sterlite	1	600	Yes				
			PS		2	600	Yes				
			PS		3	600	Yes				
			PS		4	600	Yes				
			PS	Adhunik Power	1	270	Yes				
			PS		2	270	Yes				
			PS	JLHEP	1	48	No	(RoR project with 3 hours pondage)			
			PS		2	48	No				
			PS	Chujachen HEP	1	49.5	No	(RoR project with 3 hours pondage)			
			PS		2	49.5	No				
			PS		1	200	No	could be put in RGMO			



	Hydro	IPP	PS	Teesta Urja	2	200	No	could be put in RGMO mode but because of transmission evacuation constraint RGMO/FGMO is disabled
			PS		3	200	No	
			PS		4	200	No	
			PS		5	200	No	
			PS		6	200	No	
			PS		1	48	No	
			PS	Dikchu	2	48	No	(RoR project with 3 hours pondage)
			PS					

# Quarterly Preparedness Monitoring -AGENDA

( Status as on :  
 )

S.No.	State	Sector ( G/T/D)	Utilities	Status of CISO Nomination	Critical Infra Identified	Crisis managem ent Plan Prepared	Status of CS mock drill	Status of Training/ Workshops organized/ participated by utility	Action taken on CERT- In/NCIIPC Advisories
1	Tamilnadu	T	TANGEDCO	Yes/No	Yes/No	Yes/No	Done on _____		

**AVAILABILITY STATUS OF EVENT LOGGER, DISTURBANCE RECORDER & GPS**

Sl. NO	Substation	Protection & Control System						Remarks
		Availability			Time Synchronization			
		EL	DR	GPS	Relay	DR	EL	
1	Subhasgram	Yes	Yes	Yes	Yes	Yes	Yes	
2	Maithon	Yes	Yes	Yes	Yes	Yes	Yes	
3	Durgapur	Yes	Yes	Yes	Yes	Yes	Yes	
4	Malda	Yes	Yes	Yes	Yes	Yes	Yes	
5	Dalkhola	Yes	Yes	Yes	Yes	Yes	Yes	
6	Siliguri	Yes	Yes	Yes	Yes	Yes	Yes	
7	Binaguri	Yes	Yes	Yes	Yes	Yes	Yes	
8	Birpara	Yes	Yes	Yes	Yes	Yes	Yes	
9	Gangtok	Yes	Yes	Yes	Yes	Yes	Yes	
10	Baripada	Yes	Yes	Yes	Yes	Yes	Yes	
11	Rengali	Yes	Yes	Yes	Yes	Yes	No	New EL would be implemented in BCU under NTAMC project by March'2015
12	Indravati (PGCIL)	Yes	Yes	Yes	Yes	Yes	No	EL is old one(model-PERM 200), provision for time synchronisation is not available. New EL would be implemented in BCU under NTAMC project by March'2015
13	Jeypore	Yes	Yes	Yes	Yes	Yes	Yes	EL is old and not working satisfactorily. New EL would be implemented in BCU under NTAMC project by March, 2015
14	Talcher	Yes	Yes	Yes	Yes	Yes	Yes	
15	Rourkela	Yes	Yes	Yes	Yes	Yes	Yes	
16	Bolangir	Yes	Yes	Yes	Yes	Yes	Yes	
17	Patna	Yes	Yes	Yes	Yes	Yes	Yes	
18	Ranchi	Yes	Yes	Yes	Yes	Yes	Yes	
19	Muzaffarpur	Yes	Yes	Yes	Yes	Yes	Yes	
20	Jamshedpur	Yes	Yes	Yes	Yes	Yes	Yes	
21	New Purnea	Yes	Yes	Yes	Yes	Yes	Yes	
22	Gaya	Yes	Yes	Yes	Yes	Yes	Yes	
23	Banka	Yes	Yes	Yes	Yes	Yes	Yes	
24	Biharsariif	Yes	Yes	Yes	Yes	Yes	Yes	
25	Barh	Yes	Yes	Yes	Yes	Yes	Yes	
26	Sagardighi	No	Yes	Yes	Yes	Yes	No	EL is under process of restoration with help from OEM, China
27	Kahalgaon	Yes	Yes	Yes	Yes	Yes	Yes	
28	Farakka	Yes	Yes	No	No	No	No	Time synchronization available for Farakka-Kahalgaon line-III & IV. The same will be implemented in rest of the lines by December, 2014.
29	Meramundali	Defunct	Yes	Yes	Yes	Yes	Yes	
30	Tisco	Yes	Yes	Yes	Yes	Yes	Yes	
31	Bidhannagar	No	Yes	Yes	No	No	No	Using DR & EL available in Numerical

								relays. GPS will be put in service by January, 2015.
32	Indravati (OHPC)	Yes	Faulty	No	No	No	No	Time synchronization will be done by Feb, 2015. ICT-I feeders using DR & EL available in Numerical relays. 400 kV ICT-II feeder is being maintained by PGCIL, Mukhiguda. Status may confirm from PGCIL
33	Kharagpur	No	Yes	Yes	No	No	No	Using DR & EL available in Numerical relays.
34	DSTPS	Yes	Yes	Yes	Yes	Yes	Yes	
35	Sterlite	Yes	Yes	Yes	Yes	Yes	Yes	
36	Mejia 'B'	Yes	Yes	Yes	Yes	Yes	Yes	
37	Mendhasal	Defunct	Yes	Yes	Yes	Yes	No	EL will be restored by March, 2015.
38	Arambagh	No	Yes	Yes	No	No	No	Using DR & EL available in Numerical relays
39	Jeerat	No	Yes	No	No	No	No	Using DR & EL available in Numerical relays. Procurement of new GPS is in progress.
40	Bakreswar	Yes	Yes	Yes	Yes	Yes	Yes	
41	GMR	Yes	Yes	Yes	Yes	Yes	Yes	
42	Maithon RB	Yes	Yes	Yes	Yes	Yes	Yes	
43	Raghunathpur	Yes	Yes	Yes	Yes	Yes	Yes	
44	Kolaghat	Yes	Yes	Yes	Yes	Yes	Yes	
45	Teesta V	Yes	Yes	Yes	Yes	Yes	Yes	
46	Koderma	Yes	Yes	Yes	Yes	Yes	Yes	
47	Sasaram	Yes	Yes	Yes	Yes	Yes	Yes	
48	Rangpo	Yes	Yes	Yes	Yes	Yes	Yes	
49	Adhunik	Yes	Yes	Yes	Yes	Yes	Yes	
50	JITPL	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
51	765kV Angul	Yes	Yes	Yes	Yes	Yes	Yes	
52	Chuzachen	Yes	Yes	Yes	No	Yes	Yes	
53	New Ranchi 765kV	Yes	Yes	Yes	Yes	Yes	Yes	
54	Lakhisarai	Yes	Yes	Yes	Yes	Yes	Yes	
55	Chaibasa							
56	765kV Jharsuguda	Yes	Yes	Yes	Yes	Yes	Yes	All are in working condition. However a dedicated DR for 765KV Lines; make TESLA is not working. M/s Siemens has assured to commission the same by 31.01.15
57	Beharampur	Yes	Yes	Yes	Yes	Yes	Yes	
58	Keonjhar	Yes	Yes	Yes	Yes	Yes	Yes	

### **Eastern Regional Power Committee**

**The status of ERS towers in Eastern Region as updated in OCC meetings is given below:**

1) ERS towers available in Powergrid S/s is as given below:

<b>Sl. No.</b>	<b>Name of S/S</b>	<b>No. of ERS towers available</b>
1	Durgapur, ER-II	1 Set (8 towers)
2	Rourkela, ER-II	3 towers incomplete shape
3	Jamshedpur, ER-I	15 towers (10 nos Tension tower and 5 nos suspension tower)

2) The present status of ERS towers in OPTCL system is as follows:

<b>Sl. No.</b>	<b>Name of S/S</b>	<b>No. of ERS towers available</b>
1	Mancheswar	2 nos, 400 kV ERS towers
2	Mancheswar, Chatrapur & Budhipadar	42 nos, 220 kV ERS towers

- 12 nos. of new 400 kV ERS towers have been recieved.
- Another, 16 nos of 400 kV towers accompanied with 6 sets of T&P are required which is under process

3) The present status of ERS towers in WBSETCL system is as follows:

<b>Sl. No.</b>	<b>Name of S/S</b>	<b>No. of ERS towers available</b>
1	Gokarna	2 sets
2	Arambag	2 sets

4) The present status of ERS towers in BSPTCL system is as follows:

<b>Sl. No.</b>	<b>Type</b>	<b>Quantity</b>	<b>Remarks</b>
1	Tension ERS Tower	12	New
2	Suspension ERS Tower	20	New
3	Old ERS Tower	10	1 no. is defective
<b>Total</b>		<b>42</b>	

- As informed in ERS meeting held on 10-11-2014 taken by Member (Power System), CEA; 2 sets (12 tension & 20 suspension) of ERS towers had been procured and currently available in BSPTCL system (as mentioned in above table with remarks "New").
- Same ERS tower is used in both 220 kV and 132 kV circuits.

- 5) In 25<sup>th</sup> ERPC meeting held on 21.09.2014, E R P C concurred to the proposal of procurement of four sets of ERS and it was also informed that, the proposed four sets of ERS will be kept at Sikkim, Siliguri, Ranchi and Gaya and will be used by all constituents of ER during emergencies.

Powergrid informed that four sets of ERS for Eastern Region will be procured.

- 5) DVC informed that they are in process of procuring two (2) sets of 400 kV ERS towers.

**Checklist for Submission of new transmission elements for updation in Protection Database**

**NAME OF ORGANISATION:**  
**FOR THE MONTH OF:**

**SUBSTATION DETAIL:**

SI No	DETAILS OF ELEMENTS	DATA TYPE	Status of Submission (Y/N)	Remarks
1	TRANSMISSION LINE	LINE LENGTH, CONDUCTOR TYPE, VOLTAGE GRADE		
2	POWER TRANSFORMER	NAMEPLATE DETAILS		
3	GENERATOR	TECHNICAL PARAMETERS		
4	CURRENT TRANSFORMER	NAMEPLATE DETAILS		
5	VOLTAGE TRANSFORMER	NAMEPLATE DETAILS		
6	RELAY DATA	MAKE, MODEL and FEEDER NAME		
7	RELAY SETTINGS	NUMERICAL RELAYS: CSV or XML file extracted from Relay ELECTROMECHANICAL RELAYS: SNAPSHOT of RELAY		
8	REACTOR	NAMEPLATE DETAILS		
9	CAPACITOR	NAMEPLATE DETAILS		
9	UPDATED SLD			

**SIGNATURE:**  
**NAME OF REPRESENTATIVE:**  
**DESIGNATION:**  
**CONTACT:**  
**E-MAIL ID:**