



# Minutes of 130<sup>th</sup> OCC Meeting

**Date: 07.03.2017**  
**Eastern Regional Power Committee**  
**14, Golf Club Road, Tollygunge**  
**Kolkata: 700 033**

## **Eastern Regional Power Committee**

**Minutes of 130<sup>th</sup> OCC Meeting held on 17<sup>th</sup> February, 2017 at ERPC, Kolkata**

### **PART A**

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

#### **Item no. 1: Confirmation of minutes of 129<sup>th</sup> OCC meeting of ERPC held on 17.01.2017**

The minutes of 129<sup>th</sup> OCC meeting were uploaded in ERPC website and circulated vide letter dated 02.02.2017 to all the constituents.

Members may confirm the minutes.

#### **Deliberation in the meeting**

*Members confirmed the minutes.*

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

#### **Item No. B.1: Commissioning of new transmission elements in Eastern Region**

In 118<sup>th</sup> OCC, it was informed that the network diagram of eastern region needs to be updated on regular basis on account of commissioning of new elements in the CTU as well as STU networks.

OCC advised all the constituents to update the list of newly commissioned power system elements to OCC on monthly basis so that ERLDC/ERPC can update the network diagram on regular basis.

The list of new Transmission Elements commissioned/charged during **January, 2017** as informed by ERLDC and BSPTCL is given below:

- 1) 50MVar LR of 400kV RTPS-Ranchi-II charged for the first time at 20:01Hrs 03/01/17.
- 2) 400kV Main bay of Nabinagar-Sasaram-II at Nabinagar charged for the first time at 18:44Hrs of 06/01/17.
- 3) 400kV New Ranchi – New PPSP-I (charged as 400kV New Ranchi - PPSP) charged for the first time at 17:38Hrs of 06/01/17 and 400kV New Ranchi - New PPSP-II (charged as 400kV New Ranchi - Arambagh) charged for the first time on 18:21Hrs of 06/01/17.
- 4) 132kV Purnea (PG)- Purnea (BSPTCL)-II was charged for the first time after re-conductoring with HTLS ACCC (Casablanca) conductor at 15:28Hrs of 07/01/17.
- 5) 400kV Teesta-III- Rangpo charged for the first time at 18:14Hrs of 13/01/17.
- 6) Teesta-III has charged its GTs along with units for the first time as follows
  - I) GT 1 & Unit 1 : 22:00Hrs of 14/01/17
  - II) GT 3 & Unit 3: 18:55Hrs of 15/01/17
  - III) GT 5 & Unit 5: 22:26Hrs of 24/01/17
  - IV) GT 2 & Unit 2: 20:23Hrs of 27/01/17
  - V) GT 6 & Unit 6: 16:44Hrs of 28/01/17

- 7) LILO of 220 KV KBUNL-Darbhanga (D/C) line at 220/132/33 KV Musahari S/s along with 2X160 MVA, 220/132 kV transformer charged on 17/01/17.
- 8) LILO of 132 KV Purnea-Saharsa (S/C) line at 132/33 KV Banmankhi S/s along with 2X20 MVA, 132/33 kV transformer charged on 25/01/17.
- 9) LILO of 132 KV 132 KV Sultanganj-Jamalpur (S/C) line at 132/33 KV Tarapur S/s along with 2X20 MVA, 132/33 kV transformer charged on 26/01/17.
- 10) 220 KV (MTPS-Darbhanga)- Mushahri LILO was charged on 11/01/17.
- 11) 132 kV Arah(PG)-Jagdishpur ckt-2 was charged on 05/01/17.
- 12) 132 kV D/C Kishanganj(new)- Kishanganj line was charged on 04/01/17.

Other constituents may update.

### **Deliberation in the meeting**

*Members noted.*

### **Item No. B.2: 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. The latest status as updated in 129<sup>th</sup> OCC is as given below:

SN	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	Amount approved (in Rs.)	Amount drawn till date (in Rs.)	Status as updated in 129 <sup>th</sup> OCC
1	WBSETCL	Renovation & up-gradation of protection system of 220 kV & 400 kV Substations in W. Bengal	31-12-14		120.67 Cr	11.04 Cr.	95 % Supply Completed
2	WBSETCL	Transmission System improvement of WBSETCL					
3	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	10.05.17	162.5 Cr.	<b>19.53 Cr</b>	<i>Total contract awarded for Rs. 67.73 Cr</i>  <i>Erection work for received equipment is in progress.</i>
4	ERPC	Creation & Maintenance of web based protection database and desktop based protection calculation tool for Eastern Regional Grid	17.03.16		20 Cr.	<b>4.94 Cr. + 9.88 Cr.</b>	<b>1) Hardware supplied and installed.</b> <b>2) SAT completed for pilot state</b> <b>3) Protection database management software (PDMS) delivered.</b> <b>4) Training on PDMS organised at Odisha.</b>
5	BSPTCL	Renovation and up-gradation of 220/132/33 KV GSS Biharsharif, Bodhgaya, Fatuha, Khagaul Dehri-on-sone & 132/33 Kv GSS Kataiya	11/5/2015	Feb'2017	64.33 crore	23.68 crore	<i>Project is on going. Order for supply of equipment placed for Rs.13.51 Cr.</i>
6		Installation of capacitor bank at different 35 nos. of GSS under BSPTCL	5/9/2016		18.88 crore		Approved (triparty agreement among NLDC, Govt. of Bihar & BSPTCL is in under process)
7		Renovation & up-gradation of protection and control system of 12 nos. 132/33 KV GSS under BSPTCL.					Recommendation of appraisal committee is awaited. Estimated cost 54.69 crore.
8	DVC	Renovation and upgradation of control & protection system and replacement of Substation Equipment of 220/132/33 kV Ramgarh Substation			25.96		Approved by Ministry of Power

9		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			140		Appraisal committee has recommended. It will be placed in next monitoring Committee meeting.
10	WBPDC	Implementation of Islanding scheme at Bandel Thermal Power Station					Appraisal committee has recommended. It will be placed in next monitoring Committee
		Upgradation of Protection and SAS			26.09		Approved by Ministry of Power
11	OHPC	Renovation and up-gradation of protection and control system of 4 nos OHPC substations.					<i>OHPC will submit the detailed proposal soon as per the requirement of Appraisal committee.</i>

*34<sup>th</sup> TCC/ERPC accorded post facto approval to the following three schemes of ERPC for submission to PSDF Appraisal Committee:*

- 1) Training for Power System Engineers
- 2) Training on Integration of Renewable Energy resources
- 3) *Training on Power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents*

*The proposal was examined by the Techno Economic sub group of PSDF and advised to submit revised DPR with consideration of views of the group for 1) one domestic training proposal and 2) one foreign training proposal (Training on Power market at NORD POOL Academy).*

Other constituents may update.

### **Deliberation in the meeting**

*ERPC informed that the preparation of revised DPR for its projects in consideration with the views of Techno-economic sub-group of PSDF is under progress.*

### **Item No. B.3: MONITORING OF SCHEMES FUNDED FROM PSDF—NPC Agenda**

In the 6<sup>th</sup> meeting of NPC held on 19<sup>th</sup> December, 2016 it was decided that all the RPCs in the monthly OCC meetings may follow up with entities to expedite completion of the scheme by giving due priority. The implementation of most of these schemes are based on the recommendation of the Enquiry Committee on Grid Disturbance of July 2012 headed by Chairperson, CEA. Therefore, timely implementation of these schemes would enhance the grid security and reliability. Accordingly, the grant sanctioned from PSDF for the schemes of Eastern Region is enclosed at **Annexure-B.3(I)** for deliberation in the OCC meeting.

The status of implementation of the above schemes (physical as well as financial progress) may please be reviewed and the entities are requested to expedite implementation of the schemes. The entities may also be advised to furnish information in the format enclosed at **Annexure-B.3 (II)** by first week of every month on regular basis to Member Convener, PSDF Project Monitoring Group (AGM, NLDC, POSOCO) with a copy to NPC Division.

*129<sup>th</sup> OCC, all the respective constituents are advised to furnish the status to NLDC & NPC as per the desired format as attached at **Annexure- B.3 (II)**.*

Constituents may update.

### **Deliberation in the meeting**

*BSPTCL informed that they have furnished the status to NLDC & NPC.  
OCC advised all other constituents to furnish the status to NLDC & NPC at the earliest.*

#### **Item No. B.4: OPERATIONAL LOAD FLOW STUDY FOR OFF-PEAK PERIOD (WINTER LEAN PERIOD)**

*In 128<sup>th</sup> OCC for lean off-peak load flow study, OCC finalized the date and time as follows*

- 13.00 Hrs of 28<sup>th</sup> December, 2016.
- 02:00 Hrs of 29<sup>th</sup> December, 2016

*OCC advised to submit the data as per the format available in ERPC website.*

*Further, 129<sup>th</sup> OCC advised PRDC to interact with ERLDC and resolve the issue of mismatch between SCADA snapshot and Study result of peak scenario for few pockets of ER grid as per the earlier decision.*

**PRDC may update.**

### **Deliberation in the meeting**

*PRDC presented the status of data collection for off-peak load flow study, the presentation is enclosed at **Annexure-B.4**. Further, it was informed that the report will be submitted by March, 2017.*

#### **Item No. B.5: Status of UFRs healthiness installed in Eastern Region**

UFR Healthiness Certification for the month of January, 2017 has been received from JUSNL, BSPTCL, WBSETCL, CESC and OPTCL.

DVC may update.

### **Deliberation in the meeting**

*DVC informed that they have submitted the report today.*

#### **Item No. B.6: Healthiness of SPS existing in Eastern Region**

GMR, JITPL, Vedanta, Powergrid-Odisha & CESC have submitted the healthiness certificate for the month of January, 2017.

NTPC, Chuzachen & Powergrid ER-II may submit the healthiness certificate for January, 2017.

### **Deliberation in the meeting**

*OCC requested NTPC ER-II to submit the healthiness certificate at the earliest.*

In 129<sup>th</sup> OCC, on query about SPS at 400kV level at Rangpo S/s for reliable power evacuation through 400kV Rangpo – Siliguri D/c, Powergrid informed that the SPS at Rangpo substation has been completed and the extension of signal to respective generation stations have been tested.

However, ERLDC informed that the SPS scheme for unit trip/ generation reduction has been received from Teesta-III & Chuzachen. The scheme details are yet to be received from Jorethang, Dikchu and Tashiding HEPs.

OCC advised all generators to share the details with ERLDC & to comply other requirements as per decision of the special meeting of 14.10.16 & 30.11.16 so that there should not be any delay in doing commercial transactions by concerned generators

Respective members may update.

### **Deliberation in the meeting**

*ERLDC informed that Powergrid, Jorethang, Chuzachen and Teesta-III had submitted the SPS scheme through mail.*

*OCC advised ERLDC to consider this mail communication as official and requested Dikchu and Tashidig HEP to share the scheme details with ERLDC at the earliest.*

## **Item No. B.7: Status of Islanding Schemes of Eastern Region**

### **B.7.1. Status of commissioned Islanding Schemes 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

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 January, 2017 has been received from CTPS, DVC, BkTPS, Tata Power and CESC.

Members may note.

### **Deliberation in the meeting**

*Members noted.*

### **B.7.2. FSTPS Islanding Scheme, NTPC**

In 123<sup>rd</sup> OCC, NTPC informed that cable laying completed and interfacing is pending. Interfacing will be done after completion of the PLCC installation work by PGCIL at JUSNL sub-stations.

In 127<sup>th</sup> OCC, Powergrid informed that the work under the scope of JUSNL has been completed.

NTPC informed that the integration of cables at their end is going on and it may take another one month to complete it.

*In 128<sup>th</sup> OCC meeting it was informed that progress of the islanding scheme is being monitored at Ministry level and ERPC Secretariat has already communicated the completion schedule as December, 2016.*

*OCC took serious note of extending the completion schedule of the islanding scheme in the last moment.*

OCC advised NTPC to explore final hooking up with C& I system at an opportune S/D time of the unit.

In 129<sup>th</sup> OCC, NTPC explained that after final hooking up with C&I of units they have to conduct dry simulation for checking the successful operation of the scheme which can only be carried out during overhauling.

Further, they informed that the maintenance programme of U#1 is scheduled from 10<sup>th</sup> March, 2017. so the hooking up with unit-I will be completed by March, 2017 and the Islanding scheme will be operational. Unit#2 and Unit #3 will be hooked in April, 2017 and June/July, 2017 respectively during their overhauling.

OCC advised NTPC to strictly maintain the schedule so that the FSTPS islanding scheme can be put into service w.e.f. March, 2017.

NTPC may update.

### **Deliberation in the meeting**

NTPC assured to complete the islanding scheme with U#1 of FSTPS by March-April, 2017 and they have requisitioned for shutdown of U#1 w.e.f. 10<sup>th</sup> March, 2017.

### **B.7.3. Bandel Islanding Scheme, WBPDC**

In 33<sup>rd</sup> TCC, WBPDC informed that DPR has been submitted to NLDC on 22-06-2016 for funding from PSDF.

Subsequently, PSDF Secretariat vide mail dated 07.10.2016 informed that the Scheme was examined on 28.09.2016 and has sought some clarification from WBPDC.

In 127<sup>th</sup> OCC, WBPDC informed that clarification has been submitted.

It was informed that the Appraisal committee has recommended. It will be placed in next Monitoring Committee

In 128<sup>th</sup> & 129<sup>th</sup> OCC, it was informed that the PSDF Appraisal committee has accepted the proposal and forwarded to CERC.

WBPDC may update the latest status.

### **Deliberation in the meeting**

WBPDC informed that the status is same.

### **Item No. B.8: Agenda related to All Power plants of Eastern Region – CEA**

As informed by OPM division, CEA vide letter dated 02.02.17 the following points are placed for discussion:

1. Change in the status of three units of Vedanta Ltd into Captive Power plant and furnishing of data thereof.
2. Online submission of data (Daily and monthly) by the power plants
3. Retiring of thermal units.

Members may update.

### **Deliberation in the meeting**

*OCC advised SLDC, Odisha to take necessary steps so that the data from Vedanta Ltd should be submitted to CEA.*

*MS-ERPC informed that Ministry of Power has launched a web-portal for online submission of daily and monthly generation data from all the power plants.*

*OCC requested all the constituents to send the required data through online portal to the MoP.*

*Regarding retiring of thermal units MS-ERPC informed that for retirement of any unit constituents need to take the approval of their management and with this approval they can write a letter to CEA for retirement. The retirement approval process has been made simpler compared to earlier where a lot of formalities need to be done. Advice of CEA in this regard is placed at **Annexure-B.8**.*

#### **Item No. B.9: Request of Indian Army for water rafting in Teesta river -- NHPC**

Teesta-V Power Station has received a letter No. C/7320/ECANT Picnic-17/Fin dated 28<sup>th</sup> Jan'2017 from Administrative Officer, 17 Mtn Div Ord. Unit requesting therein for water rafting in Teesta river from 10:00 Hrs to 16:00 Hrs on 05<sup>th</sup> February,2017. In this context, it is to mention here that due to acute shortage of inflow in Teesta River, Power Station could manage to run all three Generating units during normal peaking hours only and achieving PAF of 102.21% now-a – days.

In order to facilitate and honor the request of Indian Army, Power Station have to run one unit during the above period which shall be resulted into depleted water level of reservoir and unit(s) shall be run as per availability of water during the normal peaking hours on 05<sup>th</sup> Feb'2017.

In view of the above circumstances, PAF of 102.21% may please be considered on 05<sup>th</sup> Feb,2017 in case of shortfall of generation during the normal peaking hours.

Members may discuss.

### **Deliberation in the meeting**

*NHPC informed that had already generated during the normal peak hours on 05.02.17 even after the water release for rafting purpose of Indian Army.*

#### **Item No. B.10: Provision for one no dedicated bay for proposed 33kV substation at Bhagalpur Railway Station from 132/33 kV Sabour GSS -- Railways**

Eastern Railway, Malda vide letter dated 2<sup>nd</sup> February, 2017 intimated that the work for 33 kV sub-station at Bhagalpur have been sanctioned vide pink book of 2008-09. In this connection Rs.1,13,31,492/- have already been deposited to the Accounts Officers /R.E/BSEB/Patna vide demand draft no.528111 dt.16.01.10 against estimate no- BESA/Tech/03 BGP/Deposit Head/09-10 dated 08.07.09 as a 33kV service connection charges.

During this execution of work BSPTCL Ltd. Transmission wings has submitted additional estimated amount of Rs.56,79,146/- vide estimate no-28 dated 15.05.2013 for provision of one no dedicated bay for proposed 33 kV substation at Bhagalpur Railway Station from 132/33 kV Sabour Grid Sub-station.

Accordingly, the estimate has been processed for revision from railway side to incorporate the additional amount of R. 56,79,146/-, but due to different correspondence with HQ & local accounts the estimate has been sanctioned on date 21.04.2016 vide revised estt no- DF/450/BGP/MLT of (2<sup>nd</sup> Revised)2014-15 and the same has been communicated to



SE/DGM/SBPDCL Bhagalpur vide letter no. DF/450/BGP/MLT of 2015-16 dated 24.06.2016 & 10.08.2016 and to GM cum CE/BSPTCL vide even letter no. dated-26.10.2016 but the GM cum CE/BSPTCL Muzaffarpur has denied to take the payment saying as it is more than three years old & also informed vide letter ref above-1 that fresh estimate should be taken and get sanctioned and submit new revised amount under deposit head of BSPTCL Patna.

In this connection the undersigned visited on date 17<sup>th</sup> November, 2016 in Muzaffarpur BSPTCL office and met with GM cum CE for discussing in this regard and made an approach to GM to agree with the earlier estt. Amount as this is a govt. to govt. matter and it is also added, if BSPTCL authority will go for fresh estimate then it will again cause further delay in execution of project.

In this regard GM cum CE has advised to approach BSPTCL/HQ Patna for accepting the previous estimated amount. Accordingly, the undersigned has visited BSPTCL, Vidyut Bhawan, Patna office on date 23.12.2016 and met CE/Project-II(Mr. S.N.Sinha) in this regard, but CE/Project-II also did not agree with the old estimate.(3 years old) and advised for taking fresh estimate from BSPTCL Muzaffarpur and revised amount should be deposited.

Therefore, Railway has requested to include this in the agenda of OCC meeting for final discussion with BSPTCL/HQ Patna to arrive at a fruitful solution.

BSPTCL/ Railway may update.

#### **Deliberation in the meeting**

*Eastern Railway representative explained the matter and requested OCC for early solution to the matter.*

*BSPTCL informed that as the matter involves significant financial implication, so the issue may be discussed with the higher authority of BSPTCL.*

*Member Secretary discussed the issue with Director Projects (BSPTCL) during the meeting, appointment was fixed and as per his advice OCC requested Railway to discuss the issue with Director (Project) of BSPTCL to arrive at a fruitful solution.*

#### **Item No. B.11: Injection of infirm power from India Power Corporation (Haldia) Ltd.(3x150 MW)**

As informed, India Power is planning for commissioning of the 1<sup>st</sup> Unit of 150 MW very soon. It is required to inject infirm power as and when power is generated from the above mentioned unit upto 135 MW for smooth commissioning before we commence their commercial operation.

The required clearance for injecting infirm power to the tune of upto 135 MW may kindly be given in terms of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 dated 19<sup>th</sup> January,2009 and amendments made thereafter.

Further, it was known that they will be connected at 220kV Haldia S/Stn. of WBSETCL, in STU system which is around 2.8 km away from their Power Plant.

India Power/WBSETCL may update.

#### **Deliberation in the meeting**

*It was informed that IPC(H)L got clearance for synchronization of its 1<sup>st</sup> Unit of 150 MW capacity vide order of WBERC dated 09/02/2017. WBERC also approved the infirm power purchase agreement upto 130 MW from 1<sup>st</sup> Unit between IPC(H)L & IPCL for a maximum period of 90 days from the date of 1<sup>st</sup> synchronization.*

*IPCL shall obtain open access as applicable for delivery & drawal of infirm power. The delivery point will be 220 kV bus of New Haldia substation of WBSETCL and the drawal point will be 220 kV bus of J.K. Nagar substation of IPCL.*

#### **Item No. B.12: Status of 2X48 MW Dikchu HEP**

As intimated in 34<sup>th</sup> CCM,

- Dikchu HEP is a run-of –river hydropower project currently under advanced stages of construction with a licensed capacity of 96.0 MW (2x 48 MW) and is located on the Dikchu River, North District of Sikkim. Dikchu Hydro Power Project is being developed as a Build, Own, Operate and Transfer(BOOT) basis by **Greenko Group**. It envisages utilization of the flows of the river Dikchu a tributary of river Teesta for power generation on a run of river type development, harnessing a head of about 350m. Dikchu river drains a catchment area of about 240 sq km at the proposed diversion dam site with statutory clearances as follows:

<b>S.No.</b>	<b>Approval</b>	<b>Regulatory Authority</b>	<b>Status</b>
1.	DPR	State Government	DPR for 96 MW approved on 31.07.2008
2.	MOU/Implementation Agreement	State Government	Agreement signed with Government of Sikkim on 1/03/2006
3.	Techno Economic/ DPR Clearance from the State Technical Committee	State Government	Obtained on 28/11/2008
4.	Consent for Establishment (CFE)	State Pollution Control Board	CFE under both Air and Water Act is valid upto 31/03/2014
5.	Environmental Clearance	MOEF,GOI/State Govt.	Received on 01/04/02008

- Wet commissioning activities for 2x48 MW GE made Francis turbines and generators have started as on 26th January,2017. No LOAD Testing are under process for both units together.
- PGCIL specification complaint / ABT compliant 9 nos. Special Energy Meters(SEM) have been procured directly from L & T which are installed in both 132kV & 400KV GIS switchyard. Technical specification and raw data (npc file) have been vetted by ERLDC /PGCIL before installation in locations.
- Application for Electrical Inspection has been made & visit of the Inspector is proposed in 3rd week of February,2017.
- LILO connectivity with one circuit of 400kV Teesta III –Rangpo(Teesta III\_Kishenganj in future) is proposed by 3rd week of February,2017 subsequent to the inspection clearance.
- With physical link of PLCC established after LILO connectivity, data telemetry and protection settings with support from PGCIL are planned to be established simultaneously.
- Rangpo SPS is planned to be complied with as soon as the PLCC link is complete.
- Application has been submitted to ERLDC for new entity registration as well as opening of DSM/ UI accounts.
- Infirm generation is expected to start by 4th week of February,2017.
- COD of both units of Dikchu HEP is envisaged within March,2017

Dikchu may update. Members may note.

#### **Deliberation in the meeting**

*Dikchu informed that the LILO portion has been completed and for final stringing they need shutdown of 400 kV Teesta-III- Rangpo line for 2 days.*

*Teesta-III informed that shutdown will be allowed by 21.02.2017.*

**Item No. B.13: Future planning of trial run operation for commercial operation of Teesta – III units**

Tessta –III unit 1, 3, 5, 2 & 6 ( except unit – 4) were first time synchronised on date 14-01-17, 15-01-17, 24-01-17, 27-01-17 & 28-01-17 respectively. Since 14th January 2017, Teesta - III is injecting infirm power to the tune of 200 to 230 MW round the hours and some times more than 300 MW as per testing requirement. In this respect, Tessta – III is advised to intimate its future panning of testing activities and first time synchronisation schedule of unit – 4 and planning for trial operation for the commercial operation of its units. Before start of their trial operation for the commercial operation activities, Teesta – III has to confirm availability of stable data and voice communication to ERLDC. Moreover, Teesta – III, TPTL and Powergrid ER-II are also requested to give the commissioning details of 400 kV Teesta – III – Dikchu – Rangpo line for reliable evacuation of Teesta – III power.

Teesta – III, TPTL, POWERGRID ER - II may update.

**Deliberation in the meeting**

*ERLDC informed that they had not received any notice or information regarding trial operation of Teesta-III units.*

*Teesta-III informed that they are planning for trial operation of 5 units within Feb-March, 2017*

*OCC advised Teesta-III to strictly follow the IEGC guidelines for trial run/COD of units and submit their plan for trial run to ERLDC/ERPC at least 7 days beforehand.*

*Teesta-III agreed to comply all the provisions of IEGC before declaring the COD of their units.*

**Item No. B.14: Tripping Details(EL & DR) for ENICL and PKTCL -- Sterlite Power**

Sterlite Power vide letter dated 04.02.2017 informed that they were not getting the tripping details (EL&DR) for ENICL and PKTCL lines on regular basis from their respective sub-stations control room.

**TRIPPING DETAILS(EL & DR) FOR ENICL AND PKTCL**

**ENICL Lines:**

**LINE NAME**

Purnea –Biharshariff 400 KV D/C Line  
Alipurduar-Siliguri 400 KV D/C Line  
Alipurduar-Bongaigaon 400 KV D/C Line

**RESPECTIVE SUB-STATION**

Purnea S/S & Biharsharif S/S  
Alipurduar S/S & Siliguri S/S  
Alipurduar S/S & Bongaigaon S/S

**PKTCL lines:**

**LINE NAME**

Kharagpur-Chaibasa 400 kV D/C line  
Purulia –Ranchi 400 kV D/C line

**RESPECTIVE SUB-STATION**

Kharagpur S/S & Chaibasa S/S  
Purulia S/S & Ranchi S/S

Therefore, Sterlite Power has requested for providing the Event Logger and Disturbance Report time to time for their lines so that they can analyse the tripping pattern on time.

Sterlite/Powergrid/WBSETCL may update.

**Deliberation in the meeting**

*Powergrid informed that they are sending each and every tripping details to ERLDC as well as to ENICL/PKTCL. Further, Powergrid informed that the DR/EL data is being submitted to ERPC/ERLDC in PCC forum.*

**Item No. B.15: Charging of 132KV Patraru(DVC) - Patraru(JSEB) tie line and Kolaghat(DVC) - Kolaghat(WBSETCL) tie line--DVC**

It has been observed that 132KV, Patraru(DVC) - Patraru(JSEB) tie line and Kolaghat(DVC) - Kolaghat(WBSETCL) tie line are out since long. These lines are made on request to facilitate any shut-down/ maintenance purpose.

But, inter-state tie lines are meant for stability of any state network irrespective any power flow through it as per sec 40(a) of Elec Act 2003. It is learnt that at Kolaghat S/s of WBSETCL, all three ATRs have already been replaced and are all in service. DVC is supplying around 138MVA load to WBSEDCL between Burdwan S/s to Kharagpur S/s of DVC and it has been felt necessary that Kolaghat - Kolaghat tie be kept in service for reliability of power supply to WBSEDCL and stability of the grid. Similarly, Patraru(DVC) - Patraru(JSEB) tie line be also kept in service to obviate the low voltage problem at Patraru and North-karanpura S/s of DVC and stability of grid as well.

128<sup>th</sup> OCC felt that inter-state lines should be utilized to improve the reliability of the system and advised WBSETCL and JUSNL to charge 132KV Kolaghat(DVC) - Kolaghat(WBSETCL) and 132kV Patraru(DVC) - Patraru(JSEB) lines on continuous basis.

WBSETCL informed that 132kV Kolaghat(DVC) - Kolaghat(WBSETCL) line is being utilized during contingencies in radial mode and informed that ICT at Kolaghat may overload if the line charged in synchronous mode.

OCC advised to conduct a simulation study to verify the constraint before charging the line in synchronous mode. WBSETCL agreed.

DVC vide mail dated 10.01.17 informed that West Bengal SLDC has not agreed with synchronisation of DVC system with WBSETCL via 132kV network due to non availability of 132kV circuit breaker at WBSETCL end and high loading of 132kV KTPP - Kolaghat(WBSETCL) D/C with present peak load of Kolaghat S/S (above 130MW with traction)

*In 129<sup>th</sup> OCC, JUSNL informed that charging attempt for Patraru(DVC) - Patraru(JSEB) tie line will be taken by end of January, 2017.*

*Regarding Kolaghat(DVC)- Kolaghat(WBSETCL) line, OCC preferred to carry out a simulation study to know the cause of constraints.*

DVC and WBSETCL may update.

**Deliberation in the meeting**

*JUSNL informed that charging of Patraru(DVC) - Patraru(JSEB) tie line on continuous basis is not possible as it will be overloaded the JUSNL system in the case of contingency of TVNL units or one ckt of 220 kV Hatia-Ranchi. They submitted the relevant data regarding the line along with the load flow pattern.*

*OCC requested ERLDC/ERPC to carry out a system study to find the constraints related to closing of this tie.*

*Regarding Kolaghat(DVC)- Kolaghat(WBSETCL) line, OCC requested WBSETCL to submit a official communication mentioning the anticipated constraints/problems due to closing of the said tie. After that ERLDC/ERPC may carry out a system study to find out the constraints. OCC also requested WBSETCL to provide the relevant data for carrying out the system study.*

*WBSETCL agreed.*

**Item No. B.16: HIGH AMOUNT OF DEVIATION CHARGES PAYABLE BY BSEB ON ACCOUNT OF M/s. TALA HEP**

SBPDCL vide letter dated 07.01.17 informed that the deviation charges incurred by M/s TALA HEP are to be borne by its beneficiaries, and BSEB being a major beneficiary, having a share of 25.5% has to bear a major portion of these deviation charges.

For the last 8 weeks, it has been observed, to their great concern that the deviation charges incurred by M/s TALA HEP have been continually high, amounting to as high as few crores per week. A summary report of the amount incurred by M/s TALA HEP as deviation charges, and consequently the amount to be borne by BSP(H)CL erstwhile BSEB, is attached as a table at **Annexure- B.16.**

From the statistics in this table; & discussion with ERLDC, it was concluded that a major percentage of bill for UI & Deviation payable by BSP(H)CL erstwhile BSEB, is on account of huge deviation charges incurred by M/s TALA HEP.

As such, ERLDC should keep scheduled generation near to actual generation or devise a mechanism to make deviation zero or minimum. Beneficiaries should not be charged for the high declared capacity (DC) given by TALA or CHUKHA HEP, as they are not responsible for the high mismatch between scheduled generation and actual generation of Bhutan generating station.

So, it is requested that the future scheduling for power purchase on behalf of M/s TALA HEP and M/s CHUKHA HEP should be done keeping in mind the concerns of its beneficiaries.

*MS, ERPC assured that the matter is under consideration and will be resolved at the earliest.*

*The matter is being reviewed by ERPC and ERLDC.*

ERPC/ERLDC may update.

**Deliberation in the meeting**

*ERPC informed OCC that the matter has been analysed and it was found that the BSPHCL's assertion about the payment of high deviation charge is not correct.*

*Further, ERPC explained in detail to BSPHCL/SBPDCL regarding the adjustment of payments due to deviation by Tala.*

**Item No. B.17: HIGH VOLTAGE PROBLEM IN 400KV MERAMUNDALI GRID S/S**

GRIDCO vide letter dated 07.01.17 intimated that presently Odisha is going through very high voltages at 400kV bus of Meramundali, Duburi and Mendhashal grid S/S. The situation is further worsened due to high reactive power flow from Meramundali to Angul pooling sub-station, from Duburi to Meramundali sub-station and from Kuchei to Duburi sub-station. It may be noted that, PGCIL has installed two nos. of 330 MVAR Bus reactors at Angul 765kV substation and two nos. of 125 MVAR Bus reactors at Ancul 400kV substation, thus resulting high reactive power flow from Meramundali to Angul & Duburi to Meramundali grid S/S. In view of the above OPTCL suggests the following as short term and long term measures to mitigate the high voltage issue as well as to improve the high reactive power flow situation.

**Short term measure**

- OPTCL will install 80 MVAR reactor at Meramundali 400kV S/S.
- The Angul-Meramundali Double circuit tie to be opened at both ends.

### **Long term measure**

- The Meramundali-Angul Double circuit will be terminated at Meramundali (B). A letter regarding the above change has already been forwarded to CEA and will be placed in the next Standing Committee meeting of CEA. Meramundali(B) will be a new 400kV substation of OPTCL, approved by CEA and the work order to be issued shortly.

In view of the above and as the high voltage situation is menacing, it is requested to grant permission for the short term measures, mentioned above, to get relief from the high voltage issue and high reactive power flow. The system in the above condition will remain stable.

*In 129<sup>th</sup> OCC, OPTCL informed that they are incurring substantial financial loss on account of reactive charges due to this overvoltage problem at 400 KV Meramundali substation and requested to explore the high voltage scenario by opening of 400 kV Angul-Meramundali D/C tie on trial basis.*

*ERLDC informed that the same may be granted as per real time grid conditions.*

*Further, OPTCL requested OCC to take up the issue of opening of LILOs of 400 kV Talcher-Meramundali & Bolangir –Meramundali lines at 765/400 kV Angul S/s which was already decided in 17<sup>th</sup> SCM meeting.*

*OCC viewed that as it is the matter related to Standing Committee of ER the same may be taken up with CEA/CTU.*

*MS assured to interact on this issue with CTU.*

*Subsequently, MS took up the issue with CTU and it was agreed that ERLDC will carry out study for Reactive power flow in OPTCL system.*

*ERLDC vide mail dated 06.02.17 has sought some data from OPTCL for carrying out the study.*

*ERLDC may present the load flow study.*

### **Deliberation in the meeting**

*ERLDC presented the study results and informed the following:*

- *The voltage at Meramundali is increasing during winter season due low demand at Meramundali, Dubri and Mendhasal and insufficient reactive power support.*
- *In the present scenario the 765/400 kV Angul S/s is acting like sink of Reactive power for OPTCL system in around 400kV Meramundali S/s.*
- *With opening 400kV Angul-Meramundali line the export of reactive power to the ISTS network is reduced drastically but the voltage at 400kV Meramundali S/s is increasing by 4 kV which may affect the sub-station equipment.*
- *Further due to outage of one ckt of 400 kV Meramundali- Mendhasal the voltage at Meramundali is on higher side. This line may be restored at the earliest.*

*OPTCL informed that 400 kV Meramundali- Mendhasal line will be restored within a week and 315 MVA, 400/220kV ICT will be restored by 15<sup>th</sup> March, 2017.*

*OPTCL informed that all the generating stations should cooperate to solve this high voltage menace and also requested NTPC to absorb maximum possible reactive VAR in order to reduce the voltage at Meramundali.*

*MS-ERPC informed that CTU will give their view regarding LILO connectivity at TCC meeting.*

*OCC advised OPTCL to plan for adequate reactive power compensation at 400kV Meramundali, New Dubri and Mendhasal S/s as a long term a measure.*

**Item No. B.18: Restoration of PLCC system of important JUSNL ties**

In 119<sup>th</sup> OCC, JUSNL informed that the following:

- a) In 220 KV Chandil –Santaldih line auto-reclosure has been enabled and termination done in PLCC panels at Chandil end but due to non-availability of PLCC panels at Santaldih(WBPDCL) end the A/R and PLCC scheme could not be activated.
- b) In 220 KV Ramchandrapur-Joda line auto-reclosure has been enabled and termination done in PLCC panels at Ramchandrapur end but due to non-availability of PLCC panels at Joda (OPTCL) end the A/R and PLCC scheme could not be implemented.

Further, it was informed that JUSNL is ready to share their standby PLCC panels (BPL make) with WBPDCL (for Santaldih end) and OPTCL (for Joda end) to complete the PLCC schemes of both the above lines.

*In 128<sup>th</sup> OCC, OPTCL informed that PLCC panels will be installed by 2<sup>nd</sup> week of January 2017.*

*In 129<sup>th</sup> OCC, OPTCL informed that PLCC panel will be commissioned by January,2017.*

*WBPDCL informed that PLCC system at santaldih end has been commissioned on 31.12.16 but the same could not be put into service due to some problem at Chandil (JUSNL) end LMUs and CVT points.*

*Subsequently, JUSNL vide letter dated 27.01.2017 intimated that PLCC for 220 kV Chandil-Santaldih line has been tested and commissioned successfully on 25.01.17.*

JUSNL/OPTCL may update.

**Deliberation in the meeting**

*WBPDCL informed that the PLCC was activated but the auto-reclosure could not be put into service as the R-Ph pole of Circuit Breaker is not getting closed during auto-reclosure operation. The same is taken up with the OEM (i.e. ABB) and they will be rectifying the CB.*

*OPTCL informed that PLCC panels at 220kV Joda end will be commissioned within a week. JUSNL informed that the Ramchandrapur end is ready in all respect for implementation of PLCC.*

**Item No. B.19: Concerned members may update the latest status.**

**B.19.1: Commissioning of 400 kV Ind-Bharath to Jharsuguda D/C (dedicated line)**

*In 126<sup>th</sup> OCC, Ind-Bharath informed that the CEA inspection for the line has been completed on 17.10.16 and PLCC work is In progress. They are expected to complete the line in all respect by first week of November, 2016.*

*OCC advised IBEUL to submit all the clearances (CEA clearance etc.) along with completion of line and communication system so that a special meeting could be convened before starting the commercial power transaction from IBEUL for final consideration of all aspects.*

*In 34<sup>th</sup> TCC, it was informed that construction of line has been completed but CEA clearance is still awaited.*

*In 128<sup>th</sup> OCC, IBEUL informed that the line will be commissioned by January 2017.*

In 129<sup>th</sup> OCC, IBEUL informed that the commissioning is delayed due to severe ROW problems however, it is expected to be commissioned by February 2017.

IBEUL may update.

### **Deliberation in the meeting**

IBEUL informed that construction of the line has been completed and ready for commission. The line will be commissioned by 28<sup>th</sup> February, 2017.

OCC advised IBUEL to communicate the status to ERPC and ERLDC after commissioning of line for commencement of commercial transaction.

OCC advised ERPC secretariat to check the readiness of Protection co-ordination, communication both data and voice and all other details in interaction with ERLDC before permitting IBEUL for commercial evacuation of power.

### **B.19.2: Status of construction of 400 kV Sterlite-Jharsuguda D/C sections**

In 34<sup>th</sup> TCC, Vedanta explained the status of construction with a presentation. Updated status along with the target date is given below:

Activities	Nos	Status as on 15-Nov-16	Target completion	Remarks
Tower Foundation	64	62	30-Dec-16	4 DD+30 tower foundation concrete: volume increased from 742 m3 to 1118 m3
Tower Erection	64	<b>55(3 are in progress)</b>	10-Feb-17	757 MT balance tower material to be erected.(DD+30 is 7 )
Stringing /OPGW Cabling & Testing	20.5 Km	<b>5.5 Km completed.</b>	28-Feb-17	Stringing can be started only after harvesting. i.e. Dec-16.
Sub station Bay	2	Equipment Erection, Cable Trench, Earthing Completed	Jan, 17	CR Panel erection, cabling & termination to be done, Testing to be carried out. CEA inspection to be done post completion
Statutory clearances	-	-	15-Mar-17	CEA inspection of line to be done Report generation to be done.
Line & Bay Charging	-	-	25-Mar-17	ERLDC clearance for line charging after attending CEA report punch points

Vedanta informed that significant progress has been made in last 5 months and the line will be commissioned by March, 2016. Vedanta requested to extend the removal of the LILO till March, 2017 as final commitment.

OPTCL added that since Vedanta has made substantial progress during last 5 months and the dead line for removal of the LILO may be extended till February, 2017.

TCC agreed and advised Vedanta to submit a fresh undertaking in affidavit form to CTU and ERPC stating that the dedicated line will be completed by 28.02.2017 with no further extension. Failing which, CTU/ERLDC is authorized to open the LILO with effect from 01.03.2017.

In 127<sup>th</sup> OCC, Vedanta updated that 43 towers erection have been completed.

OCC advised Vedanta to submit the affidavit as per the decision of 34<sup>th</sup> TCC latest by 30.11.2016.



OCC also advised Vedanta to complete the line by February, 2017 as decided by ERPC. Vedanta assured.

Vedanta vide mail dated 06.02.17 updated the latest status. The latest status is enclosed at **Annexure-B.19.2**.

Vedanta may update.

### **Deliberation in the meeting**

*Vedanta updated the status as above.*

*OCC reminded Vedanta that the target date for completion of line is 28<sup>th</sup> Feb, 2017 as decided by ERPC and from 1<sup>st</sup> March, 2017 the LILO will be opened by CTU.*

*OCC referred the issue to 35<sup>th</sup> TCC/ERPC.*

## **B.19.3: Status of Bus Splitting schemes in Eastern Region**

### **A. Bus Splitting of Powergrid Sub-stations**

As per decision of Standing Committee of ER CTU was entrusted to do Bus splitting at 400 kV Maithon, Durgapur & Biharsharif S/Ss or ER. The latest status on the same are:

- 400 kV Maithon ---Completed
- 400 kV Durgapur--Completed
- 400 kV Biharsharif—Foundation work has been completed but shutdown are yet to be received to complete the work.

*In 127<sup>th</sup> OCC, Powergrid informed that they are availing shutdown from 28.11.16.*

*In 128<sup>th</sup> OCC, Powergrid informed that bus splitting scheme has been implemented for Bus-II of 400kV Biharsharif S/s and Bus-I will be completed by 2<sup>nd</sup> week of January 2017.*

*In 129<sup>th</sup> OCC, Powergrid informed that bus splitting scheme for Bus-I will be completed by February, 2017.*

Powergrid/BSPTCL may update.

### **Deliberation in the meeting**

*Powergrid informed that physical bus splitting at 400kV Biharsharif S/s has been completed. Protection part is yet to be completed.*

*Powergrid added that bus splitting at 400kV Biharsharif S/s will be commissioned by March 2017.*

### **B. Bus Splitting of Kahalgaon STPS Stage I&II, NTPC**

In 24<sup>th</sup> ERPC meeting held on 27.04.2013, ERPC advised NTPC to go ahead with the bus-splitting scheme as it is a technical requirement for safe, secure operation of the grid.

In 32<sup>nd</sup> TCC, NTPC informed that they are going ahead with the implementation of Bus Splitting of Kahalgaon STPS Stage I&II and the implementation is expected to be completed by December, 2018.

In 126<sup>th</sup> OCC, NTPC has given the present status as follows:

- 400/132kV Switchyard package - bid opened on 14.03.16. Awarded on 04.05.2016.
- Site levelling – Site levelling package awarded, expected to be completed by November, 2016.
- Transformer package and Shunt reactor– have been awarded.

*In 127<sup>th</sup> OCC, NTPC informed that the bus splitting will be completed by December, 2018.*

*In 128<sup>th</sup> OCC, NTPC informed that site levelling of 400kV side has been completed and 132kV side would complete by 31<sup>st</sup> March, 2017.*

*In 129<sup>th</sup> OCC, NTPC informed that site levelling has been completed and the target date for final completion will be maintained.*

NTPC may update.

#### **Deliberation in the meeting**

*NTPC informed that the work is in progress and the target date for final completion will be maintained.*

#### **B.19.4: 11KV Auxiliary power supply of 400KV Berhampore Powergrid Substation.**

*In 34<sup>th</sup> TCC, WBSEDCL informed that the construction of dedicated line has been delayed due to ROW issues. The same has been resolved now and the construction of dedicated line will be completed by December, 2016.*

*WBSEDCL added that cable needs to be laid out for highway crossing for which cost estimate will be given to Powergrid within a week.*

*Powergrid agreed to do the payment after receiving the estimate.*

*WBSEDCL assured that on receipt of deposit from Powergrid all efforts will be made to resolve the issue on reasonable time.*

*In 128<sup>th</sup> OCC, WBSEDCL informed that work is in progress. PGCIL informed that requisite amount will be deposited shortly.*

*In 129<sup>th</sup> OCC, PGCIL informed that requisite amount will be deposited by tomorrow (i.e. 18.01.2017). WBSEDCL informed that work is in progress and expected to be completed by another 10 days.*

WBSEDCL/Powergrid may update.

#### **Deliberation in the meeting**

*WBSEDCL informed that the requisite amount has been received from Powergrid and the work will be completed by 15<sup>th</sup> March, 2017.*

#### **B.19.5: Run-back scheme of Sasaram 500MW HVDC B-t-B converter -- ERLDC**

It is understood that the following run-back schemes are functional for the 500 MW B-t-B HVDC converter at Sasaram:

1. Tripping of any circuit of 400kV Biharshariff-Sasaram D/C line – reduction of HVDC power order to 250 MW
2. Tripping of both circuits of 400kV Biharshariff-Sasaram D/C line – complete blocking of the HVDC converter.

In this connection it is stated that the above run-back conditions were relevant when 400kV Biharshariff-Sasaram D/C line was the only AC source on the East side bus. However, at present due to existence of 765kV Sasaram-Fatehpur 765kV line along with 765/400kV Sasaram ICT, there would be no loss of AC voltage of the 400kV East bus, even if both circuits of Biharshariff-Sasaram 400kV D/C line trip.

It is to mention that on 19-12-16, the HVDC Sasaram power order had to be reduced to 250MW when 400kV Biharshariff-Sasaram-I was taken under planned shutdown. Thereafter, at 12:43 Hrs, the other 400kV circuit Biharshariff-Sasaram-II tripped due to transmission of DT signal from Biharshariff to Sasaram leading to complete blocking of the converter. However, such blocking was unwarranted as the 765kV Sasaram-Fatehpur line together with the 765/400kV ICT at Sasaram was still in service.

It is therefore suggested that the existing run-back scheme may be activated only when Sasaram 765/400kV ICT or Sasaram-Fatehpur 765kV line is under outage and bypassed under normal conditions. The scheme may be further reviewed when at least two units of Nabinagar TPS commence firm generation.

*ERLDC explained the scheme in 128<sup>th</sup> OCC.*

*OCC decided to implement the revised scheme and advised Powergrid to modify the scheme in coordination with CTU.*

*In 129<sup>th</sup> OCC, Powergrid informed that for implementing the scheme there is a requirement of modification in CCU which will be done by the OEM (Alstom). The same will be implemented by March, 2017.*

Powergrid/ERLDC may update.

### **Deliberation in the meeting**

*Powergrid informed that the CCU at Sasaram is old and it is not possible to implement the revised scheme. So, the CCU needs to be changed for implementation of new scheme.*

#### **B.19.6: 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 126<sup>th</sup> OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

<b>Sl. No.</b>	<b>Name of the transmission line</b>	<b>Completion schedule</b>
<b>1.</b>	<b>2x315MVA 400/220kV Bolangir S/s</b>	
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 May, 2017.</b>
b.	LILo of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S	Charged on 04.05.16
<b>2.</b>	<b>400/220 kV Keonjhar S/S</b>	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	By 2017.
b.	Keonjhar (PG)-Turumunga (OPTCL) 220kV D/C line	By 2019.
<b>3.</b>	<b>400/220kV Pandiabil Grid S/s: Expected by June'16</b>	
a.	Pratapsasan (OPTCL)-Pandiabil (PG) 220 kV D/C line	Dec, 2017.
b.	LILo of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	<b>May, 2017</b>

OPTCL may update.

#### **Deliberation in the meeting**

*OPTCL updated the status as above.*

#### **B.19.7: 220 kV inter-connecting lines of JUSNL with 2x315 MVA, 400/220 kV sub-stations at Chaibasa, Daltonganj & Dhanbad**

In 125<sup>th</sup> OCC, JUSNL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
<b>1.</b>	<b>Chaibasa 400/220kV S/s</b>	
a.	Chaibasa (POWERGRID) – Chaibasa (JUSNL) 220kV D/c	Completed.
b.	Chaibasa (POWERGRID) – Ramchandrapur (JUSNL) 220kV D/c	<b>March, 2017</b>
<b>2.</b>	<b>Daltonganj 400/220/132kV S/s: Expected by Mar'17</b>	
a.	Daltonganj (POWERGRID) – Latehar 220kV D/c	<b>By Dec, 2017.</b>
b.	Daltonganj (POWERGRID) – Garhwa 220kV D/c	Matching with S/s
c.	Daltonganj (POWERGRID) – Daltonganj (JUSNL) 132kV D/c	Matching with S/s
d.	Daltonganj (POWERGRID) – Chatarpur/Lesliganj 132kV D/c	Matching with S/s
<b>3.</b>	<b>Dhanbad 400/220 kV S/s: Awarded under TBCB</b>	
a.	Dhanbad – Dhanbad (Govindpur) (JUSNL) 220kV D/c	Matching with S/s

JUSNL may update.

#### **Deliberation in the meeting**

*JUSNL updated the status as above.*

#### **B.19.8: 220 kV inter-connecting lines of WBSETCL with 400/220 kV, 2x315 MVA Alipurduar & 2x500 MVA Rajarhat sub-stations**

In 126<sup>th</sup> OCC, WBSETCL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
<b>1.</b>	<b>2x315MVA, 400/220kV Alipurduar sub-station</b>	
a.	Alipurduar (POWERGRID) – Alipurduar (WBSETCL) 220kV D/c ( <b>Twin moose</b> )	April, 2017
<b>2.</b>	<b>2x500MVA, 400/220kV Rajarhat --- by Feb, 2017</b>	
a.	Rajarhat-N. Town-3 (WBSETCL) 220 kV D/C line	Matching
b.	Rajarhat-N. Town-2 (WBSETCL) 220 kV D/C line	<i>June, 2018</i>
c.	Rajarhat- Barasat (WBSETCL) 220 kV D/C line	<i>June, 2018</i>

WBSETCL may update.

#### **Deliberation in the meeting**

*WBSETCL updated the status as above.*

#### **Item No. B.20: Third Party Protection Audit**

##### **1. 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
Powergrid	54	37	68.52
NTPC	16	14	87.50
NHPC	1	1	100.00
DVC	40	26	65.00
WB	68	27	39.71
Odisha	59	38	64.41
JUSNL	34	16	47.06
BSPTCL	16	5	31.25
IPP (GMR, Sterlite and MPL)	5	5	100.00

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.

OCC advised all specially JUSNL and BSPTCL to send the revised DPRs at the earliest after clarifying the queries if any.

Members may comply.

### **Deliberation in the meeting**

*Members noted for compliance.*

## **2. Schedule for 2<sup>nd</sup> Third Party Protection Audit:**

The latest status of 2<sup>nd</sup> Third Party Protection audit is as follows:

1) Jeerat (PG)	Completed on 15 <sup>th</sup> July 2015
2) Subashgram (PG)	Completed on 16 <sup>th</sup> July 2015
3) Kolaghat TPS (WBPDCCL)-	Completed on 7 <sup>th</sup> August 2015
4) Kharagpur (WBSETCL) 400/220kV -	Completed on 7 <sup>th</sup> August 2015
5) Bidhannagar (WBSETCL) 400 &220kV	Completed on 8 <sup>th</sup> September, 2015
6) Durgapur (PG) 400kV S/s	Completed on 10 <sup>th</sup> September, 2015
7) DSTPS(DVC) 400/220kV	Completed on 9 <sup>th</sup> September, 2015
8) Mejia (DVC) TPS 400/220kV	Completed on 11 <sup>th</sup> September, 2015
9) 400/220/132kV Mendhasal (OPTCL)	Completed on 2 <sup>nd</sup> November, 2015
10) 400/220kV Talcher STPS (NTPC)	Completed on 3 <sup>rd</sup> November, 2015
11) 765/400kV Angul (PG)	Completed on 4 <sup>th</sup> November, 2015
12) 400kV JITPL	Completed on 5 <sup>th</sup> November, 2015
13) 400kV GMR	Completed on 5 <sup>th</sup> November, 2015
14) 400kV Malda (PG)	Completed on 23 <sup>rd</sup> February, 2016
15) 400kV Farakka (NTPC)	Completed on 24 <sup>th</sup> February, 2016
16) 400kV Behrampur(PG)	Completed on 25 <sup>th</sup> February, 2016
17) 400kV Sagardighi (WBPDCCL)	Completed on 25 <sup>th</sup> February, 2016
18) 400kV Bakreswar (WBPDCCL)	Completed on 26 <sup>th</sup> February, 2016
19) 765kV Gaya(PG)	Completed on 1 <sup>st</sup> November, 2016
20) 400kV Biharshariff(PG)	Completed on 3 <sup>rd</sup> November, 2016
21) 220kV Biharshariff(BSPTCL)	Completed on 3 <sup>rd</sup> November, 2016

The list of observations for the above sub-stations is already available at ERPC website ([www.erpc.gov.in](http://www.erpc.gov.in)). Respective constituents are requested to comply and submit the report to ERPC for regular update.

Members may note.

### **Deliberation in the meeting**

*Members noted.*

#### **Item No. B.21: Inspection of Under Frequency Relays (UFR)**

In 124<sup>th</sup> OCC, DVC informed that the UFR relays will be delivered by August, 2016 and the UFRs at 220/132/33 KV Ramgarh S/s will be replaced by next month.

In 125<sup>th</sup> OCC, DVC informed that the UFR relays are in transit and the UFRs at 220/132/33 KV Ramgarh S/s will be replaced by next month.

In 127<sup>th</sup> OCC, DVC informed that the UFR relays at 220/132/33 KV Ramgarh S/s will be replaced by December, 2016.

In 128<sup>th</sup> & 129<sup>th</sup> OCC, DVC informed that the UFR relays at 220/132/33 KV Ramgarh S/s will be replaced by January, 2017.

**The proposed UFR audit schedule for Third quarter of 2016-17 is placed below:**

<b>Sl No</b>	<b>Proposed Date</b>	<b>Substation/feeder inspected by the sub-group</b>
1	Feb, 2017	220/132/33 KV Sampatchak of BSPTCL
2		132/33 KV Purnea of BSPTCL
4	Mar , 2017	220/132/33 KV Kalyaneswari of DVC
5		220/132/33 KV New Bishnupur of WBSETCL
6		132/33 KV Old Bishnupur of WBSETCL
7	Mar 2017	BRS (Liluah S/Stn.) of CESC

Members may decide.

### **Deliberation in the meeting**

*Members noted.*

#### **Item No. B.22: 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.

NTPC communicated their activity of the preparation of Crisis Management Plan for countering the cyber attacks vide letter dated 2<sup>nd</sup> August, 2013.

In 113<sup>th</sup> OCC, Member Secretary informed that during interaction with consultants of Grid Study Committee, NLDC agreed that they will plan for conducting workshops on crisis management plan for Cyber Security and few workshops will also be held in Eastern Region.

CESC vide letter dated 22.08.15 had furnished their status of the preparation of Crisis Management Plan (CMP) for Cyber attacks in their system.

Members may note and comply.

### **Deliberation in the meeting**

*Members noted.*

#### **Item No. B.23: 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.

In 85<sup>th</sup> OCC NTPC informed that, NTPC-Farakka has been certified with IS 18001. Other constituents including OHPC requested to interact with BIS with intimation to ERPC and get certified as per CEA direction. The matter is getting reviewed by highest authorities with top priority.

In 88<sup>th</sup> OCC NTPC informed that, all NTPC stations in Eastern Region are certified with IS 18001. NHPC informed that, Teesta is also certified with IS 18001. After that, OHPC and CESC informed that their stations are certified with IS18001.

In 104<sup>th</sup> OCC, WBPDCCL informed that Bandel TPS is certified with IS 18001.

OPTCL vide letter No. TB-SO-MISC-9/2010/1914 dated 20.12.2014 had proposed to go for IS 18001:2007 certification as per direction of CEA.

In 113<sup>th</sup> OCC, CESC informed that Budge-Budge Generating station (3x250 MW) has renewed their certification of BS 18001:2007.

In 121<sup>st</sup> OCC, it was informed that Kolaghat Generating station of WBPDCCL has received certification of IS 18001:2007 from BIS on 29.04.2016.

In 124<sup>th</sup> OCC, WBPDCCL informed that Bakreswar Generating station has received certification of IS 18001:2007 from BIS.

Members may note and update the status.

### **Deliberation in the meeting**

*WBPDCCL informed that Sagardighi Thermal Power Project has also received certification of IS 18001:2007 from BIS in December, 2016.*

#### **Item No. B.24: FORMULATION OF A SKILL PLAN FOR POWER SECTOR BASED ON THE ASSESSED SKILL GAP IN THE SECTOR**

CEA vide letter dated 04.07.16 intimated that a meeting on the above subject was held in the Ministry of Power, New Delhi on 1<sup>st</sup> July, 2016. The meeting was Chaired by the Additional Secretary Shri B.P.Pandey. Power Sector Skill Council (PSSC) made a presentation on the subject. The meeting was attended by the representatives of BEE, PSUs, CEA, PGCIL, NPTI, PFC etc.

The main emphasis made by the Additional Secretary are as follows:

- The Report has to be submitted by PSSC by 10<sup>th</sup> of July, 2016 clearly indicating the needs of training and skill gaps in power sector.
- All the data captured, analysis made and other facts in the draft skill plan have to be validated by CEA before finalization of the Report.

In this regard officials from PSSC may visit various formations of CEA and / or circulate the Draft Report for obtaining the relevant inputs and validation of the data gathered by them. Chairperson CEA has been apprised of the same.

Further to this, MoP vide their letter No.7/5/2015-T&R dated 01.07.2016 have sought information in the matter. Based on the letter of MoP a proforma has been prepared. It is requested that the relevant information pertaining to the sector/sub-sector as per the attached proforma (Attached at **Annexure-B.24**) may please be sent to CEA (by mail: ceahrd@gmail.com).

124<sup>th</sup> OCC advised all the constituents to send the relevant information as per the proforma.

Constituents may note and comply.

#### **Deliberation in the meeting**

*Members noted for compliance.*

#### **Item No. B.25: Energy Generation data management from Renewable Energy Sources**

RES development Division, CEA has been receiving monthly generation details and installed capacity of Renewable Energy Sources from respective SLDCs and other authorized agencies. Some discrepancies has been found in the data as received by CEA and MNRE.

Constituents are requested to reconcile/confirmed the correct information at the earliest.

In 120<sup>th</sup> OCC, all the SLDCs were advised to submit the data to CEA as per the format given in **Annexure- B.25** with a copy to ERPC Secretariat.

In 121<sup>st</sup> OCC, SLDC West Bengal and SLDC Odisha informed that they have submitted the relevant data to CEA.

SLDCs may update.

#### **Deliberation in the meeting**

*Members noted for compliance.*

#### **Item No. B.26: Compilation of data for meeting Renewable Energy targets of 175 GW by 2020 -- Reference from MNRE**

CEA vide letter dated 29.03.16 has referred Ministry of Power letter no. 23/2/2005-R &R(Vol-XI), dated 22.03.2016 & MNRE letter dated 02.03.2016 regarding compilation of data for meeting Renewable Energy targets of 175 GW by 2020.

Concerned State Utilities /Generating companies are requested to submit data of their respective control areas.

Members may update.

#### **Deliberation in the meeting**

*Members noted for compliance.*



## **Item No. B.27: Reporting of Energy generated from renewable resources on daily basis--- ERLDC**

Government of India has set an ambitious target to achieve 175 GW of renewable generation by year 2022. Renewable energy sources(RES) development division of CEA alongwith MNRE is continuously monitoring the progress in installation of renewable resources and also collecting actual generation data on monthly basis. However the energy injected from the renewable generating plants into the grid also needs to be monitored on daily basis and incorporated in the reports by NLDC, to determine the correct percentage of energy mix for whole country on any particular day. Thus the renewable generators/ concerned SLDC may furnish following data on daily basis:

- a) Grid connected RES whose scheduling and metering is done as regional entity : Maximum/Time and energy injected(MWh) for the previous day (from the SEM meters on a daily basis till the AMR is commissioned/working)
- b) Grid connected RES which is under state purview: Maximum/Time and energy injected(MWh) for the previous day. Concerned SLDCs to compile station wise / connection point wise energy injected into the state grid and send it RLDC on a daily basis.

The above data may be sent by mail to [erldc.cal@gmail.com](mailto:erldc.cal@gmail.com) positively by 01:00hrs of the day i.ro data for the previous day. This is essential as the power supply report has to be sent by early morning hours for the previous day.

*In 126<sup>th</sup> OCC, ERLDC informed that the data for renewable generation on daily basis is required from the constituents.*

*SLDC Odisha informed that generation data for renewable energy sources connected at 132 kV is possible but at lower voltage level connected to the distribution network is difficult to get. Moreover, the data on monthly basis is possible instead of daily basis.*

*WBSEDCL informed they will look into the matter and submit the renewable generation data to ERLDC.*

*OCC advised all the respective constituents to submit the data along with their comments, if any.*

*In 127<sup>th</sup> OCC, ERLDC informed that though they have received some data, but generation data on daily-basis is yet to be furnished by the respective generators.*

*OCC advised all the respective constituents to look into the matter and make possible to submit the data on daily-basis.*

*In 128<sup>th</sup> OCC, ERLDC informed that they are receiving the requisite data from Odisha and NTPC Talcher stations.*

*OCC advised all the other SLDCs to submit the data to ERLDC.*

*In 129<sup>th</sup> OCC, West Bengal informed that they will submit the information soon.*

*OCC advised all the other SLDCs to submit the data to ERLDC.*

All SLDCs may kindly update.

### **Deliberation in the meeting**

*ERLDC informed that they are receiving the requisite data only from Odisha and NTPC Talcher stations.*

*OCC advised all the other SLDCs to submit the data to ERLDC.*

**Item No. B.28: Data of Peak Demand – Submission of hourly power cut data**

The peak demand met figure calculated by CEA is a part of the monthly Power Supply Position Report prepared by CEA, based on the data provided by five Regional Power committee (RPCs), who in turn collect the data from State / UTs and RLDCs. As per the present methodology being adopted for calculation of States /Regional peak demand met, the figure of peak demand met at any time in the month is taken as peak demand met for the month. For all India monthly peak demand met, the sum of five regional peaks met, which may occur at different points of time is taken.

The above methodology has been reviewed and it has been decided with the approval of Chairperson, CEA that Peak demand Met and Peak Demand in the country should be based on hourly all India demand data. The matter was taken up with POSOCO for getting the hourly data of peak demand met for each month in respect of all the regions in the country in the first week of following month and they have assured to furnish the same. To calculate the demand, data of hourly scheduled and unscheduled power-cuts / load shedding is also required, which is not available with POSOCO.

It is, therefore, requested that hourly figures of scheduled/ unscheduled power cuts/load shedding data may be collected from States / UTs and the same may be sent to CEA every month as per above schedule in the enclosed format, in spread sheet, so that hourly figures of peak demand can be calculated and incorporated in Power Supply Position report.

This data for a month may kindly be sent in the first week of each month, along with PSP data, starting from the data for the month of February, 2015. The format for sending the data of hourly scheduled and unscheduled power-cuts / load shedding has already been circulated.

In 110<sup>th</sup> OCC meeting, OCC advised all the concerned utilities (BSPTCL, JUSNL, OPTCL, WBSETCL & Sikkim) to send the data of hourly scheduled and unscheduled power-cuts / load shedding by mail to mserpc-power@nic.in latest by first week of each month.

*In 129<sup>th</sup> OCC, JUSNL and BSPTCL agreed to furnish the data.*

For the month of January, 2017 data has been received from OPTCL, CESC.

JUSNL BSPTCL, DVC &WBSETCL may update.

**Deliberation in the meeting**

*JUSNL and BSPTCL informed that they will submit the data soon.  
OCC requested others to furnish the data at the earliest.*

**Item No. B.29: Reasons for demand –supply gap and its variation -- Agenda by NPC**

It was deliberated in the 4<sup>th</sup> NPC meeting that monthly power supply position prepared & published by CEA based on the data furnished by the states reflected shortages in almost all the states. However, a number of those states intimated adequate availability of power. This meant that the deficit / shortage in such states was actually not the deficit in true sense but demand - supply gap due to reasons other than shortage of power. The other reasons for the demand - supply gap could be inadequate availability of power, transmission constraint, distribution constraint, financial constraint etc. The reason for demand –supply gap needed to be clearly mentioned to reflect true picture of power supply position in different states and also to invite attention of various agencies including policy makers to the specific problem areas in the power sector for suitable solution.

It was agreed by all the RPCs to advise the states in their respective regions to intimate broad break-up of demand –supply gap due to various reasons, or at least, the main reason(s) for demand supply in each month.

*In 129<sup>th</sup> OCC, all the constituents are advised to comply.*

Members may update.

### **Deliberation in the meeting**

*Members noted.*

#### **Item No. B.30: Transfer capability determination by the states -- Agenda by NPC**

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.

33<sup>rd</sup> TCC felt that grid operator should have the information on how much power they can export and import and they should restrict to that figures in order to avoid major grid disturbances.

Accordingly, TCC advised all the constituents to place the details in monthly OCC meetings till they upload the information in their respective websites.

*In 126<sup>th</sup> OCC, OCC advised all the SLDCs to mention the constraints along with ATC/TCC figures.*

*WBSETCL is uploading the ATC/TCC figures in their website.*

*OCC advised DVC, JUSNL and Odisha to upload ATC/TTC figures along with the constraint details in their website.*

*OCC advised Bihar to compute ATC/TTC figures and submit to ERPC and ERLDC at the earliest.*

*In 129<sup>th</sup> OCC, BSPTCL informed that they will compute their ATC/TTC and furnished to ERPC/ERLDC.*

#### ***Import TTC for Feb 2017***

State	TTC (MW)	Reliability Margin	ATC (MW)	Remarks
WBSETCL	3960	300	3660	Not mentioned
OPTCL	1447	80	1367	Outage of one 220kV Meramundali-BhanjanagarCkt.
DVC	Not received			Received for month of Jan 17
BSPHCL	Not received			
JUSNL	713	100	613	1) 220 kV D/C Ranchi- Hatia-II 2) 132 kV Jamtara- Maithon 3) 132 kV Ramchandrapur- Adityapur line
SIKKIM	Not received			

Members may update.

### **Deliberation in the meeting**

*OCC requested all the SLDCs to compute and send the ATC/TTC figures for the next month in advance along with the details like assumptions, constraints etc.*

#### **Item No. B.31: Ratification of projected Demand and generation for POC transmission charges and loss calculations for Q1(2017-18)**

As The projected Demand and Generation of ER constituents to be considered in the base case for POC transmission charge and loss calculations for Q1(April,17-June,17) are attached at **Annexure-B.31** for ratification by the constituents.

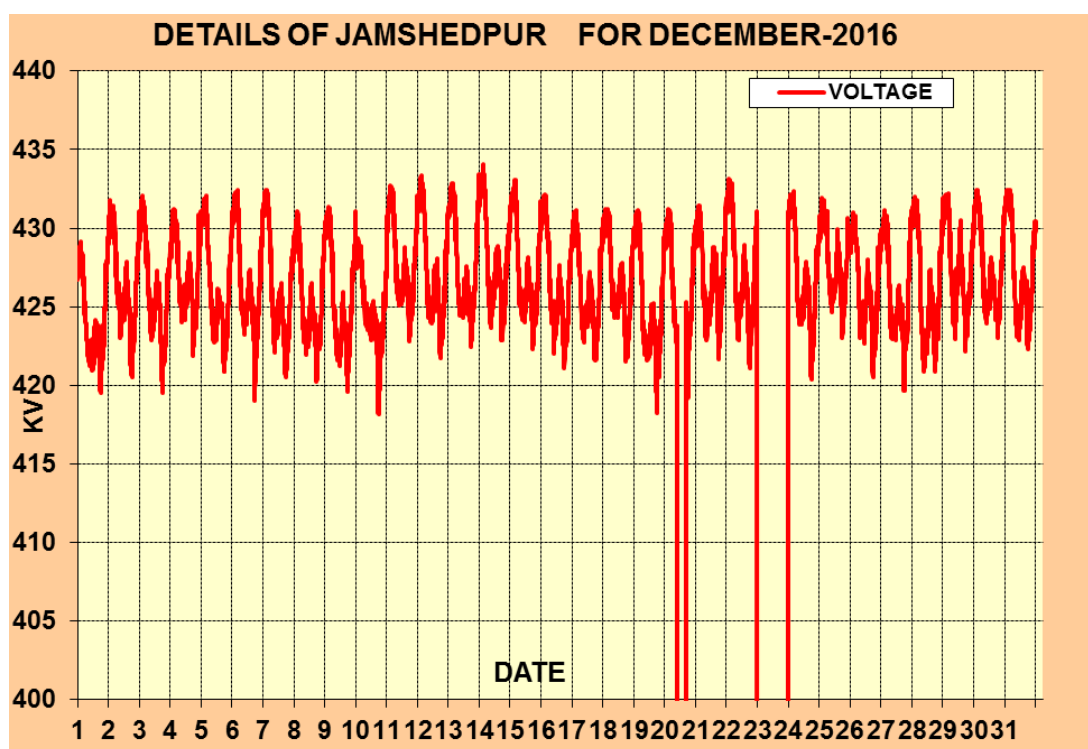
Members may kindly go through and confirm the data.

### **Deliberation in the meeting**

*OCC requested all the constituents to confirm the data by next week.*

#### **Item No. B.32: Commissioning of 125MVAR bus reactor at 400KV Jamshedpur s/s**

Voltage at 400KV Jamshedpur substation was observed more than 420KV in the month of Dec.16 and Jan 17. Voltage is also expected to improve if Jharkhand enhances its import from Chaibasa (by expediting its planned intra-state transmission system). At present JUSNL draws only 12-16 MW at Chaibasa. Therefore, the commissioning of 125MVAR bus reactor at 400KV Jamshedpur needs to be expedited.



Powergrid/ERLDC may update.

### **Deliberation in the meeting**

*ERLDC informed that severe high voltage is being observed at 400kV Jamshedpur S/s on continuous basis and advised Powergrid to commission 2X125 MVAR bus reactors at the earliest.*

*Powergrid informed that the reactor will be commissioned by April, 2017.*

### **Item No. B.33: Implementation of New Web Based Scheduling at ERLDC**

Presently, development of web-based scheduling software at ERLDC by PWC is completed and the testing of the software is at final stage. Now ERLDC is doing the parallel operation of the new WBES software along with the older one. The same software was already being installed at WRLDC and made operationalize with effective from 01<sup>st</sup> July, 2016. A detailed workshop cum interactive Session with all Stakeholders/beneficiaries shall be arranged during 20-21 February, 2017, wherein the detailed presentation of the software features and new scheduling procedures, associated issues and concerns will be deliberated. Some new procedure like surrender philosophy, LTA/MTOA requisition and ramping up/down rate consideration of ISGS had already been deliberated and approved in 123<sup>rd</sup> OCC, ERPC meeting. The beta version of the software will be available for testing after training to the stake holders. In this regards all users – regional constituents, generators (RLDC control Area) and regional entities are requested to nominate 1-2 officers involved in scheduling activity at your end in the proposed training cum joint exercise on WBES at ERLDC Kolkata during 20 – 21 February 2017.

ERLDC may update.

#### **Deliberation in the meeting**

*ERLDC briefed about the web based scheduling software and requested all the constituents to send their representatives to ERLDC for the training program scheduled on 20-21 February, 2017.*

### **Item No. B.34: Persistent over drawl by Jharkhand**

It has been observed since last few month, Jharkhand is over drawing continuously to the tune of 1.5 to 2mu per day. Jharkhand overdraw for the month November, December and January 2017 were around 40 mu, 63 mu and 52 mu respectively. Several times Jharkhand also advised to take un-requisition surplus power of NTPC plant on real time basis. However the quantum requisitioned by Jharkhand for URS power of NTPC plants was very less compare to its overdraw quantum. Numbers of instructions were also issued from ERLDC Control Room during real time operation to Jharkhand regarding the same issue. However the response of Jharkhand was not commensurate with criticality of the situation. Details of above violations would be presented by ERLDC for discussions/suggestions.

ERLDC may explain. Jharkhand may respond.

#### **Deliberation in the meeting**

*ERLDC presented the schedule and drawal of JUSNL which is enclosed at **Annexure-B.34** and informed that JUSNL is overdrawing on continuous basis.*

*OCC advised JUSNL to explore for procurement of URS power to minimize the over drawal.*

*JUSNL informed that they have taken up the issue of URS power procurement with JBVNL but action is yet to be taken by JBVNL.*

### **Item No. B.35: Long outage of important transmission elements**

#### **a) Non availability of Line Reactor of 400KV Malda-Purnea-I**

In 123<sup>rd</sup> OCC, Powergrid informed that order has been placed for Reactor-1 and it will be commissioned by September, 2016.

*In 129<sup>th</sup> OCC, Powergrid informed that the reactor will be dispatched by 25<sup>th</sup> January, 2017 and the same will be commissioned by February, 2017.*

Powergrid may update.

#### **Deliberation in the meeting**

*Powergrid informed that the reactor will be commissioned by end of February, 2017.*

##### **b) 400kV Meramundali-Mendhasal S/C**

Tower collapsed near Mendhasal at 3 Locs, viz. Locs. 180, 181 & 182.

In 123<sup>rd</sup> OCC, OPTCL informed that tower 181 and 182 were restored. Restoration of tower 180 will take time due to water logging and the tower would be restored by September, 2016.

In 124<sup>th</sup> OCC, OPTCL informed that restoration of tower 180 will take time due to water logging and the tower would be restored by December, 2016.

*In 128<sup>th</sup> & 129<sup>th</sup> OCC, OPTCL informed that the line is expected to be restored by January, 2017.*

OPTCL may update.

#### **Deliberation in the meeting**

*OPTCL informed that the line will be restored by 20<sup>th</sup> February, 2017.*

##### **c) 400kV Patna-Kishengunj D/C**

Tower collapsed at Loc. 51 in Kankai river on 26.07.2016 and three nos towers at Loc no 128F/0, 128 G/0 and 128E/0 in Ganga river on 01.09.2016.

Powergrid informed that due to water logging problem the work is getting delayed however work is expected to be completed by 15<sup>th</sup> October, 2016.

In 127<sup>th</sup> OCC, Powergrid informed that line will be restored by July, 2017.

*In 129<sup>th</sup> OCC, Powergrid informed that the work has been awarded.*

Powergrid may update.

#### **Deliberation in the meeting**

Powergrid informed that line will be restored by July, 2017.

##### **d) 400kV Purnea-Biharshariff D/C (under outage wef 23/08/16)**

Three Nos. Tower (mid river) collapsed.

*In 126<sup>th</sup> OCC, ENICL informed that the final assessment is under progress. The same will be submitted to ERPC and ERLDC.*

*In 129<sup>th</sup> OCC, ENICL informed that line will be restored by June, 2017.*

ENICL may update.

#### **Deliberation in the meeting**

*ENICL informed that line will be restored by last week of June, 2017.*

**e) Main bay of 315MVA ICT at Farakka(Tie element-400kV FSTPP-Malda-I)**

The main bay is under s/d for upgradation wef 06/05/16. Powergrid may update stating status of the upgradation.

In 125<sup>th</sup> OCC, Powergrid informed that Bus-I end is ready and will be charged, Bus-II end is bypassed and will be ready for charge after getting shutdown.

*In 128<sup>th</sup> OCC, NTPC informed that the bay will be in service by 2<sup>nd</sup> week of January, 2017.*

*In 129<sup>th</sup> OCC, NTPC informed that the tie transformer-III has been charged and the shutdown will be allowed by next week. Powergrid informed that the work will be completed by January, 2017.*

Powergrid/NTPC may update.

**Deliberation in the meeting**

*Powergrid informed that the element will be charged today.*

**f) 50MVAR Bus Reactor-I at Farakka (alongwith main and tie bays)**

Under shutdown wef 31/05/16 for dismantling from old bay and re-installation in new bay in the dia of FSTPP GT#3.

In 125<sup>th</sup> OCC, Powergrid informed that reactor will be charged by end of October, 2016.

In 126<sup>th</sup> OCC, Powergrid informed that reactor will be charged by November, 2016.

*In 128<sup>th</sup> OCC, Powergrid informed that the reactor will be charged by 2<sup>nd</sup> week of January, 2017.*

*In 129<sup>th</sup> OCC, NTPC informed that the shutdown will be allowed by next week.*

Powergrid may update.

**Deliberation in the meeting**

*Powergrid informed that the reactor will be charged by 1<sup>st</sup> week of March, 2017.*

**g) Tie bay of 125MVAR Bus reactor and 400kV Indravati-Indravati and Indravati(PG):**

Under outage wef 18/03/16 due to R-Ph pole bursting of Tie CB. Due to non-availability of the tie bay, the Buses are coupled only via the tie bay of 400kV Rengali-Indravati and 400kV Indravati-Jeypore at Indravati and any outage of the lines would result in decoupling of the Buses.

In 125<sup>th</sup> OCC, Powergrid informed that main CB has some problem which will be taken care by OHPC/OPTCL.

*In 129<sup>th</sup> OCC, OPTCL informed that the CB has reached at the site. The installation work will be completed by February, 2017.*

Powergrid/OHPC may update.

**Deliberation in the meeting**

*OPTCL informed that the work will be completed by February, 2017.*

**h) 220 kV Waria – Bidhannagar-II**

The line is under outage wef 20.08.16 due to collapse of one no of tower collapse.

*In 129<sup>th</sup> OCC, DVC informed that the line will be restored by July, 2017.*

DVC may update.

**Deliberation in the meeting**

*WBSETCL requested DVC for early restoration of line in view of summer peak.*

*OCC requested DVC to expedite the work.*

**i) 315MVA ICT-I at Meramundali**

The ICT is under outage wef 12/11/16 due to damage after B-ph LA blasting.

*In 129<sup>th</sup> OCC, OPTCL informed that the ICT reached the site and it will be in service by February 2017.*

OPTCL may update.

**Deliberation in the meeting**

*OPTCL informed that the ICT will be in service by 15<sup>th</sup> March,2017.*

**j) 220kV Meramundali-Bhanjanagar-I**

The line is under outage w.e.f 25/11/16 for conductor replacement work. OPTCL may furnish the details of conductor replacement being done and the expected date of restoration.

*In 128<sup>th</sup> OCC, OPTCL informed that the conductor replacement work will be completed by January 2017. OPTCL added that type of conductor is ACSR Zebra.*

*In 129<sup>th</sup> OCC, OPTCL informed that the conductor replacement work will be completed by February 2017.*

OPTCL may update.

**Deliberation in the meeting**

*OPTCL informed that the conductor replacement work will be completed by end of March 2017.*

**Item No. B.36: 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.

*In 120<sup>th</sup> OCC, ERLDC informed that every month they were updating the status and posting at ERLDC website.*

*In 129<sup>th</sup> OCC, all the respective constituents were advised to ensure the availability of telemetry data to ERLDC. The updated status is enclosed at Annexure- B.36.*



GM, ERLDC informed that some IPPs are not providing the telemetry data to ERLDC on continuous basis.

OCC endorsed the proposal of ERLDC to discontinue the scheduling for IPPs who were not ensuring the telemetry data to ERLDC on continuous basis as per the IEGC provisions.

Members may update.

#### **Deliberation in the meeting**

*ERLDC informed that the 220 kV Lalmatia data is not coming since Jan, 2016 and requested NTPC to look into the matter.*

*NTPC informed that the AMC of PLCC is with Powergrid and requested Powergrid to restore the PLCC communication at the earliest.*

*OCC advised NTPC to resolve the matter at the earliest.*

*Further, OCC advised all the respective constituents to ensure the availability of telemetry data to ERLDC. The updated status is enclosed at **Annexure- B.36**.*

#### **Item No. B.37: Installation of PMUs in Eastern Region under URTDSM project**

LOA for installation of PMUs in Eastern Region under URTDSM project was awarded to M/s Alstom on 15th January 2014. The contract has to be completed in all respect within 24 months from the award. The status of implementation may be informed since PMU data is very much important to real time shift operator for analyzing the security of the grid.

In 124<sup>th</sup> OCC, it was informed that out of 247 PMUs 46 have been installed.

OCC advised Powergrid to submit a report on latest status of implementation and advised to update the status on every OCC.

In 126<sup>th</sup> OCC, Powergrid submitted the latest status which is given at Annexure- B.37.

OCC advised POWERGRID to share the future installation and substation visit schedule with the members.

POWERGRID may update the status.

#### **Deliberation in the meeting**

*Powergrid submitted the latest status of PMU installation, which is given at **Annexure- B.37**.*

#### **Item No. B.38: 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-B.38**.

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

Members may update.

#### **Deliberation in the meeting**

*Members noted.*

**Item No. B.39: Status of Emergency Restoration System (ERS Towers) for Eastern Region constituents**

The latest status of Emergency Restoration System (ERS towers) as well as the future plan of procurement was given at **Annexure- B.39**.

Members may update the latest status.

**Deliberation in the meeting**

*Members noted.*

**Item No. B.40: Non-commissioning of PLCC / OPGW and non-implementation of carrier aided tripping in 220kV and above lines.**

According to CEA technical standard for construction of electric plants and electric lines -Clause 43(4) (c), transmission line of 220 KV and above should have single-phase auto-reclosing facility for improving the availability of the lines. However, from the tripping details attached June-August, 2016 it is evident that the some of 220kV above Inter & Intra-Regional lines do not having auto-reclose facility either at one end or at both ends. Out of these for some of the lines even PLCC/OPGW is not yet installed and carrier aided protection including Autorecloser facility is not yet implemented. Based on the trippings of June- August, 2016 and PMU analysis a list of such lines has been prepared and as given below:

List of line where auto reclose facility is not available(Information based on PMU data analysis)							
S. No	Transmission Lines name	Date of Tripping	Reason of Tripping	Owner Detail		Present Status	
				End-1	End-2	OPGW/ PLCC Link available	AR facility functional
1	400 KV ANGUL -TALCHER	02.06.16	B-N FAULT	PGCIL	NTPC		
2	400 KV BIHARSARIFF-VARNASI-I	07.06.16	B-N FAULT	PGCIL	PGCIL	PLCC available	Functional (10.11.2016)
3	400KV BIHARSARIFF-BANKA-II	12.06.16	Y - N FAULT	PGCIL	PGCIL	PLCC available	Functional (25.09.2016)
4	220KV SASARAM-SAHUPURI	12.06.16	B - N FAULT	PGCIL	UPTCL	PLCC available	Functional at Pusauli
5	400 KV TALA -BINAGURI -IV	13.06.16	B - N FAULT	Durk Green	PGCIL		Binaguri end AR is healthy. Tala end AR is disabled.
6	400 KV KODERMA-BOKARO-I	14.06.16	B-N FAULT	DVC	DVC	PLCC available	
7	400 KV FARAKKA-KAHALGAON-IV	15.06.16	R-N FAULT	NTPC	NTPC	Yes	Yes and operated last on dated 28.09.2016.
8	400 KV MUZAFFARPUR-BIHARSARIFF-II	17.06.16	Y-N FAULT	PGCIL	PGCIL	PLCC available	Functional (18.10.2016)
9	400 KV MERAMUNDALI-NEWDUBRI - I	20.06.16	B-N FAULT	OPTCL	OPTCL	PLCC available	Yes
10	400KV PATNA-BALIA-II	21.06.16	B-N FAULT	PGCIL	PGCIL		
11	400KV PATNA-KISHANGANJ-II	21.06.16	Y-N FAULT	PGCIL	PGCIL	PLCC available	Functional (21.06.2016)

12	400KV PATNA-BALIA-I	21.06.16	R-N FAULT	PGCIL	PGCIL	PLCC available	
13	<u>220KV BUDIPADAR-KORBA-II</u>	23.06.16	Y-N FAULT	OPTCL	CSEB	PLCC available	will be activated in consultation with Korba
14	400 KV ARAMBAGH BIDHANNAGAR	02.07.16	Y-N FAULT	WBSETCL	WBSETCL		
15	400 KV FARAKKA-DURGAPUR-I	06.07.16	Y-N FAULT	NTPC	PGCIL	Yes	Yes and operated last on 19.07.2016 & 06.11.2016
16	400 KV NEW RANCHI CHANDWA - I	13.07.16	B-N FAULT	PGCIL	PGCIL	PLCC available	
17	<u>220 KV TSTPP-RENGALI</u>	17.07.16	EARTH FAULT	NTPC	OPTCL		
18	<u>220KV BUDIPADAR-RAIGARH</u>	21.07.16	EARTH FAULT	OPTCL	PGCIL	PLCC defective	
19	400 KV KOLAGHAT-KHARAGPUR	03.08.16	Y-N FAULT	WBPDC	WBSETCL		
20	<u>220 KV FARAKKA-LALMATIA</u>	03.08.16	B-N FAULT	NTPC	JUNSL	Yes	Old Relay and not functional. 7-8 months required for auto re-close relay procurement
21	400 KV PURNEA-MUZAFARPUR-I	03.08.16	R-N FAULT	PGCIL	PGCIL	PLCC available	
22	400 KV GAYA - CHANDWA -II	04.08.16	B-N FAULT	PGCIL	PGCIL	PLCC available	Functional (01.09.2016)
23	<u>220 KV MUZAFFARPUR-HAZIPUR - II</u>	10.08.16	B-N FAULT	PGCIL	BSPTCL		
24	<u>220 KV ROURKELA-TARKERA-II</u>	11.08.16	B-N FAULT	PGCIL	OPTCL	OPGW available	Expected to install protection coupler by Jan 17
25	<u>220 KV CHANDIL-SANTALDIH</u>	25.08.16	R-N FAULT	JUNSL	WBPDC		
26	400 KV MPL-RANCHI-II	02.09.16	R-N FAULT	MPL	PGCIL	PLCC available	
27	<u>220 KV BIHARSARIF-TENUGHAT</u>	07.09.16	B-N FAULT	BSPTCL	TVNL		
28	400KV MERAMANDALI-STERLITE-II	10.09.16	Y-N FAULT	OPTCL	SEL	OPGW not commissioned	
29	<u>220 KV RAMCHANDRAPUR-CHANDIL</u>	22.09.16	B-N FAULT	JUNSL	JUNSL		
30	400KV SEL - MERAMUNDALI-I	22.09.16	B-N FAULT	SEL	OPTCL	OPGW not commissioned	
31	400 KV KOLAGHAT-CHAIBASA	28.09.16	B-N FAULT	WBPDC	PGCIL	PLCC available	

34<sup>th</sup> TCC advised all the respective members to update the above list along with the last tripping status in next PCC meeting.

TCC further advised all the constituents to give the latest status of PLCC of other 220kV and above lines under respective control area.

TCC advised to review the status of above in lower forums report back in next TCC.

In 128<sup>th</sup> OCC, Powergrid and OPTCL updated the status as mentioned in above table.

OCC advised all the respective members to update the above list along with the last tripping status.

Respective members may update the status.

### **Deliberation in the meeting**

The updated status as per 52<sup>nd</sup> PCC is as above.

### **Item No. B.41: Non-commissioning / non-functional status of bus-bar protection at important 220 kV Sub-stations**

It has been observed that at many 220 kV substations particularly that of STU, bus-bar protection is either not commissioned or non-functional. The non-availability / non-functionality of bus bar protection, results in delayed, multiple and uncoordinated tripping, in the event of a bus fault. This in turn not only results in partial local black out but also jeopardises the security of interconnected national grid as a whole. The matter was also pointed out during the third party protection audit which is being carried out regularly. Constituents are required to meet the audit compliance and commission or made bus –bar protection functional where ever it is not available. A list of such important 220 kV sub-stations as per the first third party audit is placed in the meeting.

In 51<sup>st</sup> PCC, members updated the status as follows:

#### **Bus Bar Protection not available (reccord as per third party protection audit)**

<b>Bihar</b>				
<b>SI No</b>	<b>Name of Substation</b>	<b>Bus protection status</b>	<b>Date of audit</b>	<b>Present Status</b>
1	220 kV Bodhgaya	Not available	28-Dec-12	Single bus and there is no space available for busbar protection
<b>Jharkhand</b>				
1	220 kV Chandil	Not available	29-Jan-13	LBB available
2	220 kV Ramchandrapur	Not available	29-Jan-13	Functional from October 2013
3	220 kV Tenughat	Not available	12-Apr-13	
<b>DVC</b>				
1	220 kV Jamsedpur	Not available	10-Apr-13	Single bus. Bus bar will be commissioned under PSDF.
<b>Odisha</b>				
1	220 kV Mermandali	Not functional	30-Dec-12	Commissioned in Mar 2015
<b>West Bengal</b>				
1	220 kV Arambah	Not available	24-Jan-13	Available in alarm mode. Planning to replace with numerical relay
2	220 kV Jeerat	Not available	20-Dec-12	Relays have been received at site. Installation is in progress
3	220 kV Kolaghat	Not available	19-Dec-12	Commissioned in May 2014
4	220 kV Howrah	Not available	26-Mar-13	Available
<b>Powergrid</b>				
1	220 kV Silliguri	Not available	30-Mar-13	Commissioned in Mar 2016
2	220 kV Bolangir	Not available	31-Mar-13	Commissioned in April 2013

TCC further advised all the constituents to give the latest status of Bus Bar protection of other 220KV S/S under respective control area.

TCC advised to review the status of above in lower forums report back in next TCC.

129<sup>th</sup> OCC advised all the respective members to update the latest status.

Members may update.

### **Deliberation in the meeting**

The updated status as per 52<sup>nd</sup> PCC is as above.

### **Item No. B.42: Pollution mapping for Eastern Region**

The Pollution Mapping work in ER was started with on-site measurement of ESDD and NSDD.

OCC advised all the respective constituents to coordinate with Powergrid for online filling of measurement data.

The updated status as updated by constituents & as intimated by Powergrid vide mail dated 19.10.16 is as given below:

	Scope (no. of location s)	Installed Locations	Number of locations where the results for 1st set of Measurements submitted	No. of locations where the results for 2nd set of Measurements submitted	Number of locations where the results for 3rd set of Measurements submitted	Number of locations where the results for 4 <sup>th</sup> set of Measurements submitted
JUSNL	67	27	21	19	13	3
BSPTCL	59	52	52	40	4	0
WBSETCL	73	68	43	3	2	0
OPTCL	164	102	102	90	79	0
SIKKIM POWER	12	9	6	6	0	0
POWERGRID ER1	99	99	99	47	0	0
POWERGRID ER2	40	40	40	40	17	0
POWERGRID ODISHA	42	42	42	42	40	0

It is requested to submit the fourth and balance third set measurement result at the earliest.

Further, the schedule for measurement as informed vide letter dated 20.01.2016 & mail dated 21.01.2016 are as follows:

<b>Measurement Schedule</b>		
4th set	5th set	6th set
21st -30th Sep 2016	21st -31st Jan 2017	21st -31st May 2017

OCC advised all the constituents to complete the measurements as per the schedule.

Powergrid updated the latest status as follows:

	Scope (no. of location s)	Installed Locations	Number of locations where the results for 1st set of Measurements submitted	No. of locations where the results for 2nd set of Measurements submitted	Number of locations where the results for 3rd set of Measurements submitted	Number of locations where the results for 4 <sup>th</sup> set of Measurements submitted
JUSNL	67	27	17	17	13	11
BSPTCL	59	52	40	29	4	3
WBSETCL	73	68	43	4	3	1
OPTCL	164	102	100	90	79	1
SIKKIM POWER	12	9	6	6	0	0
POWERGRID ER1	99	99	99	47	0	0
POWERGRID ER2	40	40	40	40	17	0
POWERGRID ODISHA	42	42	42	42	40	0

*Powergrid informed that most of scheduled measurements till fourth set has not been completed yet, it is requested to complete the measurements and submit the results at the earliest.*

*Powergrid added that they prepared an online format to submit the details of measurements. Powergrid requested to fill the Google form(<https://goo.gl/6375HJ>) for onward submission of measurements for better analysis of results.*

*OCC advised all the constituents to complete the measurements as per the schedule.*

Members may update.

### **Deliberation in the meeting**

*Members noted.*

## **Item No. B.43: Mock Black start exercises in Eastern Region – ERLDC**

### **i) The status of black start exercises**

*The schedule of the proposed black-start exercises for F.Y 2016-17 is as follows:*

Sl no	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	U.Kolab	Last week of May, 2016	<i>Completed on 16<sup>th</sup> July 2016</i>	Last Week of January 2017	<b><i>Completed on 25.01.17</i></b>
2	Maithon (To be tested in islanded mode)	1 <sup>st</sup> week of June 2016	<i>Completed on 02.12.2016</i>	1 <sup>st</sup> Week of February 2017	
3	Rengali	2 <sup>nd</sup> week of June 2016	<i>Completed on 23<sup>rd</sup> Sept, 2016</i>	Last week of November 2016	<b><i>Completed on 25.01.17</i></b>
4	U. Indarvati	3 <sup>rd</sup> week of June 2016	<i>Completed on 16<sup>th</sup> July 2016</i>	2 <sup>nd</sup> week of February 2017	<b><i>February 2017</i></b>
5	Subarnarekha	1 <sup>st</sup> week of October 2016	<i>Completed on 19.10.16</i>	1 <sup>st</sup> week of January 2017	
6	Balimela	3 <sup>rd</sup> week of October 2016	<i>Completed on 29.11.16</i>	1 <sup>st</sup> week of March 2017	

7	Teesta-V	2 <sup>nd</sup> week of Nov 2016		Last week of February 2017	February 2017
8	Chuzachen	Last Week of May 2016	<b>17<sup>th</sup> Jan, 2017 (Scheduled)</b>	January 2017	
9	Burla	Last Week of June 2016	<i>Completed on 28.07.2016</i>	Last week of February 2017	<b>February 2017</b>
10	TLDP-III	1 <sup>st</sup> Week of June 2016		2 <sup>nd</sup> Week of January 2017	
11	TLDP-IV	Last Week of June 2016	<i>Completed on 17.11.16</i>	1 <sup>st</sup> Week of February 2017	

127<sup>th</sup> OCC advised OHPC and WB SLDC to submit a report on blackstart exercise of Balimela and TLDP-IV respectively.

In 129<sup>th</sup> OCC, Chuzachen informed that blackstart exercise is scheduled to be done today at 2:00 PM.

The Mock black start exercise of Chuzachen unit was attempted on 17-01-17, as scheduled, but could not be concluded successfully due to unexpected tripping of unit and large mismatch between load and generation. Therefore to CHEP to plan another mock black start exercise in consultation with Sikkim electrical department before 31<sup>st</sup> March 2017

Members may update.

#### **Deliberation in the meeting**

*The updated status of Black start exercise is as above.*

OCC advised CHEP to finalize the date for mock black start exercise in consultation with Sikkim electrical department. CHEP agreed to carry out in March, 2017.

#### **ii) Black start facility at Purulia Pump Storage Project (PPSP) of WBSEDCL**

The Black-start operation of Purulia Pump Storage Project (PPSP), WBSEDCL was deliberated in several OCC meetings. Subsequently, WBSEDCL has applied to CERC for exemption from Black Start mode and RGMO operation

CERC vide order dated 04.07.13 on Petition No. 149/MP/2012 directed that WBSEDCL to provide black –start facility after finalizing a suitable scheme in consultation with ERLDC through WBSEDCL

Subsequently, APTEL vide order dated 21.11.2015 on the Appeal No. 60 (filed by WBSEDCL) directed CEA to submit a report on the feasibility of black start of PPSP units.

Further, APTEL vide order dated 31.05.16, based on CEA report dated 18.04.16, directed CERC to ensure implementation of the recommendations of CEA within 6 months of the date of order.

*In 34<sup>th</sup> TCC, WBSETCL informed that black start exercise can be conducted after commissioning of new 400kV PPSP S/s with 80 MVAR reactor.*

*WBSEDCL informed that they have contacted OEM Toshiba for feasibility of black start and OEM required to conduct a simulation with CEA recommendations.*

*TCC advised WBSEDCL/WBSETCL to submit the status to CERC.*

*In 128<sup>th</sup> OCC, WBSEDCL informed that they have filed a petition before CERC on 30th September, 2016 for extension of six months.*

WBSEDCL may update the latest status.

#### **Deliberation in the meeting**

*OCC asked WBSEDCL to explore the opportunity for conducting black start exercise as the extension given by CERC is going to lapse by March.2017.*

*WBSEDCL informed that they are fully dependant on OEM Toshiba to carry out this exercise.*

#### **Testing of DG sets meant for Black start**

Test run report of DG sets for blackstart has been received only from Odisha hydro units. The test run reports of other machines may be sent to [erldc.cal@gmail.com](mailto:erldc.cal@gmail.com) and [erldcoutage@gmail.com](mailto:erldcoutage@gmail.com).

Constituents may kindly ensure compliance.

#### **Deliberation in the meeting**

*Members noted.*

#### **Item No. B.44: Restricted Governor /Free Governor Mode Operation of generators in ER**

The latest status of units of ER under RGMO is available at ERPC website (<http://www.erpc.gov.in/>) under Operation>Important data.

*In 126<sup>th</sup> OCC requested all the generators to share their governor response with ERLDC in the group ([https://in.groups.yahoo.com/neo/groups/er\\_gov\\_respons/info](https://in.groups.yahoo.com/neo/groups/er_gov_respons/info)). Members may also send their request for joining the group to [erldcprotection@gmail.com](mailto:erldcprotection@gmail.com).*

*ERLDC had uploaded the unit wise responses in the group "er\_gov\_respons@yahoogroups.co.in." i.r.o the following events for monitoring of RGMO response of generator:*

- a) *On 19.01.2017, at 00:17hrs, Due to break down of 220 kV Akal-Jeerat Y-Phase jumper, all lines emanating from 220 kV Akal s/s got tripped. There was total 900 MW of wind generation loss in Rajasthan.*

*WBSEDCL vide letter dated 18.01.2017 intimated that as per the direction of CERC and recommendations of CEA the FGMO mode of operation with manual intervention has been made operational for all the units of PPSP.*

ERLDC may update.

#### **Deliberation in the meeting**

*Members noted.*

#### **Item No. B.45: Reactive Power performance of Generators**

Generating stations have been monitored for certain sample dates in the month of January,17.



Power Plant	Max and Min Voltage observed for Jan 17 (KV)	Date for monitoring (Jan 17)
Farakka STPS	423,406	8,30
Khalgaon STPS	418,409	8,30
Talcher STPS	412,401	22,28
Teesta	423,399	9,15
Bakreshwar TPS	418,400	3,21
Kolaghat TPS	421,401	12,26
Sagardighi TPS	--	--
MPL	422,413	9,20
Mejia-B	--	--
DSTPS	424,412	14,12
Adhunik TPS	425,414	14,12
Sterlite	424,408	9,16
Barh	--	--
JITPL	--	--
GMR	417,402	16,27
HEL	--	
Kodarma	424,409	9,16

ERLDC may present the reactive performance.

### **Deliberation in the meeting**

*ERLDC presented the response of the generators and members noted.*

#### **a) Schedule for reactive capability tests**

The following was status of regarding reactive capability testing:

- a. Adhunik TPS(both units) –Yet to be confirmed by Adhunik
- b. DSTPS (Unit#2 only pending) – done
- c. Koderma TPS Unit#1 -- done on 08.08.2016
- d. JITPL(both units) – Procedure given. Not yet done
- e. Barh TPS – In June 2016
- f. *Raghunatpur (both units)*
- g. *GMR (Three units)*
- h. *Haldia TPS (Unit #4)*

Members may update.

### **Deliberation in the meeting**

*Members noted.*

## **PART C:: OPERATIONAL PLANNING**

### **Item no. C.1: Anticipated power supply position during March'17**

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of March'17 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-C.1.

Members may confirm.

#### **Deliberation in the meeting**

*Modified anticipated power supply position for the month of March, 2017 after incorporating constituents' observations is given at **Annexure-C.1**.*

### **Item no. C.2: Shutdown proposal of transmission lines and generating units for the month of March'17**

Members may finalize the Shutdown proposals of the generating stations for the month of March'17 as placed at Annexure-C.2.

ERLDC may place the list of line shutdown. Members may confirm.

#### **Deliberation in the meeting**

*Approved maintenance programme of generators and transmission elements for the month of March, 2017 is given at **Annexure-C.2**.*

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

#### **(i) Generating units:**

Generating Station	UNIT NO	CAP(MW)	REASONS FOR OUTAGE	OUTAGE DATE	Restoration status
HALDIA	1	300	OVER HAULING	25-Dec-16	<b>On bar</b>
KAHALGAON	7	500	COAL SHORTAGE	03-Jan-17	
RAGHUNATHPUR	1	600	PLANNED MAINTENENCE	7-Dec-16	
BAKRESWAR	4	210	MAINT. WORK	27-Nov-16	<b>On bar</b>
JITPL	2	600	DUE TO LOW SCHEDULE	30-Nov-16	
GMR	2	350	COAL SHORTAGE	09-Jan-17	
MEJIA	1	210	BOILER TUBE LEAKAGE	03-Jan-17	
MEJIA	2	210	BOILER TUBE LEAKAGE	30-Dec-16	
BOKARO B	3	210	DESYNCHRONIZED DUE	10-Aug-16	
BOKARO B	1	210	BOILER TUBE LEAKAGE	8-Nov-16	
RAGHUNATHPUR	2	600	BOILER TUBE LEAKAGE	6-Nov-16	
KODERMA	2	500	DESYNCHRONIZED DUE	31-Dec-16	
BUDGE-BUDGE	1	250	HIGH TURBINE VIBRATION	27-Sep-16	
KOLAGHAT	1	210	DESYNCHRONIZED DUE	7-Nov-16	
KOLAGHAT	4	210	DESYNCHRONIZED DUE	27-Nov-16	
BAKRESWAR	3	210	OVER HAULING	1-Nov-16	<b>On bar</b>
TENUGHAT	2	210	MAINT. WORK	7-Nov-16	

**(ii) Transmission elements**

Name of the Line/Element	Outage	Reason
400 KV MEERAMANDALI- MENDHASAL S/C	23/05/16	TOWER COLLAPSED NEAR MENDHASAL, LOC NO 180,181,182.
400 KV PATNA-KISHANGANJ D/C	26/07/16	TOWER COLLAPSED AT LOC NO 51
400 KV BIHARSARIFF-PURNEA- I & II	23/08/16	Three numbers of tower badly damaged at location
220KV WARIA - BIDHANNAGAR-II	10/09/16	LINE UNDER B/D, TOWER COLLAPSED AT LOC NO 28
220 KV MERAMUNDALI – BHANJNAGAR-I	25/11/16	CONDUCTOR REPLACEMENT WORK
315 MVA ICT-I AT MEERAMUNDALI	12/11/16	UNDER B/D AS ICT GOT BURNT DUE TO B

Members may update.

**Deliberation in the meeting**

*Members noted.*

**Item no. C.4: Status of commissioning of generating station and transmission elements**

**New generating units:**

S.No.	Power Plant	Plant Size	Expected date

**New transmission elements:**

Sl No.	Name of Element	Expected date
1	400kV Rajarhat-Purnea D/C (with LILO of one circuit each at Farakka and Gokarno)	
2	Augmentation of 400kV Farakka-Malda D/C with HTLS conductor	
3	400kV Ind-Bharath-Jharsuguda D/C	
4	400kV Talcher-Bramhapur-Gazuwaka D/C	
5	400kv Talcher-Rourkella(2 <sup>nd</sup> D/C-Quad)	
6	400kV Sterlite-Jharsuguda D/C	
7	765kv Anugul-Srikakulum D/C	
8	400kV Sasaram-Daltonganj D/C & Daltonganj S/Stn	
9	400 kV Ranchi-Raghunathpur D/C	
10	220 kV TLDP-IV – NJP ckt-2	
11	220 kV Bidhansai-Cuttack D/C	
12	220kV Gola- Ranchi	

Members may update.

**Deliberation in the meeting**

*Members noted.*

## **PART D:: OTHER ISSUES**

### **Item no. D.1: UFR operation during the month of January'17**

System frequency touched a maximum of 50.33Hz at 18:03Hrs of 14/01/17 and at 23:59Hrs of 26/01/17 and a minimum of 49.71Hz at 18:20Hrs of 26/01/17. Accordingly, no report of operation of UFR has been received from any of the constituents.

Members may note.

#### **Deliberation in the meeting**

*Members noted.*

### **Item no. D.2: 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 January'17.

Members may note.

#### **Deliberation in the meeting**

*Members noted.*

### **Item no. D.3: Grid incidences during the month of January, 2017**

Sl no	Disturbance Place	Date	Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	Kalyaneswari	10/01/17	22:05	0	150	At 22:00 hrs, SF6 gas / Air pressure L/O occurred in Mejia - I (L#239) bay at Kalyaneswari s/stn. Both the trip coil of Mejia - I (L#239) bay became in-operative to safe guard the breaker from any further trip/close operation after SF6 gas / Air pressure L/O. After 5 min, distance protection relay of Mejia - I (L#239) bay operated (as per data recorded by installed PMUs in Kalyaneswari) resulting tripping of all 220 kV lines except Burnpur (L#229) and ATRs through operation of 96 (bus bar trip lockout relay).	GD - I
2	NJP	19/01/17	0:12	50	120	At 00:12 hrs, 132 kV NJP(WB) – NJP(PG) S/C tripped from both end due to R phase CVT burst at WB end. At the same time, 132 kV NJP (WB) – Chalsa S/C tripped from both end on B-N fault and 220 kV bus-extension breaker at Binaguri S/S tripped on RXMVB4 protection. During this incident under frequency relay operated at NJP (WB) S/S. and 33 kV Dabgram, Radhabari and Raninagar feeders and 33/11 kV ATR – I & II at NJP (WB) tripped resulting power failure in 33	GD - I

						kV network	
3	Hatia	25/01/17	8:45	56	291	At 08:45hrs, total power failure occurred at Hatia-Ranchi-Namkom-PTPS complex of JUSNL. Following elements tripped during the incident. 220/132 kv ICT – I, II, III at Hatia (II), 132 kV Hatia (II) – Hatia (I) – II, 220 kV bus bar coupler at Hatia (II), 132 kV Hatia (I) – PTPS 9C, 132 kV Hatia(I) – HEC 8C, 132/33 kV 50 MVAR ATR – I & II at Hatia (I), 132 kV Kamdara – Gumla S/C, 132 kV Kamdara – Hatia (I) S/C, 132/33 kV 50 MVAR ATR I & II at Kanke, 132/33 kV 100 MVAR ATR at Namkom III, 132 kV Namkom – Hatia (I) S/C, 220/132 kV ATR I & II at PTPS	GD - I
4	Kahalgaon	11/01/17	12:28	0	0	At 12:28 hrs, both main & tie breaker of Lakhisrai – I feeder tripped from KhSTPP end on DT receipt from remote end. R & B phase pole of main breaker opened instantaneously. But Y phase pole did not open resulting pole discrepancy followed by opening of all breakers connected to bus – I. After 2.5 sec, Y phase pole of Lakhisarai – I feeder also tripped.	-
5	Gaya	13/01/17	12:49	0	0	At 12:49 hrs, all the feeders connected to 220 kV bus bar I at Gaya i.e. 220 kV Gaya – Dehri – I, 220 kV Gaya – Bodhgaya – I and 220 kV Gaya – Sonenagar – II tripped in bus bar operation. In PMU data, no fault has been observed. In the DR data bus bar operation of bay 212 i.e. Sonenagar – II feeder fault current has been observed. Mal-operation of bus bar relay/CT core used by bus bar relay is suspected as the reason of the disturbance.	-
6	Kahalgaon	24/01/17	17:12	0	0	At 17:12 hrs, all the breakers connected to 400 kV bus – II at Kahalgaon tripped on operation of low impedance TEED #2 relay along with BFR (breaker failure relay) operation in 400 kV Kahalgaon – Maithon – I.	-

Members may note.

#### **Deliberation in the meeting**

*Members noted.*

#### **Item no. D.4: Additional Agenda**

##### **1. Training on Genes meters:**

As discussed in last commercial meeting (34<sup>th</sup> CCM), M/S. Genus Power, supplier of new SEM, will conduct a training programme at ERPC/Kolkata on 03.03.17. All constituents are requested to send their representative for training purpose.

Members may kindly note.

#### **Deliberation in the meeting**

*Members noted.*

## 2. Insulator replacement programme for the month of February'2017 of ER-II:

As per earlier discussion POWERGRID/ER-II is submitting the plan for insulator replacement for the month of February-March'2017:

### Upcoming Plan for Insulator Replacement work proposed in the month of February-March-17

SI No.	Name of TL	Description of Work	Loc from No.	Loc To No.	Remarks
1	220 KV D/C Siliguri-Binaguri TL.	Replacement of porcelain insulators with CLR insulators.	10	122 (Birpara end)	Complete replacement of insulators.
2	220 KV D/C Siliguri-Kishanganj TL.	Replacement of porcelain insulators with CLR insulators.	1 (Bongaigaon end)	484	Railway crossing. Ckt-I & II alternately
3	220 KV D/C Dalkhola-Kishanganj TL.	Replacement of porcelain insulators with CLR insulators.	12	12	Railway crossing.
4	220 KV –Malda-Dalkhola-D/C.	Replacement of porcelain insulators with CLR insulators.	318	320	Railway crossing. One circuit at a time.
5	400 KV Malda-Purnea-D/C.	Replacement of porcelain insulators with CLR insulators.	600	702	National Highway/State highway/River crossing.
6	400 KV Jeerat-Subhasgram –S/C.	Replacement of porcelain insulators with CLR insulators.	202	340	National Highway/State highway/River crossing.

For all above places conventional porcelain insulator will be replaced by Composite Long Rod Insulator. Placed before members for discussion and subsequent consideration of the outages as deemed availability.

### Deliberation in the meeting

Powergrid-Odisha has also submitted the the plan for insulator replacement for the month of February-March'2017 which is enclosed at **Annexure- D.4.2**.

OCC agreed to consider the shutdown period as per the decision of 30<sup>th</sup> TCC/ERPC meetings.

## 3. Covering of Tertiary Bushing and associated bay equipment's by Insulating Sleeve of ICT's of ER-II.

It has been observed that due to certain presence of foreign object (By wind or Bird etc.) tertiary system of ICT's creating fault which results in unnecessary outage of the main element and sometime also contributing towards failure of associated part. To prevent this abnormality, POWERGRID has started covering the tertiary system (Bushing and associated conductor part & connectors also) with adequate insulation covering.

For the same following S/D's are proposed for carrying out the job in following locations:-

SI No	Name of Sub-station	Equipment Identification	Tentative Date	Tentative time for outage
01.	Binaguri	315 MVA ICT-I & II.	02.03.17 & 03.03.17.	05 Hours Each, One ICT at a time.
02.	Malda	315 MVA ICT-III & V.	05.03.17 & 06.03.17.	05 Hours Each, One ICT at a time.
03.	Durgapur	315 MVA ICT-I & II.	08.03.17 & 09.03.17.	05 Hours Each, One ICT at a time.
04.	Subhasgram	315 MVA ICT-I,II,III,IV & 500 MVA ICT-V.	10.03.17 to 14.03.17.	05 Hours Each, One ICT at a time.
05.	Maithon	315 MVA ICT-II.	16.03.17	05 Hours for ICT.

As this is for system improvement and earlier same type of fault has been observed in the system, it is proposed to allow the above mentioned S/D's.  
For carrying out the work and also consideration for deemed availability as this will contribute towards system improvement.

#### **Deliberation in the meeting**

*OCC agreed to consider the shutdown period as per the provisions of existing regulations.*

#### **4. Shifting of tower of 400 kV Rourkela-Sundargarh#1 & 400kV Rourkela-Raigarh#2.**

Powergrid vide letter dated 13.02.17 intimated that due to flood in Koel River during last monsoon, the foundation of Tower Location No.1134 of Rourkela-Raigarh D/C line 1 & 2 (old name) was severely affected with major soil erosion. The said Tower Loc. No.1134 is in very vulnerable condition for which shifting of Tower to a new location nearby was envisaged. In view of severe criticality, construction of Pile foundation at new location has been completed and ready for shifting of line from the vulnerable Tower. Hence, Shutdown is required to carry out erection of new Tower, dismantling of old Tower and restringing with shifting of line works. Tentative program for the above works have been scheduled in Feb-March,2017 as follows:

Sl.No	Name of Line	Date	Time	Date	Time	Remarks
1	400 kV Rourkela-Sundargarh#1 (Old Rourkela-Raigarh#1)	20.02.2017	09:00	03.03.17	18:00	OCB
2	400kV Rourkela-Raigarh#2	24.02.2017	09:00	03.03.17	18:00	OCB

Further, as the erosion of Tower foundation is due to natural calamities i.e. flood in Koel river, the shutdown required for shifting of existing vulnerable tower to new tower location may be considered as deemed availability.

Members may discuss.

#### **Deliberation in the meeting**

*OCC agreed to consider the shutdown period as per the provisions of existing regulations.*

*Members noted.*

Meeting ended with vote of thanks to chair.

\*\*\*\*\*

# ANNEXURES



**Participants in Protection 130<sup>th</sup> OCC Meeting of ERPC**

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 17.02.2017 (Friday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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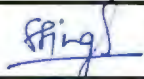

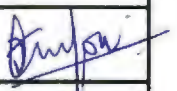


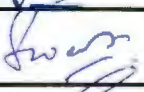

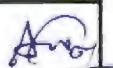
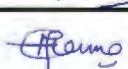
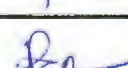
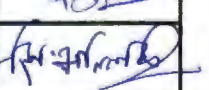
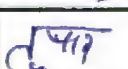

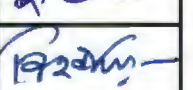
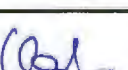

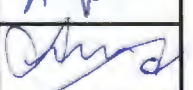
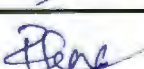
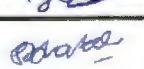


# Participants in Protection 130<sup>th</sup> OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 17.02.2017 (Friday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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# Participants in Protection 130<sup>th</sup> OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 17.02.2017 (Friday)

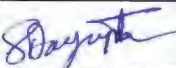






Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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# Participants in Protection 130<sup>th</sup> OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 17.02.2017 (Friday)

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# Annexure-B.3 (I)

## Schemes of Eastern Region funded under PSDF

State / UT	Sr. No.	Details of the Scheme	Nos. of Schemes	Grant Sanctioned (in Rs Crores)	Date of Sanction	Funds released (in Rs Crores) as on 30.11.2016	% age of fund Disbursed against Grant sanctioned
West Bengal	1.	Renovation and Upgradation of protection system of substations	2	108.60	31/12/2014	11.04	10.16%
	2.	The Renovation and Modernization of 220/132 kV STPS switch yard and implementation of Substaion Automation System.		23.48	5/9/2016	0	0%
Bihar	3.	Renovation and Upgradation of protection system of substations	2	64.22	11/05/2015	18.68	29.09%
	4.	Installation of capacitor bank for Improvement of Voltage profile in BSPTCL, Bihar.		18.88		0	0%
Odisha	5.	Renovation and Upgradation of protection system of substations	1	162.50	11/05/2015	19.52	12.01%
Eastern Regional Power Committee (ERPC)	6.	Creation and Maintanance of Web based Protection Database Management System and Desktop based Protection Setting Calculation Tool for Eastern Regional Grid.	1	20.00	17/03/2016	4.94	24.7%
POWERGRID	7.	Installation of STATCOMs in ER at Ranchi-New,Rourkela, Kishanganj and Jeypore substation of POWERGRID.	1	630.28	5/1/2016	0	0%
TOTAL			7	1027.96			

Reporting Format to the PSDF Project Monitoring Group				
1. Name of the Scheme				
1.1 Name of the substation and its Location				
1.2 Executing Agency				
1.3 State/Region				
2. Date of Sanction order				
2.1 Date of Agreement of Entity with State Govt./NLDC				
2.2 Total Approved Cost of the Scheme				
2.3 Approved Grant by Monitoring Committee (Rs. In Lakhs)				
2.4 Date of Requisition by the Entity				
2.4.a) date and Reference of LOA				
2.4.b) Amount of LOA				
2.5 Date of Disbursement and amount				
2.5.1 : 1st Installment				
2.5.2: IIrd installment				
2.5.3: IIIrd installment				
2.6 Date of Scheduled completion of Work				
2.7 Date of handing over of Site to entity (in case of turnkey projects)				

Report for the Month of MM / YY							
No.	Supply Description	Qty. AS PER LOA	Quantity Received during Month	CUMMULATIVE PROGRESS Till date		BALANCE	Remarks
				Sch.	Act.		
1	item Details						
1.1							
1.2							
....							
	Erection Description	works as per LOA	Progress During Month	CUMMULATIVE PROGRESS Till date		Balance	
2	work details						
2.1							
2.2							
....							
3	Others						
Signature with seal of the Nodal Officer							

## Creation and maintaining a Web based Protection Database and Desktop based Protection setting calculation tool for Eastern Regional Grid

### Load Generation Data Status

Off peak condition



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### Introduction

- Project awarded by ERPC on 31<sup>st</sup> March 2016.
- First and second implementation meeting called by ERPC on 12<sup>th</sup> April 2016 and 21<sup>st</sup> April 2016 respectively.
  - Overview of the project and implementation plan
  - Data requirement for system studies
- In OCC meeting date and time for operational load flow was decided as 26.05.2016 and 27.05.2016 at 20.00hr.
  - Operational system study has accomplished by considering 26.05.16 load & Gen. scenario and report was submitted on 29.06.2016.
- In 124<sup>th</sup> OCC meeting date and time for off peak operational LFA decided as 27<sup>th</sup> and 28<sup>th</sup> August 2016 at 13.00 hrs and 03.00 hrs respectively.



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– Operational system study has accomplished by considering 27.08.16 load & Gen. scenario and report was submitted on 06.01.2017.

- In 128<sup>th</sup> OCC meeting date and time for off peak operational LFA decided as 28<sup>th</sup> and 29<sup>th</sup> December 2016 at 13.00 hrs and 02.00 hrs respectively.



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### Data availability status

States	State wise Load Generation data received (%)			Network Data (%)
	Data Received for both time interval	28 <sup>th</sup> Dec-16 13:00 hrs	29 <sup>th</sup> Dec-16, 02:00 hrs	
Bihar	51.28	52.99	53.85	0
Jharkhand	83.56	83.56	84.93	0
Odisha	77.78	79.37	78.57	0
Sikkim	8.33	8.33	8.33	0
West Bengal	96.79	97.44	96.79	0

\*The S/S owned by Central , State sectors, DVC, DPL and Private Utilities are allocated in above 5 states as per their geographical location .



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## Data availability status

States under ERPC	State wise Data received*		
	Load Gen. Data( 28 <sup>th</sup> and 29 <sup>th</sup> December 2016) S/S wise		
	Total No. of S/S & G/S	Full data received	Partial data received
Bihar	122	63	5
Jharkhand	91	71	2
Odisha	172	127	3
Sikkim	31	5	0
West Bengal	184	174	1

\*The S/S and G/S owned by Central , State sectors, DVC, DPL and Private Utilities are allocated in above 5 states as per their geographical location .



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## Loading details of 28<sup>th</sup> and 29<sup>th</sup> Dec 2016 off peak hours of ER grid (ERLDC-PSP Data)

Sl. No.	Constituents	Load (MW)	
		28 <sup>th</sup> Dec-16 13:00 hrs	29 <sup>th</sup> Dec-16, 02:00 hrs
1	Bihar	2056	2431
2	Jharkhand	875	938
3	Odisha	2626	2397
4	Sikkim	57	37
5	W. Bengal	4518	4040
6	DVC	2276	2413
Total Demand		12408	12256
Total Regional Gen.		17337	15175



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भारत सरकार  
GOVERNMENT OF INDIA  
विद्युत मंत्रालय  
MINISTRY OF POWER  
केन्द्रीय विद्युत प्राधिकरण  
CENTRAL ELECTRICITY AUTHORITY



(आई एस ओ : 9001-2008)

पी. डी. एम. / POWER DATA MANAGEMENT DIVISION

सेवा भवन, रामाकृष्णापुरम, नई दिल्ली - 110 066

SEWA BHAWAN, R.K. PURAM, NEW DELHI - 110066

वेबसाइट/Website:

No.CEA/PLG/PDM/545/2017/ 435-60

Dated 25.01.2017

To,

(All Generating Utilities as per list enclosed)

**Subject: Retirement of power generating units in the country.**

Sir,

The power generation utilities approach CEA for approval of the retirement of their units whereas the generating utilities can take their own decision based on their own techno-economic reasons and they do not need to take approval of the CEA for retirement of their units.


In all cases where the generating company has taken a decision to retire their units, they must intimate CEA for incorporating the same in the data base of the installed capacity in the country and also for CEA to see if its retirement results in adversely affecting the voltage profile in the grid/ grid instability/ overloading. If so, the CEA would take remedial action accordingly.

However, according to Section 73(m) of Electricity Act 2003, any Generating Company can approach CEA for advice w.r.t Retirement of their generating units. In such a case, the generating utility would have to furnish data as required by CEA for giving recommendations. CEA may, at a later stage, also issue an advisory giving the criteria for retirement to help the states evaluate the unit themselves.

However, this advice being in nature of recommendation only, is not binding upon the company, which may take its own decision, as deemed appropriate by it, in the matter.

This is for your kind information and necessary action in this matter.

Yours faithfully

  
(P.D. Siwal)  
Secretary, CEA

Copy for information to:

1. PPS to Secretary (Power), MOP
2. SA to Chairperson, CEA
3. SA to Member (Planning/Hydro/Thermal/E&C/G&O/PS), CEA
4. All Chief Engineers of CEA
5. All Heads of Subordinate offices, CEA
6. IT Division, CEA for uploading on CEA website

भारत  
विद्युत नियंत्रण आयोग  
केन्द्रीय विद्युत प्राधिकरण  
पी. डी. एस. प्रभाग  
मेधा भवन, रामकृष्ण पुरम, नई दिल्ली - 110066  
\*\*\*\*\*

सं: केविप्रा/पीएलजी/पीडीएम-545/2017

दिनांक : 25-01-2017

सेवामें,

(सभी विद्युत उत्पादन कम्पनियों को सलग्न सूची के अनुसार)

**विषय:- देश में विद्युत उत्पादन इकाइयों के रिटायरमेंट के बारे में ।**

महोदय,

विद्युत उत्पादन कम्पनियाँ इकाइयों को रिटायर करने के लिए CEA को सम्पर्क(approach) करते हैं, जबकि रिटायर करने के लिए उत्पादन कम्पनियाँ अपने टेक्नो-इकोनॉमिक कारणों के आधार पर अपना निर्णय ले सकते हैं और उनकी इकाइयों के रिटायरमेंट के लिए CEA से अनुमोदन की आवश्यकता नहीं है ।

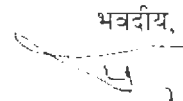
सभी मामले (cases), जहाँ पर उत्पादन कम्पनी उनकी इकाइयों को रिटायर करने का निर्णय ले चुके हैं, CEA द्वारा रिटायर्ड क्षमता को देश की स्थापित क्षमता से हटाने , ग्रिड में वोल्टेज प्रोफाइल , ग्रिड अस्थिरता/ ओवरलोडिंग को देखने के लिए CEA को सूचित करना आवश्यक है । ऐसे में, तदनुसार CEA उपचारात्मक कार्यवाही करेगा ।

मगर विद्युत अधिनियम 2003 के सेक्शन 73(M) के अनुसार कोई भी उत्पादन कंपनी उनकी इकाई को रिटायर करने के लिए, सलाह के लिए CEA को सम्पर्क (approach) कर सकते हैं । ऐसे मामले (case) में सलाह के लिए CEA द्वारा मांगी जाने वाली आवश्यक सूचना उत्पादन कम्पनी को प्रदान करनी होगी । राज्यों/कम्पनी की सहायता के लिए इकाइयों के रिटायरमेंट मानदंड (criteria) मुल्यांकन के लिए बाद में , CEA सलाह (advisory) जारी करेगा ।

मगर , यह सलाह (advice) प्राकृतिक रूप से मात्र सिफारिश (Recommendation) है , कम्पनी के ऊपर प्रतिबंधन (Binding) नहीं है , जो कि स्वयं का निर्णय, जैसा उचित समझे, इन मामलों में ले सकते हैं ।

यह आपकी सूचना और इस मामले में आवश्यक कार्यवाही हेतु है ।

संलग्न : यथोपरि ।

भवदीय,  
  
(पी. डी. सिवाल)  
सचिव, के.वि.प्रा.

प्रति निम्नलिखित को सूचनार्थ:-

1. पी. पी. एस., सचिव (विद्युत), विद्युत मंत्रालय
2. अध्यक्ष, के.वि.प्रा. के वरिष्ठ सहायक ।
3. सदस्य (योजना/जल विद्युत /तापीय/ आ.एवं वा./ जी. ओ. एंड डी. / पी.एस.), के.वि.प्रा. ।
4. केविप्रा के सभी मुख्य अभियंता ।
5. के.वि.प्रा. के सभी अधीनस्थ कार्यालयों के प्रधान ।
6. आई.टी. प्रभाग, के.वि.प्रा. को के.वि.प्रा. की वेबसाइट पर अपलोड करने के लिए ।

## Annexure- B.16

(+) means receivable, (-) means payable

DATE	DEVIATION	ADDITIONAL DEVIATION	DATE	DEVIATION	ADDITIONAL DEVIATION	DATE	DEVIATION	ADDITIONAL DEVIATION
FROM THE PERIOD 14.11.2016 TO 20.11.2016			FROM THE PERIOD 14.11.2016 TO 20.11.2016			FROM THE PERIOD 14.11.2016 TO 20.11.2016		
		BIHAR			TALA			CHUKHA
14.11	4735521.55	286250.3	14.11	-6282246	0	14.11	3198728	0
15.11	1619476.13	446427.5	15.11	-6538307.84	0	15.11	3502562	0
16.11	1688070.84	172775.2	16.11	-5945495.93	0	16.11	3047359	0
17.11	1742629.03	151121.4	17.11	-7410927.48	0	17.11	4584929	0
18.11	-822636.5	156318.6	18.11	-5324392.72	0	18.11	3430551	0
19.11	1828384.23	25675.52	19.11	-524940.88	0	19.11	4262087	0
20.11	-1009805.99	136234.2	20.11	-5533393.49	0	20.11	4312400	0
<b>TOTAL</b>	<b>9781639.29</b>	<b>1374803</b>		<b>-37559704.34</b>	<b>0</b>		<b>26338615</b>	<b>0</b>
<b>AMOUNT CLAIMED FROM BSEB</b>	<b>7005483.61</b>	<b>-1374803</b>		<b>-9577724.607</b>			<b>7806766</b>	
<b>ADJUSTMENT CHARGES</b>	<b>2776155.68</b>	<b>0</b>						

FROM THE PERIOD 07.11.2016 TO 13.11.2016			FROM THE PERIOD 07.11.2016 TO 13.11.2016			FROM THE PERIOD 07.11.2016 TO 13.11.2016		
		BIHAR			TALA			CHUKHA
7.11	2548035.3	-43812.8	7.11	-8644641.76	0	7.11	5358086	0
8.11	-2798237.5	-389993	8.11	-7007811.89	0	8.11	5076075	0
9.11	-1169907.73	-481567	9.11	-4446199.57	0	9.11	3812120	0
10.11	1854689.92	-141483	10.11	-5550834.64	0	10.11	3848966	0
11.11	569281.1	-113574	11.11	-7143622.08	0	11.11	3973494	0
12.11	995190.98	-59692.1	12.11	-6924014.78	0	12.11	3874722	0
13.11	-310669.75	-90358.3	13.11	-5788365.62	0	13.11	3552514	0
<b>TOTAL</b>	<b>1688382.32</b>	<b>-1320480</b>		<b>-45505490.34</b>	<b>0</b>		<b>29495978</b>	<b>0</b>
<b>AMOUNT CLAIMED FROM BSEB</b>	<b>-953933</b>	<b>-1320480</b>		<b>-11603900.04</b>			<b>8742608</b>	
<b>ADJUSTMENT CHARGES</b>	<b>-2642315.32</b>	<b>0</b>						
(-) MEANS PAYABLE, (+) MEANS RECIEVABLE								

FROM THE PERIOD 31.10.2016 TO 06.11.2016			FROM THE PERIOD 31.10.2016 TO 06.11.2016			FROM THE PERIOD 31.10.2016 TO 06.11.2016		
		BIHAR			TALA			CHUKHA
31.10	2432859.37	126806.6	31.10	-7205937.02	0	31.10	5503201	0
1.11	-3391101.46	949067.2	1.11	-10252843.59	0	1.11	7111770	0
2.11	-148517.6	351615.8	2.11	-9124072.94	0	2.11	5918657	0
3.11	-2202276.62	469652.8	3.11	-9590760.87	0	3.11	5769728	0
4.11	3953495.32	3679.74	4.11	-11621103.65	0	4.11	4880253	0
5.11	-3278612.59	239996.9	5.11	-7286740.93	0	5.11	4933344	0
6.11	2097717.55	369681.8	6.11	-7403412.03	0	6.11	4387459	0
<b>TOTAL</b>	<b>-536436.03</b>	<b>2510501</b>		<b>-62484871.03</b>	<b>0</b>		<b>38504412</b>	<b>0</b>
<b>AMOUNT CLAIMED FROM BSEB</b>	<b>-3817514.47</b>	<b>-2510501</b>		<b>-15933642.11</b>			<b>11412708</b>	
<b>ADJUSTMENT CHARGES</b>	<b>-3281078.44</b>	<b>-0.08</b>						

FROM THE PERIOD 24.10.2016 TO 30.10.2016			FROM THE PERIOD 24.10.2016 TO 30.10.2016			FROM THE PERIOD 24.10.2016 TO 30.10.2016		
		BIHAR			TALA			CHUKHA
24.10	2354632.86	-115310	24.10	-12473194.27	0	24.10	9050850	0
25.10	171315.9	-228921	25.10	-10392714.22	0	25.10	7347471	0
26.10	-2956295.7	-146698	26.10	-10242509.34	0	26.10	6524947	0
27.10	-4498087.28	-674798	27.10	-10960256.81	0	27.10	6090168	0
28.10	-1334074.28	-118959	28.10	-10671237.24	0	28.10	4679040	0
29.10	823913.46	-53995.1	29.10	-10992903.75	0	29.10	4932213	0
30.10	2906453.25	-45205.2	30.10	-10983995.88	0	30.10	6218480	0
<b>TOTAL</b>	<b>-2532141.79</b>	<b>-1383886</b>		<b>-76716811.51</b>	<b>0</b>		<b>44843169</b>	<b>0</b>
<b>AMOUNT CLAIMED FROM BSEB</b>	<b>-6878070</b>	<b>-1383886</b>		<b>-19562786.94</b>			<b>13291515</b>	



**Weekly Progress report on Construction of Dedicated Transmission Line:****As on dt. 6<sup>th</sup> February, 2017****Name of Applicant: Vedanta Ltd**

1.	Dedicated Connectivity Line	Vedanta Switchyard to PGCIL Pooling station Sundargarh. 400KV D/c Line
2.	Length of Dedicated Connectivity Line	20.345 KM
3.	Type of Conductor	AL 59
4.	Conductor configuration	Twin Conductor
5.	Total Nos. of Transmission line towers	64 Nos.
6.	Tower Foundations Completed	61 Nos.(One no tower foundation is in progress ,36/0)
7.	Tower Erection Completed	54Nos.(Three nos tower erection is in progress,24/0,25/0,42/0)
8.	Stringing Completed	Stringing completed 4.839Km. (Stringing in progress in between 26/0 -28/0, 2.047Km)
9.	Completion Schedule of Dedicted transmission line along with the associated bay at Both ends.	28 <sup>th</sup> Feb, 2017

## Manpower Engaged in Power Sector (Separately for Central, State and Private sector)

As on 31st March	Regular						Non-Regular				Grand Total (Regular+ Non Regular)
	Managerial and higher executive	Technical/ scientific officers	Technical Supervisory Staff	Technicians & operating Staff	Non- Technical	Total (Regular) {col 2 to 6}	Technical Trainees and apprentices	Work charged staff	Casual/ Temporary/ Out sourced	Total (Non- Regular) {col 8 to 10}	
1	2	3	4	5	6	7	8	9	10	11	
<b>Actual</b>											
2012											
2013											
2014											
2015											
2016											
<b>Projected/ Estimated</b>											
2017											
2018											
2019											
2020											
2021											
2022											
2023											
2024											
2025											
2026											
2027											

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**Details Regarding No. of Consumers and Connected Load etc.**

**(A) Utilities**

As On 31st March of Financial year end	No. of Consumers	Connected Load (kW)	Consumption (MU)	Energy Available for Supply	T&D losses(%)	Per Capita Electricity Consumption(kWh)
1	2	3	4	5	6	7
2011-12						
2012-13						
2013-14						
2014-15						
2015-16						
2016-17						
2017-18						
2018-19						
2019-20						
2020-21						
2021-22						
2022-23						
2023-24						
2024-25						
2025-26						
2026-27						

**(B) Non Utilities**

As On 31st March of Financial year end	No. of Consumers	Connected Load (kW)	Consumption (MU)	Energy Available for Supply	T&D losses(%)	Per Capita Electricity Consumption(kWh)
1	2	3	4	5	6	7
2011-12						
2012-13						
2013-14						
2014-15						
2015-16						
2016-17						
2017-18						
2018-19						
2019-20						
2020-21						
2021-22						
2022-23						
2023-24						
2024-25						
2025-26						
2026-27						

**(C) Utilities + Non Utilities**

As On 31st March of Financial year end	No. of Consumers	Connected Load (kW)	Consumption (MU)	Energy Available for Supply	T&D losses(%)	Per Capita Electricity Consumption(kWh)
1	2	3	4	5	6	7
2011-12						
2012-13						
2013-14						
2014-15						
2015-16						
2016-17						
2017-18						
2018-19						
2019-20						
2020-21						
2021-22						
2022-23						
2023-24						
2024-25						
2025-26						
2026-27						

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Details Regarding Installed Capacity, No. of Consumers and Connected Load etc.

**(A) Installed Capacity (MW) - Utilities**

As On 31st March	Hydro	Thermal				Nuclear	Renewable					Grand Total
		Steam	Gas	Diesel	Total (Thermal)		Wind	Solar	Biomass etc	Mini/Micro Hydel	Total (Renewable)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2012												
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												
2022												
2023												
2024												
2025												
2026												
2027												

**(B) Installed Capacity (MW) - Non Utilities**

As On 31st March	Hydro	Thermal				Nuclear	Renewable					Grand Total
		Steam	Gas	Diesel	Total (Thermal)		Wind	Solar	Biomass etc	Mini/Micro Hydel	Total (Renewable)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2012												
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												
2022												
2023												
2024												
2025												
2026												
2027												

**(C) Installed Capacity (MW) - (Utilities + Non Utilities)**

As On 31st March	Hydro	Thermal				Nuclear	Renewable					Grand Total
		Steam	Gas	Diesel	Total (Thermal)		Wind	Solar	Biomass etc	Mini/Micro Hydel	Total (Renewable)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2012												
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												
2022												
2023												
2024												
2025												
2026												
2027												

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**Installed Capacity (MW) and Generation (MU) from renewable Resources (Injected into the Grid)**

1. State/Centre :  
2. Month :  
3. Year :

[illegible]

Generation Projection (Apr 2017 - June 2017)																	
				Generation declared Commercial from 1st July '16 to 31st Dec'16					Generation declared/expected to be declared Commercial from 1st Jan'17 to 31st Mar'17								
Sl. No.	Entities	Region	Projections based on 3 Years Data	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	TOTAL	Comments From DICs /Others (if any)	Figure as per Comments/ PoC Data	Projected Generation before normalization w.r.t projected All India Peak Demand
			(MW)			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)	(MW)			(MW)
1	West Bengal	ER	5425											5425			5425
2	Odisha	ER	3723											3723	As per GRIDCO	3350	3350
3	Bihar	ER	203											203			203
4	Jharkhand	ER	419											419			419
5	Sikkim	ER	0											0			0
6	Chujachan	ER	112											112			112
7	DVC	ER	4440											4440	As per data given by DVC	3843	3843
8	Durgapur Steel	ER															
9	Koderma TPP	ER															
10	Bokaro TPS	ER															
11	Raghunathpur	ER															
12	MPL	ER	1007											1007			1007
13	Teesta	ER	535											535	As per NHPC	510	510
14	Kahalgaon	ER	2197											2197			2197
15	Farakka	ER	1893											1893			1893
16	Talcher	ER	971											971			971
17	Rangeet	ER	70											70	As per NHPC	60	60
18	Corporate Power	ER												0			0
19	Adhunik Power	ER	359											359			359
20	Barh	ER	1225											1225			1225

## Generation Projection (Apr 2017 - June 2017)

				Generation declared Commercial from 1st July '16 to 31st Dec'16					Generation declared/expected to be declared Commercial from 1st Jan'17 to 31st Mar'17								
Sl. No.	Entities	Region	Projections based on 3 Years Data	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	TOTAL	Comments From DICs /Others (if any)	Figure as per Comments/PoC Data	Projected Generation before normalization w.r.t projected All India Peak Demand
			(MW)			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)	(MW)			(MW)
21	Kamalanga TPP (GMR)	ER	613											613			613
22	JITPL	ER	1147											1147			1147
23	Jorethang	ER	95											95			95
24	Bhutan	ER	1153											1153			1153
	TOTAL		25585					0					0	25585			25585

**Note:**

- Projections are based on monthly maximum injection in the last 3 years from actual metered data.
- Generation forecast has been done based on the following criteria
  - If there is an increasing trend then last year average generation has been considered
  - Otherwise average of past three year average generation has been considered
- In case of new generators where past data was not available following has been assumed
  - 1.0 plf for hydro generators
  - 0.7 plf for thermal generators.
  - 0.3 plf for gas stations
- In case of the re-organized states of Andhra Pradesh and Telangana Generation is divided in the ratio 53.89% for Telangana and 46.11% for Andhra Pradesh for FY 2012-13 and 2013-14. This is as per letter No.CE/COMML/APPCC/DE-COMML/POC-DATA-15-16/D.No/15 dtd. 09.10.15 as received from APTRANSCO.

DEMAND FORECAST USING PAST 3 YEARS DATA (Apr 2017 - June 2017)															
										1	2	3	4	Data given by DICs	Comments
	2014-15			2015-16			2016-17								
	Apr-14	May-14	Jun-14	Apr-15	May-15	Jun-15	Apr-16	May-16	Jun-16	2014-15 Average	2015-16 Average	2016-17 Average	Projected Demand for (Apr 2017 - June 2017) before normalization		
Bihar	2,410	2,230	2,289	2,945	2,630	2,892	3,521	3,638	3,441	2,310	2,822	3,533	4,112		
DVC	2,452	2,590	2,520	2,547	2,610	2,719	2,562	2,478	2,686	2,521	2,625	2,575	2,628	2770	As per data given by DVC
Jharkhand	1,037	961	1,001	1,043	1,067	1,083	1,177	1,498	1,119	1,000	1,064	1,265	1,375		
Odisha	3,764	3,744	3,723	3,850	3,880	3,824	4,012	3,898	3,970	3,744	3,851	3,960	4,068	4323	As per data given by GRIDCO
West Bengal	7,300	7,524	7,159	7,517	7,629	7,853	7,602	7,641	7,542	7,328	7,666	7,595	7,797		
Sikkim	80	78	78	77	77	83	112	93	93	79	79	99	106		
Bhutan															
Eastern Region	16,309	16,342	16,094	17,304	17,221	17,710	18,345	18,596	18,213						

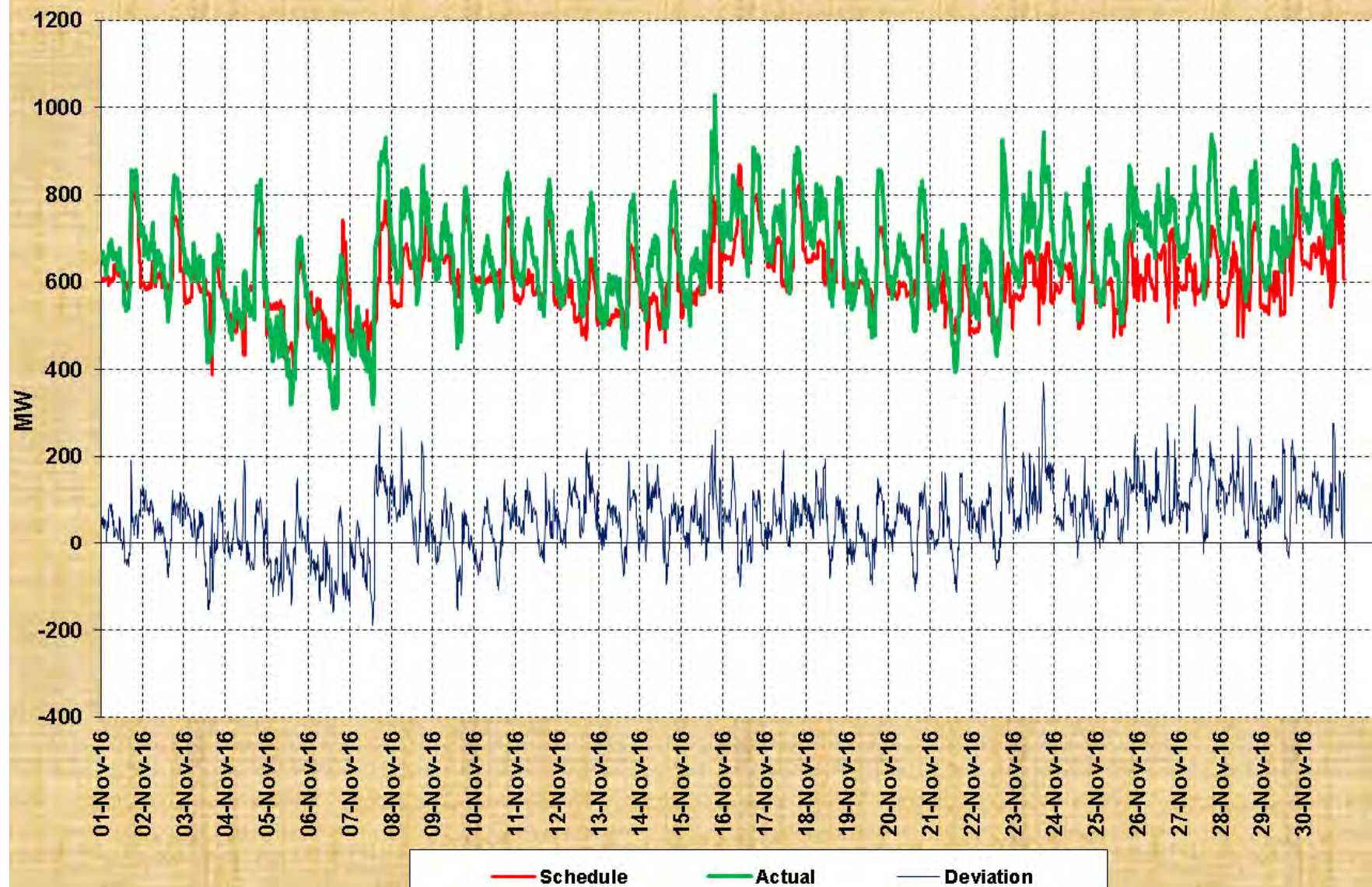
#### Notes

- Projections are based on the past 3 years' monthly Peak Demand Met data available on the website of CEA
- The above projections are being done for financial year 2017-2018 (Q1) i.e. Apr 2017 to June 2017
- Projections are being done based on the forecast function available in MS Office Excel
- In case of the re-organized states of Andhra Pradesh and Telangana Maximum Demand is divided in the ratio 53.89% for Telangana and 46.11% for Andhra Pradesh for FY 2012-13 and 2013-14. This is as per letter No.CE/COMML/APPCC/DE-COMML/POC-DATA-15-16/D.No/15 dtd. 09.10.15 as received from APTRANSCO.
- CEA Reports can be accessed from the following links:  
[http://www.cea.nic.in/reports/monthly/powersupply/2016/psp\\_peak-06.pdf](http://www.cea.nic.in/reports/monthly/powersupply/2016/psp_peak-06.pdf)  
[http://www.cea.nic.in/reports/monthly/powersupply/2016/psp\\_peak-05.pdf](http://www.cea.nic.in/reports/monthly/powersupply/2016/psp_peak-05.pdf)  
[http://www.cea.nic.in/reports/monthly/powersupply/2016/psp\\_peak-04.pdf](http://www.cea.nic.in/reports/monthly/powersupply/2016/psp_peak-04.pdf)  
[http://cea.nic.in/reports/monthly/powersupply/2014/psp\\_peak-05.pdf](http://cea.nic.in/reports/monthly/powersupply/2014/psp_peak-05.pdf)  
[http://cea.nic.in/reports/monthly/powersupply/2014/psp\\_peak-06.pdf](http://cea.nic.in/reports/monthly/powersupply/2014/psp_peak-06.pdf)  
[http://cea.nic.in/reports/monthly/powersupply/2015/psp\\_peak-04.pdf](http://cea.nic.in/reports/monthly/powersupply/2015/psp_peak-04.pdf)  
[http://cea.nic.in/reports/monthly/powersupply/2015/psp\\_peak-05.pdf](http://cea.nic.in/reports/monthly/powersupply/2015/psp_peak-05.pdf)  
[http://cea.nic.in/reports/monthly/powersupply/2015/psp\\_peak-06.pdf](http://cea.nic.in/reports/monthly/powersupply/2015/psp_peak-06.pdf)



Jharkhand Sch vs Act drawal and Deviation curve from 01-11-16 to 00-01-00 (Actual Max=1028MW;  
Min=308MW; Min Freq.=49.63Hz)

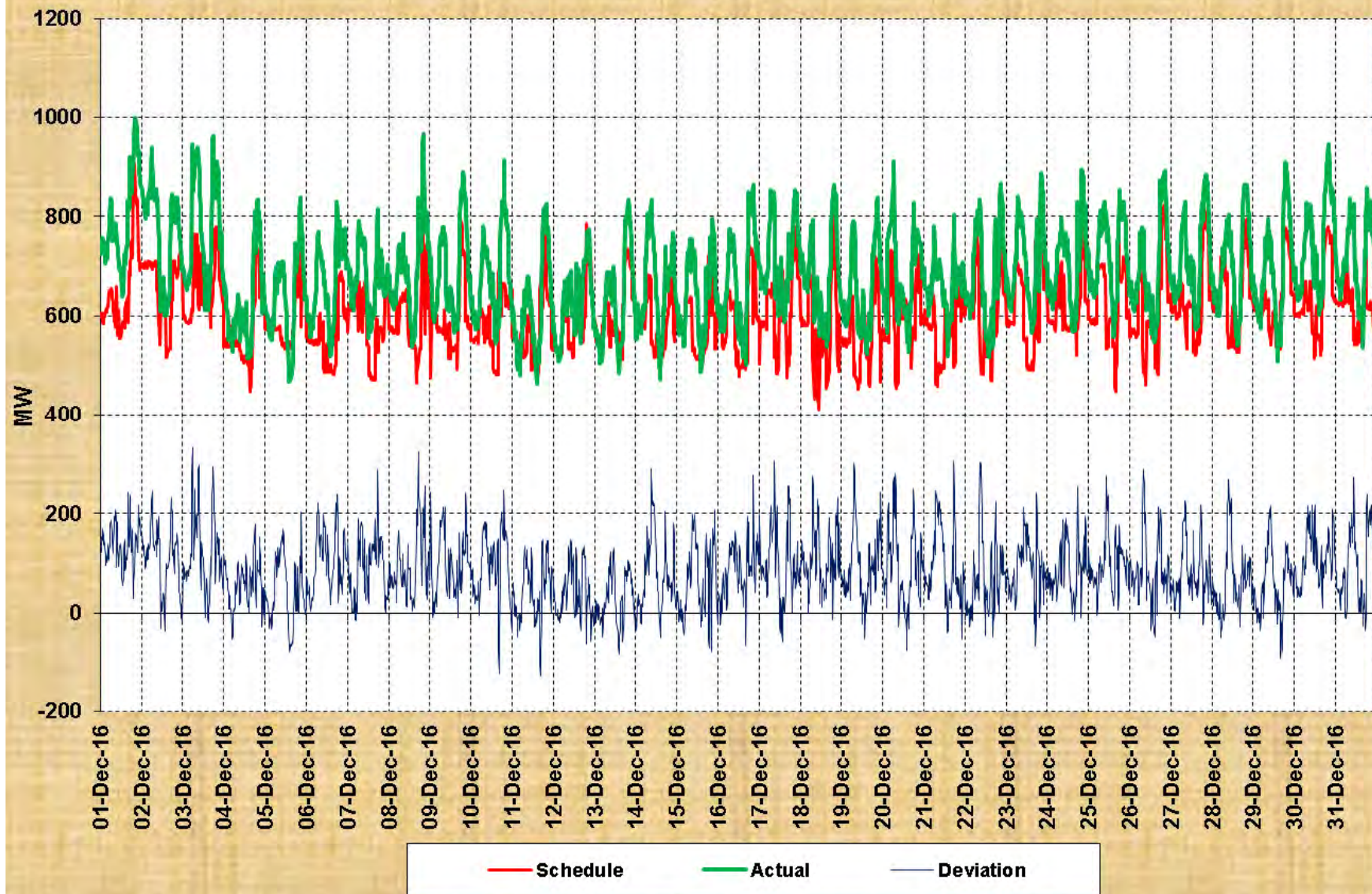
**NOV-16**





Jharkhand Sch vs Act drawal and Deviation curve from 01-12-16 to 31-12-16 (Actual Max=999MW;  
Min=463MW; Min Freq.=49.77Hz)

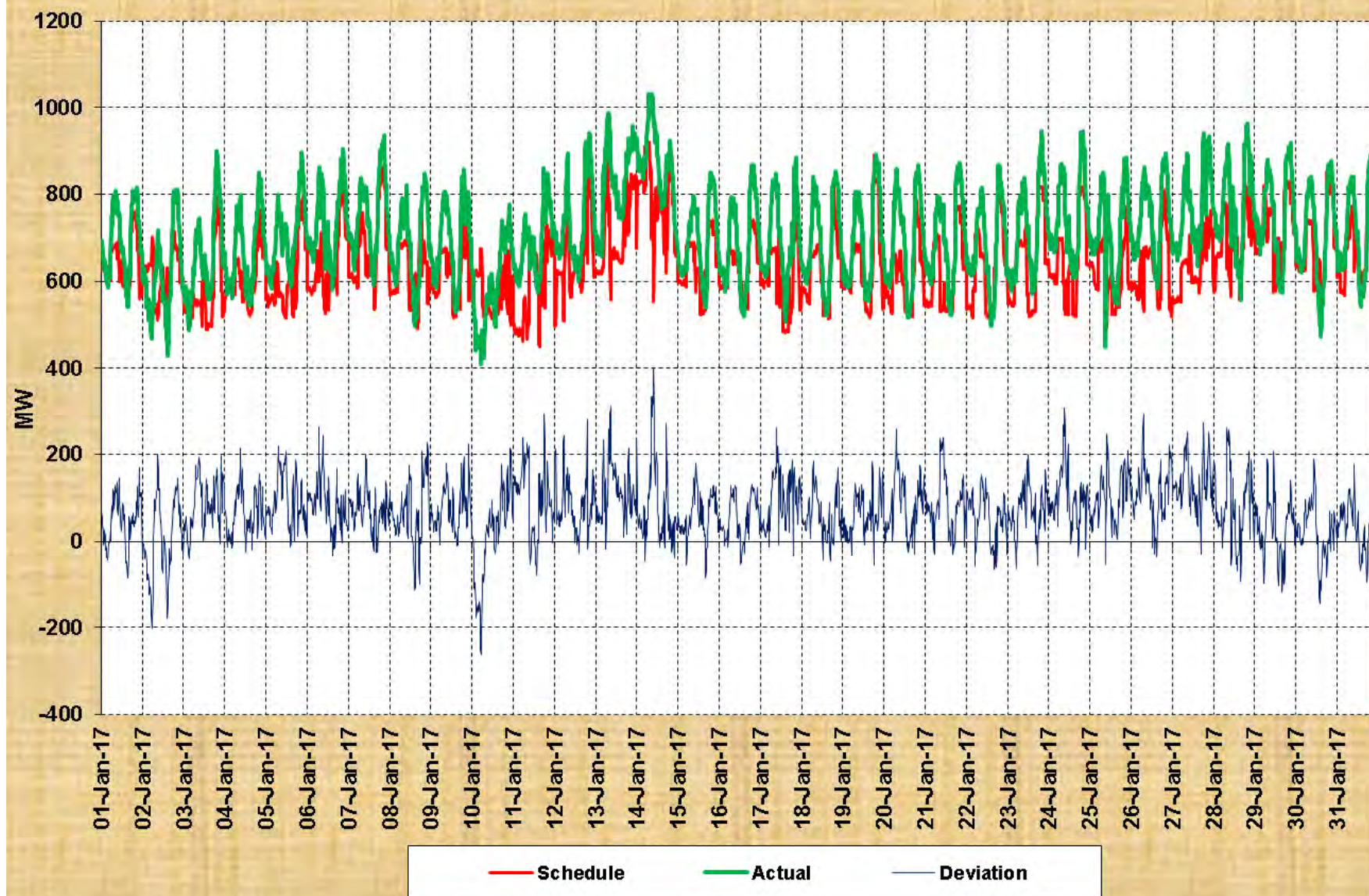
**DEC-16**





**Jharkhand Sch vs Act drawal and Deviation curve from 01-01-17 to 31-01-17 (Actual Max=1032MW;  
Min=410MW; Min Freq.=49.81Hz)**

**JAN-17**





## Chronic issue with real time data availability in eastern region:-

- Frequent Failure of Purnea New real time data.

Percentage Non-Availability of real time data from Purnea 400 kV to ERLDC.



- Another **31 days gone but JITPL and Lalmatia** data yet be restored by JITPL and NTPC respectively.
- No redundant Communication channel in eastern region for real time telemetry over IEC 101, IEC 104 as well as over ICCP protocol

## No VOICE over VOIP

- IPP : JITPL, GMR, IBEUL, TEESTA #3.
- POWERGRID : Bolangir , Indravati , Jeypore , Keonjhar, Purnea 400 kV, Purnea 220 , Baharampur 400kV , Rourkella , Lakhisarai, Rengali, Keonjhor, Jeypore, Dalkhola (PG), Birpara, Kishanganj, Indravati (PG), Bolangir ,Pandiabili.
- NTPC : Nabinagar.

# Building more confidence of Grid operator on SCADA data.

## ➤ Meeramundali MVAr data:

	Duburi New 1	Duburi New 2	Mendhasal	Angul 1	Angul 2	GMR	Talcher STPS	ICT 2	JSPL 1	JSPL 2	Sterlite 1	Sterlite 2	Residue
Site	-96	-98	19	100	126	14	18	85	-23	-25	-52	-52	16
OPTCL	-96	-92	57	182	126	25	20	85	-25	-30	5	-2	255
ERLDC	-96	-92	57	182	126	25	20	85	-25	-30	5	-2	255

## ➤ Data validation is required to be done on periodic basi.

## Non availability of Unit side data

- IBEUL (Unit 1 , Unit 2)
- Farakka Unit #6, Unit #5 (erroneous data).
- Sagardighi Unit #3.
- Teesta V HPS unit data.
- Rangit HPS Unit Data.

# OLTC

1. NEW SASARAM @ 1500 MVA 765/400 kV ICT 1
2. ANGUL @ 1500 MVA 765/400 kV ICT 1
3. ANGUL @ 1500 MVA 765/400 kV ICT 3
4. ANGUL @ 1500 MVA 765/400 kV ICT 4
5. JHARSUGUDA @ 1500 MVA 765/400 kV ICT 1
6. JHARSUGUDA @ 1500 MVA 765/400 kV ICT 2
7. BOLANGIR @ 315 MVA 400/220 kV ICT 1
8. BIHARSHARIF @ 315 MVA 400/220 kV ICT 1
9. BIHARSHARIF @ 315 MVA 400/220 kV ICT 3
10. INDRAVATI (2ND ICT) @ 315 MVA 400/220 kV ICT 1
11. INDRAVATI (2ND ICT) @ 315 MVA 400/220 kV ICT 2
12. KEONJHAR @ 315 MVA 400/220 kV ICT 1
13. KEONJHAR @ 315 MVA 400/220 kV ICT 2
14. MALDA @ 315 MVA 400/220 kV ICT 1
15. MUZAFFARPUR @ 315 MVA 400/220 kV ICT 3
16. RANCHI @ 315 MVA 400/220 kV ICT 1

# OLTC


19. RANCHI @ 315 MVA 400/220 kV ICT 2
20. RENGALI @ 315 MVA 400/220 kV ICT 2
21. ROURKELA @ 315 MVA 400/220 kV ICT 3
22. CHAIBASA @ 315 MVA 400/220 kV ICT 1
23. CHAIBASA @ 315 MVA 400/220 kV ICT 2
24. CHAIBASA @ 315 MVA 400/220 kV ICT 3
25. SUBHASGRAM (ICT I, II & V) @ 315 MVA 400/220 kV ICT3
26. KISHANGUNJ @ 500 MVA 400/220 kV ICT 2
27. KISHANGUNJ @ 500 MVA 400/220 kV ICT 3
28. BARH @ 200 MVA 400/132 kV ICT 1
29. BARH @ 200 MVA 400/132 kV ICT 2
30. LAKHISARAI @ 200 MVA 400/132 kV ICT 3
31. ARRAH @ 100 MVA 220/132 kV ICT 1
32. ARRAH @ 100 MVA 220/132 kV ICT 2
33. PURNEA @ 160 MVA 220/132 kV ICT 1
34. PURNEA @ 160 MVA 220/132 kV ICT 2

# NTPC

- Lalmatia: ( No data since Jan 2016).
- Farakka NTPC:
  - Unit #5 MW and MVAR data not matching with site data (As per inputs from NTPC, This will be done during overhauling of Unit#5)
  - Unit # 6 LV side not available.
- Nabinagar NTPC :
  - Alternet Data channel not provided.
  - Unit HV side data.
  - **No VOIP.**



# POWERGRID

- Data Intermittent /not available:
    - Purnea 400kV (Frequent Failure of RTU)
    - Ranchi 400kV, Baripada, Gaya, Angul, Chaibasa
  - VOIP for following station not yet provided:
    - Bolangir , Indravati , Jeypore , Keonjhar
- 

# WBSETCL

## ➤ Following station data not available:

- TLDP 4.
- Gokarna 400kV (400/220 kV ICT was first charged on 15th Sept'16),
- Dharampur 220,
- Krishnanagar 220,
- Hura 220,
- Foundry Park 220.
- Dalkhola
- Bantala
- Lakshmikantapur
- New Town
- Sagardighi :
  - Unit 3 LV side (Unit) data not available.
- **Kolaghat TPS :** Kharagpur #1 MW/MVAR flow not available.

# BSPHCL

## ➤ Data Intermittent /not available:

- Dumraon, Sonenagar, Khagaul ,Darbhanga, Dehri , sultangaunj , Lakhisarai, Karmanasa, Kahalgaon, Jamaui , Banka, Gopalganj, Kisanganj, Arrah ,Rajgir,Sipara ,Hajipur(New), Pusauli, Valmikinagar, Koshi

# JSUNL

## ➤ Data Intermittent /not available:

- Hatia New 220,
  - Dumka 220.
  - Patratu(Intermittent)
  - DEOGHAR
  - DUMKA
  - GARHW
  - GOELKERA
  - JAMTARA
  - JAPLA
  - KENDOPOSI
- 

# DVC

## ➤ Data Not provided:

- Giridhi 220,
  - Durgapur TPS (DSTPS): Highly intermittent.
- 



## PMU Installation and commissioning status of ER as on 16.02.2017

S.No	Region	State	Sub-Station	Owner/ Utility	S/S type	PMU	TOTAL PANEL QTY	PMU Delivery status	Cable Delivery status	Erection	Cable laying	CT/PT/DI termination	Commiss ioning	Integration	SAT	Remarks
			<b>78</b>			<b>286</b>	<b>175</b>	<b>59</b>	<b>59</b>	<b>42</b>	<b>35</b>	<b>31</b>	<b>31</b>	<b>16</b>	<b>27</b>	
1	ER-II	West Bengal	Arambagh	WBSETCL	CR	3	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
2	ER-II	West Bengal	BAKRESHWAR TPS	WBSETCL	CR	4	1	Yes	Yes	done	pending	pending	pending	Pending	pending	Panel erected. Cable laying pending due to permission issue.
3	ER-II	West Bengal	Bidhannagar	WBSETCL	CR	3	1	Yes	Yes	done	done	pending	pending	Pending	pending	Panel erected. Cable laying and termination at PMU panel completed. CT/ PT/ DI interfacing pending due to permission issue.
4	ER-II	West Bengal	JEERAT	WBSETCL	CR	2	1	Yes	Yes	done	pending	pending	pending	Pending	pending	After stoppage of work for 2 months due to permission issue, WBSETCL has provided interfacing point details on 16.02.17. CT cable shortage issue may arise as star point CT connection not available at Jeerat.
5	ER-II	West Bengal	Kolaghat TPS	WBSETCL	CR	4	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
6	ER-II	West Bengal	KASBA	WBSETCL	CR	3	1	Yes	Yes	done	pending	pending	pending	Pending	pending	After stoppage of work for 2 months due to permission issue, WBSETCL has provided interfacing point details on 15.02.17. But sub-station in-charge informed us that they will not allow us to work from 10.02.17 to 03.03.17.
7	ER-II	DVC	DSTPS	DVC	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
8	ER-II	DVC	Kodarma TPS	DVC	CR	3	1	Yes	Yes	done	done	done	done	Pending	done	Communication panel does not exist.
9	ER-II	DVC	MEJIA-B	DVC	CR	2	1	Yes	Yes	done	done	done	done	done	done	Integrated on 07.12.2016
10	ER-II	DVC	Maithon RB TPS	DVC	CR	2	1	Yes	Yes	pending	pending	pending	pending	Pending	pending	Work started on 04.07.2016. Panel shifted. Team demobilised due to access issue and panel location issue.
11	ER-II	DVC	Raghunathpur TPS	DVC	CR	3	1	Yes	Yes	done	done	done	done	Pending	done	Communication link was not available during work.
12	ER-II	DVC	MEJIA	DVC	CR	5	2	Yes	Yes	done	done	done	done	Pending	done	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mtrs. Will be integrated on Mar 2017.
13	ER-II	DVC	Bokaro	DVC	CR	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 24.06.2016
14	ER-II	DVC	CTPS(Chanderpura)	DVC	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mtrs. Will be integrated on Mar 2017.
15	Odisha	Orissa	Budhipadar	OPTCL	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.
16	Odisha	Orissa	MENDHASAL	OPTCL	CR	2	1	Yes	Yes	done	under progress	pending	pending	Pending	pending	
17	Odisha	Orissa	MERAMANDALI	OPTCL	CR	6	2	Yes	Yes	done	under progress	pending	pending	Pending	pending	
18	Odisha	Orissa	RENGALI	OPTCL	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Integration delayed because CAT-6 cable is faulty.
19	Odisha	Orissa	U.KOLAB	OPTCL	CR	2	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
20	Odisha	Orissa	BALIMELA(H)	OPTCL	CR	3	1	Yes	Yes	done	done	pending	pending	Pending	pending	DC supply issue resolved. CT/ PT/ DI interfacing permission required.
21	ER-II	West Bengal	Durgapur	Powergrid	CR	5	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 30.05.2016.
22	ER-II	West Bengal	FARRAKA	NTPC	CR	5	2	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	Road permit requested for cable.
23	Odisha	Orissa	Indrawati	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
24	Odisha	Orissa	Indrawati HPS	OPTCL	CR	1	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
25	Odisha	Orissa	JEYPORE	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
26	ER-II	West Bengal	MAITHON	Powergrid	CR	7	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 21.06.2016.
27	ER-II	West Bengal	MALDA	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 24.06.2016
28	Odisha	Orissa	Rengali	Powergrid	Kiosk	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 04.05.2016

**PMU Installation and commissioning status of ER as on 16.02.2017**

S.No	Region	State	Sub-Station	Owner/ Utility	S/S type	PMU	TOTAL PANEL QTY	PMU Delivery status	Cable Delivery status	Erection	Cable laying	CT/PT/DI termination	Commissioning	Integration	SAT	Remarks
29	Odisha	Orissa	ROURKELA	Powergrid	Kiosk	5	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 21.04.2016
30	ER-II	West Bengal	Binaguri	Powergrid	CR	7	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 28.07.2016
31	ER-II	West Bengal	SUBHASHGRAM	Powergrid	Kiosk	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 22.06.2016
32	Odisha	Orissa	Baripada	Powergrid	CR	3	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 30.01.2017.
33	Odisha	Orissa	Bolangir	Powergrid	CR+Kiosk	2	3	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
34	Odisha	Orissa	ANGUL	Powergrid	Kiosk	10	11	Yes	Yes	done	under progress	pending	pending	Pending	pending	Work started from 31.01.2017.
35	Odisha	Orissa	Keonjhar	Powergrid	CR	2	3	Yes	Yes	done	done	done	done	done	done	PMU integrated on 18.01.2017.
36	Odisha	Orissa	Jharsuguda	Powergrid	Kiosk	8	9	Yes	Yes	done	done	done	done	done	done	PMU integrated on 29.07.2016
37	Odisha	Orissa	GMR	GMR	Kiosk	3	4	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
38	ER-II	Sikkim	RANGPO	Powergrid	CR	4	1	Yes	Yes	done	done	done	done	Pending	done	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mtrs. Will be integrated on Mar 2017.
39	ER-II	West Bengal	Baharampur	Powergrid	CR	2	3	Yes	Yes	done	done	done	done	done	done	PMU integrated on 10.05.2016
40	ER-II	West Bengal	Birpara	Powergrid	CR	4	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 15.07.2016.
41	ER-II	DVC	CTPS B	DVC	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
42	ER-II	DVC	KALYANESWARI	DVC	CR	4	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 02.01.2017.
43	ER-II	DVC	PARULIA	DVC	CR	5	2	Yes	Yes	done	done	under progress	pending	Pending	pending	Work started again from 31.01.2017.
44	ER-II	West Bengal	Purulia PSP	WBSETCL	CR	2	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
45	ER-II	Jharkhand	Bokaro TPS	DVC	CR	1	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
46	ER-II	West Bengal	Durgapur TPS	DVC	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
47	Odisha	Orissa	TTPS(Talcher)	OPTCL	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
48	Odisha	Orissa	TALCHER	NTPC	CR	5	2	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
49	ER-II	Sikkim	TEESTA	Powergrid	CR	1	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
50	Odisha	Orissa	Uttara	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	Pending	pending	Communication link from s/s to ERLDC and NTAMC to be provided by PGCIL.
51	Odisha	Orissa	Jindal	JITPL	CR	2	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
52	Odisha	Orissa	Monnet	Monnet	CR	1	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
53	Odisha	Orissa	Strelite	Strelite	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
54	Odisha	Orissa	Ind barath	Ind barath	Kiosk	1	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
55	ER-II	Sikkim	New Melli	Powergrid	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.
56	ER-II	Sikkim	TT Pool	Powergrid	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.
57	ER-II	West Bengal	Alipurduar	Powergrid	CR	6	7	Yes	Yes	partially done	partially done	pending	pending	Pending	pending	Work started on 22.12.2016. 4 PMU panels and network panel installed. Rest 2 PMU panels could not be erected because location not finalised. Cable laying and termination at PMU panel completed for 6 feeders. CT/PT Interfacing pending due to unavailability of shutdown. PGCIL is asking to take DI points from field, which is not in scope. Work is held up. Team demobilised.
58	ER-II	West Bengal	Rajarhat	Powergrid	CR	2	1	Yes	Yes	done	pending	pending	pending	Pending	pending	Work withheld due to localite agitation Issue.
59	ER-I	Jharkhand	JAMSHEDPUR	Powergrid	CR	6	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 14.02.2017
60	ER-I	BIHAR	Kahalgaoon(KHSTPP)	NTPC	CR	6	2	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Scheduled to start from 20.02.2017
61	ER-I	BIHAR	Purnea	Powergrid	CR	6	2	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
62	ER-I	BIHAR	PATNA	Powergrid	Kiosk	6	7	Yes	Yes	pending	pending	pending	pending	Pending	pending	Work started from 16.02.2017.



**PMU Installation and commissioning status of ER as on 16.02.2017**

S.No	Region	State	Sub-Station	Owner/ Utility	S/S type	PMU	TOTAL PANEL QTY	PMU Delivery status	Cable Delivery status	Erection	Cable laying	CT/PT/DI termination	Commis sioning	Integration	SAT	Remarks
63	ER-I	Jharkhand	RANCHI	Powergrid	Kiosk	12	13	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	1 panel not delivered. Way bill requested.
64	ER-I	BIHAR	SASARAM(Pusauli)	Powergrid	CR+Kiosk	9	3	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Panel not delivered due to road permit issue.
65	ER-I	BIHAR	BARH	NTPC	CR	4	1	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	Panel delivered. Road permit for cable pending.
66	ER-I	BIHAR	LakhiSarai	Powergrid	Kiosk	4	5	Yes	Yes	done	done	done	done	Pending	done	SAT completed. PMU not integrated because FO cable was not delivered due to road permit issue.
67	ER-I	BIHAR	BANKA	Powergrid	Kiosk	4	5	Yes	Yes	done	done	done	done	Pending	pending	SAT pending. PMU not integrated because switch was not delivered to site. Switch in transit.
68	ER-I	Jharkhand	Chaibasa	Powergrid	Kiosk	4	5	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Road permit pending for FO cable and switch.
69	ER-I	BIHAR	765kv Gaya	Powergrid	Kiosk	11	12	Yes	Yes	done	done	done	done	Pending	pending	Splicing of FO is under progress.
70	ER-I	Jharkhand	765/400kV Ranchi (N)	Powergrid	Kiosk	8	9	Yes	Yes	done	done	under progress	pending	Pending	pending	CT interfacing was allowed from 15.02.2017.
71	ER-I	Bihar	Biharshariff	Powergrid	CR	9	3	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Panel not delivered due to road permit issue.
72	ER-I	Bihar	MUZAFFAPUR	Powergrid	CR	5	2	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
73	ER-I	Jharkhand	Daltonganj	Powergrid	Kiosk	2	3	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Road permit for Switch is pending.
74	ER-I	Bihar	Kishanganj (karandegh)	Powergrid	CR	4	1	Yes	Yes	done	done	done	done	Pending	under progress	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mts.
75	ER-I	Jharkhand	Jharkhand Pool (Chand)	Powergrid	Kiosk	4	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Scheduled to start from 22.02.2017
76	ER-I	Jharkhand	Patratu	Jharkhand	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
77	ER-I	Jharkhand	Tenughat	Jharkhand	CR	2	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
78	ER-I	Bihar	Barauni PP	Bihar	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.

**ER PMU site activity Summary:**

Sl. No.	Region	Utility	As per approved BOQ		Supplied		Installed		Commissioned		Integrated to ERLDC/ SLD	
			No. of Substations	No. of PMU	S/S	PMU	S/S	PMU	S/S	PMU	S/S	PMU
1	ER-I	Powergrid	15	94	12	71	6	37	5	29	1	6
2	ER-I	NTPC	2	10	2	10	0	0	0	0	0	0
3	ER-I	Jharkhand	2	5	0	0	0	0	0	0	0	0
4	ER-I	Bihar	1	0	0	0	0	0	0	0	0	0
	ER-I	<b>Total</b>	<b>20</b>	<b>109</b>	<b>14</b>	<b>81</b>	<b>6</b>	<b>37</b>	<b>5</b>	<b>29</b>	<b>1</b>	<b>6</b>
1	ER-II	Powergrid	13	42	10	41	10	39	8	33	7	29
2	ER-II	NTPC	1	5	1	5	0	0	0	0	0	0
3	ER-II	DVC	13	37	11	31	9	28	8	23	3	8
4	ER-II	WBSETCL	7	21	6	19	4	12	0	0	0	0
	ER-II	<b>Total</b>	<b>34</b>	<b>105</b>	<b>28</b>	<b>96</b>	<b>23</b>	<b>79</b>	<b>16</b>	<b>56</b>	<b>10</b>	<b>37</b>
1	Odisha	Powergrid	10	38	10	38	10	38	9	28	5	20
2	Odisha	OPTCL	8	19	6	16	4	13	1	2	0	0
3	Odisha	NTPC	1	5	0	0	0	0	0	0	0	0
4	Odisha	IPP	5	10	1	3	0	0	0	0	0	0
	Odisha	<b>Total</b>	<b>24</b>	<b>72</b>	<b>17</b>	<b>57</b>	<b>14</b>	<b>51</b>	<b>10</b>	<b>30</b>	<b>5</b>	<b>20</b>
	ER	<b>Total</b>	<b>78</b>	<b>286</b>	<b>59</b>	<b>234</b>	<b>43</b>	<b>167</b>	<b>31</b>	<b>115</b>	<b>16</b>	<b>63</b>

**Status of PDS system Installation and commissioning at ER as on 16.02.2017**

Sl. No.	Site Name	Work Progress
1	ERLDC	Installed, powered up, functioning and integrated with DVC, WBSETCL and OPTCL PDS system.
2	Backup-NLDC	POSOCO did not provide space for PDS system installation.
3	SLDC, Maithon	Installed, powered up, functioning and integrated with ERLDC PDS system.
4	SLDC, Bhubaneswar	Installed, powered up, functioning and integrated with ERLDC PDS system.
5	SLDC, Howrah (WBSETCL)	Installed, powered up, functioning and integrated with ERLDC PDS system.

**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 submitted during ERS meeting held on 10.11.14 taken by Member (Power System), CEA is given below:

- 1) As per 100<sup>th</sup> OCC meeting held on 22.08.2014, the status of ERS towers as available in Powergrid is as given below:

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

- 2) As informed by OPTCL, the present status of ERS towers in OPTCL system is as follows:

- 220 kV ERS towers: 42 nos located at Mancheswar, Chatrapur & Budhipadar
- 400 kV ERS towers: 2 nos located at Mancheswar.
- 12 nos. of new 400 kV ERS towers have been approved by Board of Director for procurement in the current financial year. Purchase order has been placed.
- Another, 16 nos of 400 kV towers accompanied with 6 sets of T&P are required.

- 3) WBSETCL informed that they have placed order for 2 sets of ERS towers on 31.10.2014 and expected by June, 2015.

- 4) The 25<sup>th</sup> ERPC meeting held on 21.09.2014, the board 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) Bihar informed that they have 10 sets of 220 kV ERS towers and 2 sets are under process of procurements.

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

**Anticipated Power Supply Position for the month of**  
Mar-17

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
<b>1</b>	<b>BIHAR</b>		
i)	NET MAX DEMAND	3900	2396
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	446	359
	- Central Sector	2366	1599
iii)	SURPLUS(+)/DEFICIT(-)	-1088	-437
<b>2</b>	<b>JHARKHAND</b>		
i)	NET MAX DEMAND	1200	800
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	476	384
	- Central Sector	511	306
iii)	SURPLUS(+)/DEFICIT(-)	-213	-110
<b>3</b>	<b>DVC</b>		
i)	NET MAX DEMAND (OWN)	2855	1770
ii)	NET POWER AVAILABILITY- Own Source	4672	2604
	- Central Sector	448	292
	Long term Bi-lateral (Export)	1300	967
iii)	SURPLUS(+)/DEFICIT(-)	965	159
<b>4</b>	<b>ORISSA</b>		
i)	NET MAX DEMAND	4000	2492
ii)	NET POWER AVAILABILITY- Own Source	3100	1822
	- Central Sector	1073	700
iii)	SURPLUS(+)/DEFICIT(-)	173	30
<b>5</b>	<b>WEST BENGAL</b>		
<b>5.1</b>	<b>WBSEDCL</b>		
i)	NET MAX DEMAND (OWN)	6150	3665
ii)	CESC's DRAWAL	0	0
iii)	TOTAL WBSEDCL's DEMAND	6150	3665
iv)	NET POWER AVAILABILITY- Own Source	4053	2410
	- Import from DPL	0	23
	- Central Sector	1734	965
v)	SURPLUS(+)/DEFICIT(-)	-363	-267
vi)	EXPORT (TO B'DESH & SIKKIM)	5	4
<b>5.2</b>	<b>DPL</b>		
i)	NET MAX DEMAND	250	219
ii)	NET POWER AVAILABILITY	450	242
iii)	SURPLUS(+)/DEFICIT(-)	200	23
<b>5.3</b>	<b>CESC</b>		
i)	NET MAX DEMAND	1780	830
ii)	NET POWER AVAILABILITY - OWN SOURCE	700	480
	FROM HEL	540	300
	FROM CPL/PCBL	40	10
	Import Requirement	500	40
iii)	TOTAL AVAILABILITY	1780	830
iv)	SURPLUS(+)/DEFICIT(-)	0	0
<b>6</b>	<b>WEST BENGAL (WBSEDCL+DPL+CESC)</b> (excluding DVC's supply to WBSEDCL's command area)		
i)	NET MAX DEMAND	8180	4714
ii)	NET POWER AVAILABILITY- Own Source	5203	3132
	- Central Sector+Others	2774	1265
iii)	SURPLUS(+)/DEFICIT(-)	-203	-317
<b>7</b>	<b>SIKKIM</b>		
i)	NET MAX DEMAND	90	38
ii)	NET POWER AVAILABILITY- Own Source	5	3
	- Central Sector+Others	111	62
iii)	SURPLUS(+)/DEFICIT(-)	26	27
<b>8</b>	<b>EASTERN REGION</b> <b>At 1.03 AS DIVERSITY FACTOR</b>		
i)	NET MAX DEMAND	19636	12210
	Long term Bi-lateral by DVC	1300	967
	EXPORT BY WBSEDCL	5	4
ii)	NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	21186	12527
iii)	PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	245	-654

<b>Maintenance Schedule of Thermal Generating Units of ER for March-2017</b>
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System	Station	Unit	Size (MW)	period		No. of Days	Reason
				From	To		
ODISHA	TTPS	6	110	17.03.17	23.03.17	7	ESP-I normalisation
NTPC	FSTPS	1	200	10.03.17	13.04.17	35	Unit Overhauling. <b>(Subject to non-availability of water)</b>
		5	500	10.03.17	13.04.17	35	

**EASTERN REGIONAL LOAD DESPATCH CENTRE  
KOLKATA**

**TRANSMISSION ELEMENTS OUTAGE APPROVED IN 130TH OCC MEETING OF ERPC**

Sr. No	NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
1	400KV Rourkela-Sundargarh#1	20-02-2017	09:00	03-03-2017	18:00	OCB	ER-II/Odisha	Work for erection of new tower required for shifting of existing Tower at Location No-1134 which is in very vulnerable condition due to major soil erosion from tower legs for flooded river crossing.	
2	315 MVA, 400/220 KV ICT#2 Baripada	20-02-2017	08:00	27-02-2017	18:00	OCB	ER-II/Odisha	For Replacement of Bushings-	OPTCL
3	400kv Rourkela-Sundargarh-I & Sundargarh-Indbarath-I (both circuits together)	20-02-2017	09:00	21-02-2017	18:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-jharsuguda D/C transmission line	Is it 765KV Angul-jharsuguda 3&4? / NLDC
4	400 KV Indravati-Rengali line	20-02-2017	08:00	20-02-2017	13:00	ODB	ER-II/Odisha	For removal of 50MVAR LR of Rengali-Indravati Line from service for replacement of insulating oil- And Testing of 50MVAR L/R in Rengali Line before	NLDC
5	50MVAR L/R of 400KV Indravati-Rengali Line	20-02-2017	13:00	28-02-2017	10:00	OCB	ER-II/Odisha	Replacement of insulating Oil- During this period, only 50MVAR LR will be out of service but the 400KV Indravati-Rengali line will remain in charged condition and there will be no power interruption-	
6	400 KV BUS-II of NTPC Farakka	20-02-2017	10:00	20-02-2017	16:00	ODB	ER-II/ Kol	For conducting Bus bar-II stability test for integration of bay-12 after upgradation of bay-12 from 2000A to	
7	315 MVA ICT-V AT MALDA	20-02-2017	9:00 Hrs.	20-02-2017	17:00	ODB	ER-II/ Kol	ICT AMP	WEST BENGAL
8	A/R of 400 kv BANKA- BIHARSARIF - II	20-02-2017	07:00	31-03-2017	18:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	MAY PLEASE UPDATE THE STATUS OF THE STRINGING WORK? CKT, KM COMPLETION?
9	220kv TBC Bay ( Bay- 203)	21-02-2017	10:00	21-02-2017	17:00	ODB	ER-II/Odisha	AMP work	
10	Auto-Reclosure Non-Auto mode of 400Kv Rourkela-Sundargarh-I( LILO-I Portion )	21-02-2017	09:00	15-03-2017	17:00	ODB	ER-II/Odisha	for attending PID of said fdr at LILO portion	
11	Auto-Reclosure Non-Auto mode of 400Kv Rourkela-Sundargarh-II( LILO-II Portion )	21-02-2017	09:00	15-03-2017	17:00	ODB	ER-II/Odisha	for attending PID of said fdr at LILO portion	
12	Auto-Reclosure Non-Auto mode of 400Kv Sundargarh-Ind Bharat fdr-I (LILO-I Portion )	21-02-2017	09:00	15-03-2017	17:00	ODB	ER-II/Odisha	for attending PID of said fdr at LILO portion	
13	Auto-Reclosure Non-Auto mode of 400Kv Sundargarh-Raigarh fdr( LILO-II Portion )	21-02-2017	09:00	15-03-2017	17:00	ODB	ER-II/Odisha	for attending PID of said fdr at LILO portion	
14	400 KV BONG- NEW SLG-1&2- LINE	21-02-2017	07:00	23-02-2017	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE OUT-AP 10/0 -AP 11/0 .	SHALL BE ALLOWED AFTER RESTORATION OF 220 KV BINA -
15	Bay-08 at NTPC Farakka	21-02-2017	10:00	21-02-2017	18:00	OCB	ER-II/ Kol	Testing and commissioning of CSD of CB of Bay-08	
16	400kv MTN RTPS Line	21-02-2017	10:00	21-02-2017	17:30	ODB	ER-II/ Kol	CVT replacement work.	DVC



17	400 KV BSF - BALIA Ckt. I	21-02-2017	09:00	22-03-2017	18:00	ODB	ER-I	FOR replacement of insulator damaged by miscreants.	NLDC
18	A/R of 400kv Rengali- Indravati line	22-02-2017	08:00	15-03-2017	18:00	ODB	ER-II/Odisha	For Online PID testing for Rengali-Indravati line under	
19	220kV Dhanbad-2 line	22-02-2017	10:00	22-02-2017	17:30	ODB	ER-II/ Kol	CVT replacement work.	
20	400 KV Rourkela - Chaibasa#2 Main Bay (Bay No- 409)	23-02-2017	09:00	23-02-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
21	400kV Talcher-Tie Bay ( Bay- 406)	23-02-2017	08:00	23-02-2017	17:00	ODB	ER-II/Odisha	AMP work	
22	400 KV BUS-I with Bay no-08 of NTPC Farakka	23-02-2017	10:00	24-02-2017	17:00	ODB	ER-II/ Kol	BUS bar-I stability test has to also carried out. To charge Bay no-09, jumper of Bay no-08 is to be opened and to be connected with isolator of Bay no-09. <i>Then only, Bus reactor#1 with Bay no-09 will come into service. Moreover, dismantelling of strung BUS over</i>	
23	400 KV BSF - BALIA Ckt. II	23-02-2017	09:00	24-02-2017	18:00	ODB	ER-I	FOR replacement of insulator damaged by miscreants.	NLDC
24	400KV Rourkela-Raigarh#2	24-02-2017	09:00	03-03-2017	18:00	OCB	ER-II/Odisha	Dismantling of old Tower at Location No-1134 which is in very vulnerable condition due to major soil erosion from tower legs for flooded river crossing and erection of balance tower portion at new pile	NLDC
25	400 KV Rourkela - Chaibasa#1 Main Bay (Bay No- 416)	24-02-2017	09:00	24-02-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
26	400kV Indravati Tie Bay(Bay no- 411)	24-02-2017	09:00	25-02-2017	17:00	OCB	ER-II/Odisha	Erection of Breaker for Bay extension work.	
27	220kV SLG-Kishanganj Ckt-II	24-02-2017	09:00	24-02-2017	17:00	ODB	ER-II/ Kol	PG clamp removal	
28	400 KV BONG- NEW SLG-1&2- LINE	24-02-2017	07:00	25-02-2017	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE IN -AP12/1 - AP13/0	SHALL BE ALLOWED AFTER RESTORATION OF 220 KV BINA -
29	Mejia-3 Main Bay	24-02-2017	10:00	01-03-2017	17:30	OCB	ER-II/ Kol	Overhauling of BHEL CB.	
30	400 KV Chaibasa#1 & Sundargarh#1 Tie Bay(Bay No-	25-02-2017	09:00	25-02-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
31	315MVA ICT-I Bolangir	25-02-2017	09:00	10-03-2017	18:00	ODB	ER-II/Odisha	For Construction works of Bay extension & Reactor	OPTCL
32	400 KV BONGAIGAON-NSLG Ckt-I&II	25-02-2017	08:00	15-03-2017	17:00	OCB	ER-II/ Kol	Destrining,Erection of 03 Nos new tower ,ReStringing, Desmantling of 02 Nos of tower in the section of 465 to 468.(Railway Deposit work)	SHALL BE ALLOWED AFTER RESTORATION OF 220 KV BINA - BIRPARA D/C/ NLDC
33	400 KV PTN - BARH-3	25-02-2017	08:00	01-03-2017	17:00	ODB	ER-I	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER INSULATOR	
34	132kV Kurseong - Rangit	26-02-2017	09:00	27-02-2017	17:00	ODB	ER-II/ Kol	Insulator fitting	WEST BENGAL
35	132kV Siliguri - Melli	26-02-2017	09:00	27-02-2017	17:00	ODB	ER-II/ Kol	Insulator fitting	SIKKIM
36	400 KV BIHARSARIF - MUZAFFARPUR - II	26-02-2017	07:00	28-02-2017	18:00	ODB	ER-I	FOR OPGW RECTIFICARION WORK	NLDC
37	400 kV Jeypore-Indravati S/C Line	27-02-2017	06:00	28-02-2017	18:00	ODB	ER-II/Odisha	For Replacement of PID Defective Insulators in Jay-Ivt Line	NLDC
38	400kV Rengali-Talcher-I Line	27-02-2017	11:00	27-02-2017	15:00	ODB	ER-II/Odisha	Retrofitting of DP Relay	
39	400 KV Talcher #1 Tie Bay (Bay No-- 405)	27-02-2017	09:00	27-02-2017	14:00	ODB	ER-II/Odisha	Overhauling of Air Compressor of 40552 CB-	
40	400KV Bay 404 Bolangir	27-02-2017	09:00	27-02-2017	18:00	ODB	ER-II/Odisha	AMP Work	
41	220 KV BUS COUPLER BAY AT ARA	27-02-2017	10:00	02-03-2017	17:00	OCB	ER-I	for mechanism overhauling of Circuit Breaker.	
42	400 KV Bus-II AT NEW RANCHI	27-02-2017	08:00	28-02-2017	18:00	ODB	ER-I	For alignment and testing of Patratu-I & II Main Bay isolator under JCP	

43	400KV BUS-I AT JAMSHEDPUR	27-02-2017	09:30	27-02-2017	17:30	ODB	ER-I	Bay Construction work	
44	50 MVAR B/R -1 AT BSF	27-02-2017	10:00	27-02-2017	18:00	OCB	ER-I	EXTENSION OF JACK BUS FOR UPCOMING 125 MVAR B/R -UNDER CONSTRUCTION WORK.	
45	200 MVA ICT-1AT LAKHISARAI	27-02-2017	08:00	02-03-2017	18:00	ODB	ER-I	Construction of Firewall	BIHAR
46	400KV Jharsuguda - Raigarh - I	27-02-2017	08:00	28-02-2017	18:00	OCB	IND BHARAT	REMOVAL OF IND BHARAT LILO AND RESTORATION OF DIRECT	NLDC
47	400KV Jharsuguda - Raigarh - II	27-02-2017	08:00	27-02-2017	18:00	ODB	IND BHARAT	REMOVAL OF IND BHARAT LILO AND RESTORATION OF DIRECT	NLDC
48	400kv Rengali-Talcher-II Line	28-02-2017	11:00	28-02-2017	15:00	ODB	ER-II/Odisha	Retrofitting of DP Relay	
49	400kv Main Bus-II Anugul	28-02-2017	08:00	28-02-2017	18:00	ODB	ER-II/Odisha	Commissioning of Tie Bay( Bay No-414) with Bus-II after bypassing of Monet Main Bay(415).	
50	400KV KEONJHAR LINE MAIN BAY (401)	28-02-2017	09:00	01-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TIE BAY- SF6 GAS LEAKAGE RECTIFICATION WORK IN	
51	400 KV Indravati-Rengali line	28-02-2017	10:00	28-02-2017	18:00	ODB	ER-II/Odisha	Testing of 50MVAR L/R in Rengali Line before charging- And taking the LR into service	NLDC
52	400 KV Talcher #1 Main Bay (Bay No-- 406)	28-02-2017	09:00	28-02-2017	14:00	ODB	ER-II/Odisha	Overhauling of Air Compressor of 40652 CB-	
53	Main Bay-704 of 765KV Bus Reactor-II anugul	28-02-2017	08:00	05-03-2017	18:00	OCB	ER-II/Odisha	REFURBISHMENT OF 765KV CB FOR DCRM PROBLEM(CONSTRUCTIONAL DEFECT)	NLDC
54	400KV Bay 402 Anugul	28-02-2017	09:00	28-02-2017	18:00	ODB	ER-II/Odisha	AMP Work	
55	132kv Siliguri - Kurseong	28-02-2017	09:00	28-02-2017	17:00	ODB	ER-II/ Kol	Jumper Cone Repairing / Insulator fitting	WEST BENGAL
56	400kv S/C Sagardighi-Farakka TL	28-02-2017	8:00 Hrs	28-02-2017	17:00 Hrs	ODB	ER-II/ Kol	Insulator change due to damage by miscreants	
57	400KV BUS-II AT JAMSHEDPUR	28-02-2017	09:30	28-02-2017	17:30	ODB	ER-I	Bay Construction work	
58	400 KV BUS -2 AT BSF	28-02-2017	12:00	28-02-2017	16:00	ODB	ER-I	JUMPER OPENING OF BAY NO. 17 FROM JACK BUS OF BAY NO. 13 CONNECTED TO BUS -2 FOR TENUGHAT MAIN BAY EQUIPMENT ERECTION WORK under construction work.	
59	LAKHISARAI -2 TIE BAY 417 AT BSF	28-02-2017	12:00	28-02-2017	15:00	ODB	ER-I	TENUGHAT MAIN BAY ERECTION WORK UNDER CONSTRUCTION WORK	
60	400kv Bus Reactor-3 Main Bay (404)	01-03-2017	09:00	01-03-2017	15:00	ODB	ER-II/Odisha	S/D in the month of January-2017(S/D not approved by ERLDC)-	
61	220KV Bus-I rourkela	01-03-2017	09:00	01-03-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
62	765KV Bus-I Sundergarh	01-03-2017	08:00	03-03-2017	18:00	OCB	ER-II/Odisha	For extension of Busbar and stability checking	NLDC
63	400KV Bolangir-Jeypore Line	01-03-2017	09:00	01-03-2017	18:00	ODB	ER-II/Odisha	Replacement of pilot insulators in the major crossings.	NLDC
64	400kv Bus-I Rengali	01-03-2017	09:00	01-03-2017	17:00	ODB	ER-II/Odisha	For erection of Beam structure of New Bay extension work at Rengali.	
65	400kv NSLG-Rangpo Ckt-II	01-03-2017	09:00	01-03-2017	17:00	ODB	ER-II/ Kol	Hot spot rectification	SCHEDULE MAY BE PRE PONED. WORK MAY BE COMPLETED BEFORE TEESTA - III START OF TRIAL RUN
66	400kv Bus-I AT BINAGURI	01-03-2017	07:00	04-03-2017	17:00	ODB	ER-II/ Kol	To facilitate hot spot rectification in Pumea-3 & 4 Line and Rangpo-1 & 2 Line	

67	400KV RANGPO- NSLG, CKT-1	01-03-2017	09:30	01-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	SCHEDULE MAY BE PRE PONED. WORK MAY BE COMPLETED BEFORE TEESTA - III START OF TRIAL RUN
68	400 KV Farakka- Kahalgaon 1 & 2	01-03-2017	08:00	01-03-2017	18:00	ODB	ER-II/ Kol	Stringing between Loc. No. 5A/0 to 6/0 of LILO of 400 KV Rajarhat- Purnea D/c at Farakka .	
69	400 KV Bus-I AT NEW RANCHI	01-03-2017	08:00	03-03-2017	18:00	ODB	ER-I	isolator under JCP	
70	400 KV NEW RANCHI-PURULIA LINE	01-03-2017	08:00	03-03-2017	18:00	ODB	ER-I	isolator under JCP at NEW RANCHI	
71	400 KV NEW RANCHI-ARAMBAGH LINE	01-03-2017	08:00	03-03-2017	18:00	ODB	ER-I	isolator under JCP at NEW RANCHI	
72	315 MVA ICT -1 AT MUZ	01-03-2017	10:00	01-03-2017	16:00	ODB	ER-I	AMP WORK	BIHAR/ NLDC
73	315MVA ICT-I AT RANCHI	01-03-2017	10:00	01-03-2017	17:00	ODB	ER-I	AMP WORK, During S/D ICT Out of service.	JHARKHAND
74	400KV BUS - 1 EAST SIDE AT SSRM	01-03-2017	09:30	01-03-2017	17:30	ODB	ER-I	be no any power flow in 765/400KV, 1500MVA	
75	400kv D/C Binaguri-Bongaigaon TL (One circuit at a time).	01-03-2017	8:00 Hrs	20-03-2020	17:00 Hrs	ODB	ER-II/ Kol	Porcelain Insulator replacement work, One ckt S/D shall be taken, other ckt shall remain in service	NLDC
76	220 KV DVC#1 at Durgapur.	01-03-2017	11:00	01-03-2017	12:00	ODB	ER-II	CB Overhauling-trasfer load to transfer bus & protection testing.	DVC
77	315 MVA ICT-3 AT BSF	02-03-2017	10:00	02-03-2017	18:00	ODB	ER-I	AMP OF ICT-3 AND ASSOCIATED 220 KV LINE BAY	BIHAR
78	400kv Bus-II Rengali	02-03-2017	09:00	02-03-2017	17:00	ODB	ER-II/Odisha	For erection of Beam structure of New Bay extension work at Rengali.	
79	220KV Bus-II rourkela	02-03-2017	09:00	02-03-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
80	400kv Bus Reactor-3 & Meramundali Line-1 TIE Bay (405)	02-03-2017	09:00	02-03-2017	15:00	ODB	ER-II/Odisha	Differed AMP WORK due to non availability of planned S/D in the month of January-2017(S/D not approved by	
81	400 KV BARIPADA LINE AT NEWDUBURI (OPTCL) SS	02-03-2017	09:00	02-03-2017	18:00	ODB	ER-II/Odisha	RECTIFICATION OF LINE EARTH SWITCH STOCK UP PROBLEM, WHICH CAUSED 14 HOUR DELAY IN	
82	400KV Bolangir-Angul Line	02-03-2017	09:00	03-03-2017	18:00	ODB	ER-II/Odisha	Replacement of pilot insulators in the major crossings.	NLDC
83	400kv NSLG-Rangpo Ckt-I	02-03-2017	09:00	02-03-2017	17:00	ODB	ER-II/ Kol	Hot spot rectification	SCHEDULE MAY BE PRE PONED. WORK MAY BE COMPLETED BEFORE TEESTA - III START OF TRIAL RUN
84	400kv Tala-I L/R along with Line	02-03-2017	09:00	02-03-2017	17:00	ODB	ER-II/ Kol	Repeat tan delta of 400kv R Phase Bushing & Neutral Bushing Replacement / oil leakage arrest.	NLDC
85	400KV RANGPO- NSLG, CKT-2	02-03-2017	09:30	02-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	SCHEDULE MAY BE PRE PONED. WORK MAY BE COMPLETED BEFORE TEESTA - III START OF TRIAL RUN OPERATION.
86	132KV Bus of Gangtok S/s	02-03-2017	9:00 Hrs.	02-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	All bus isolator AMP and 132KV Bus AMP, proper alignment checking of all Bus isolator is required very urgently otherwise during operation criticality may be	SIKKIM
87	66 KV Bus of Gangtok S/s	02-03-2017	9:00 Hrs.	02-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	All bus isolator AMP and 132KV Bus AMP, proper	SIKKIM
88	Kahalgaon 1 Main Bay	02-03-2017	10:00	09-03-2017	17:30	OCB	ER-II/ Kol	Overhauling of BHEL CB.	
89	400 KV JAMSHEDPUR - TATA (DVC)	02-03-2017	09:30	02-03-2017	17:30	ODB	ER-I	Bay Construction work	DVC
90	400 KV PTN - BARH -3 AND 400 KV BARH - GKP - 1	02-03-2017	08:00	04-03-2017	17:00	ODB	ER-I	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER INSULATOR	
91	400 KV KHLG - FKK-3 AND 4	02-03-2017	09:00	04-03-2017	18:00	OCB	ER-I	400 KV KHLG - BANKA T/L UNDER BUS SPLIT SCHEME AT NTPC S/Y.	

92	400KV RNC-RIGHT BANK-II	02-03-2017	10:00	02-03-2017	17:00	ODB	ER-I	insulator.	
93	765KV BUS - 1 AT SSRM	02-03-2017	09:30	02-03-2017	17:30	ODB	ER-I	AMP work in main bay of 765KV PSL-FTP line(707-52CB)	NLDC
94	220 KV MUZAFFARPUR - KANTI D/C	02-03-2017	07:00	03-03-2017	18:00	ODB	ER-I	FOR OPGW RECTIFICARION WORK	BIHAR
95	400 KV Durgapur-Maithon Line-1.	02-03-2017	10:00	02-03-2017	13:00	ODB	ER-II	Wave trap jumper rectification.	
96	(+/-) 800 KV HVDC BNC-AGRA LINE.	02-03-2017	09:00	02-03-2017	17:00	OCB	ER-II	FOR LILO OF MAIN HVDC LINE WITH ALIPURDUAR TERMINAL	NLDC
97	400kv Meramundali Line-1 Main Bay (406)	03-03-2017	09:00	03-03-2017	15:00	ODB	ER-II/Odisha	Differed AMP WORK due to non availability of planned S/D in the month of January-2017(S/D not approved by	
98	220KV BALASORE LINE-I BAY-201	03-03-2017	09:00	06-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY-	
99	220kv NSLG-SLG Ckt-II	03-03-2017	09:00	03-03-2017	17:00	ODB	ER-II/ Kol	Relay retrofitting / AMP	
100	400kv Tala Ckt-I	03-03-2017	09:00	03-03-2017	17:00	ODB	ER-II/ Kol	Relay retrofitting	NLDC
101	400kv NSLG-Kishanganj-2 Line	03-03-2017	07:00	03-03-2017	17:00	ODB	ER-II/ Kol	Hot spot rectification	
102	400kv NSLG-Bangaigaon Ckt-1	03-03-2017	07:00	05-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	NLDC
103	400kv NSLG-Tala Ckt-4	03-03-2017	07:00	03-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	NLDC
104	400KV RANGPO- TEESTA-V, CKT-1	03-03-2017	09:30	03-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	
105	220 KV Farakka- Lalmatia TL	03-03-2017	08:00	03-03-2017	18:00	OCB	ER-II/ Kol	Stringing between loc. No. 6/0 to 7/0 of LILO of 400 KV Rajarhat- Purnea D/c at Farakka.	JHARKHAND
106	132 KV MAIN BUS AT ARA	03-03-2017	09:30	03-03-2017	17:30	ODB	ER-I	for AMP and replacement of Rotating Stool Base of 132 KV Jagdishpur Ckt Main Bay Y phase Bus Isolator	
107	315 MVA ICT 2 AT JAMSHEDPUR	03-03-2017	09:30	03-03-2017	17:30	ODB	ER-I	Bay Construction work	JHARKHAND
108	400 KV PATNA-BALLIA -II	03-03-2017	07:00	03-03-2017	17:00	ODB	ER-I	For replacement of disc insulator with polymer insulator	NLDC
109	220 KV MUZ - KANTI -1	03-03-2017	10:00	03-03-2017	17:00	ODB	ER-I	AMP WORK	BIHAR
110	765KV BUS - 2 AT SSRM	03-03-2017	09:30	03-03-2017	17:30	ODB	ER-I	reactor will be out during AMP of 765KV BUS-2 as per	NLDC
111	400 kV Jeypore-Bolangir S/C Line	04-03-2017	09:30	04-03-2017	15:30:00	ODB	ER-II/Odisha	For Changing Y-Ph CVT of Bolangir Line due to Secondary Voltage Drift Violation	NLDC
112	400kv Rourkela-Sundargarh-II & Sundargarh-Raigarh-II (both circuits together)	04-03-2017	08:00	05-03-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-jharsuguda D/C transmission line	
113	765kv ICT-4 Main Bay(713)	04-03-2017	09:00	04-03-2017	17:00	ODB	ER-II/Odisha	Differed AMP WORK due to non availability of planned S/D in the month of January-2017(S/D not approved by	NLDC
114	765KV Bus-II Sundergarh	04-03-2017	08:00	06-03-2017	18:00	OCB	ER-II/Odisha	For extension of Busbar and stability checking	NLDC
115	200KV Rourkela-Tarkera#2	04-03-2017	09:00	04-03-2017	18:00	ODB	ER-II/Odisha	AMP Work-	OPTCL
116	220KV Bay 203	04-03-2017	09:00	04-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	
117	400kv NSLG-Kishanganj-1 Line	04-03-2017	07:00	04-03-2017	17:00	ODB	ER-II/ Kol	Hot spot rectification	
118	400 KV PATNA-BALLIA -I	04-03-2017	07:00	04-03-2017	17:00	ODB	ER-I	insulator	NLDC
119	400 KV CHAIBASA-KHARAGPUR CKT -2	04-03-2017	09:00	04-03-2017	08:00	ODB	ER-I	For rectification of BCU problem	
120	402 Tie bay associated with BSF-1 & ICT-1 AT	04-03-2017	10:00	04-03-2017	14:00	ODB	ER-I	AMP	
121	220 KV MUZ - KANTI -2	04-03-2017	10:00	04-03-2017	17:00	ODB	ER-I	AMP WORK	BIHAR
122	400 KV BHERAMPUR - JERAT	04-03-2017	06:00	05-03-2017	16:00	ODB	WBSETCL	STRINING OF GOKARNA - SAGARDIGHI D/CTR LINE	

123	220 KV DVC#1 at Durgapur.	04-03-2017	11:00	04-03-2017	12:00	ODB	ER-II	Final commissioning of CB.	DVC
124	400 KV BSF - MUZ Ckt. I	05-03-2017	09:00	05-03-2017	18:00	ODB	ER-I	FOR TL Maintenance works	NLDC
125	BNG-IV L/R AT BINAGURI	05-03-2017	09:00	05-03-2017	17:00	ODB	ER-II/ Kol	AMP	
126	220KV NSLG-BRP Ckt-II	05-03-2017	09:00	05-03-2017	17:00	ODB	ER-II/ Kol	Relay retrofitting / AMP	
127	400KV NSLG-Tala Ckt-1	05-03-2017	07:00	05-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	NLDC
128	315MVA ICT#2 AT PATNA	05-03-2017	09:00	05-03-2017	18:00	OCB	ER-I	AMP works.	BIHAR
129	400 KV PTN - BARH -4 AND 400 KV BARH - GKP - 2	05-03-2017	08:00	07-03-2017	17:00	ODB	ER-I	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER INSULATOR	
130	765KV Bus Reactor-2 main bay (715)	06-03-2017	09:00	06-03-2017	17:00	ODB	ER-II/Odisha	Differed AMP WORK due to non availability of planned S/D in the month of January-2017(S/D not approved by	NLDC
131	Bolangir Line Main Bay(415)	06-03-2017	09:30	06-03-2017	17:30	ODB	ER-II/Odisha	For AMP works	
132	400KV Rourkela-Sundargarh#2 Main Bay (Bay No-430)	06-03-2017	09:00	06-03-2017	18:00	ODB	ER-II/Odisha	Checking of DC Earth Fault in TC-2 Circuit-	
133	Tie Bay-711 of 765KV Sundergarh-Angul Line-I	06-03-2017	08:00	11-03-2017	18:00	OCB	ER-II/Odisha	REFURBISHMENT OF 765KV CB FOR DCRM	NLDC
134	220KV Bus Coupler Bay 204	06-03-2017	09:00	06-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	
135	TALCHER HVDC POLE-1	06-03-2017	07:00	09-03-2017	18:00	OCB	ER-II/Odisha	POLE-1 Shutdown for OLTC overhauling works and	NLDC
136	400KV NSLG-Bangaigaon Ckt-2	06-03-2017	07:00	10-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	NLDC
137	400KV RANGPO- TEESTA-V, CKT-2	06-03-2017	09:30	06-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	
138	400 KV BUS-I of NTPC Farakka	06-03-2017	09:00	07-03-2017	17:00	ODB	ER-II/ Kol	Bus-I connection for newly constructed 400 KV Farakka-Rajarhat bay and 400 KV Farakka- Purnea bay (under ERSS-V). BUS bar-I stability test has to also carried out.	
139	TIE BAY OF DURGAPUR - MEJIA AT JASHEDPUR	06-03-2017	09:30	12-03-2017	17:30	OCB	ER-I	BHEL CB REPLACEMENT WORK.	
140	400 KV BUS -3 AT BSF	06-03-2017	10:00	09-03-2017	18:00	OCB	ER-I	BUS BAR COMMISSIONING WORK UNDER BUS SPLIT PROJECT	
141	220 KV BUS-I AT PATNA	06-03-2017	09:00	07-03-2017	18.00	ODB	ER-I	AMP works. No power interruption	
142	400KV RNC-RLK-I	06-03-2017	10:00	06-03-2017	17:30	ODB	ER-I	insulator.	
143	220 KV ICT#2 incommet at Durgapur.	06-03-2017	11:00	06-03-2017	12:00	ODB	ER-II	CB Overhauling-trasfer load to transfer bus & protection testing , Fixing of insulation sleeve.	
144	400 KV Andal-Jamshedpur-D/C.	06-03-2017	10:00	08-03-2017	17:00	ODB	ER-II	For Insulator replacement work.	DVC
145	765KV Bus Reactor-II sundargarh	07-03-2017	08:00	07-03-2017	13:00	ODB	ER-II/Odisha	To take spare Reactor as Bph of 765KV Bus Reactor-II to attend oil leakage in Bph of the Reactor-	NLDC
146	765/400kv, 3*500MVA ICT#2 Anugul	07-03-2017	09:00	07-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	NLDC
147	220KV BALASORE LINE-II BAY-202	07-03-2017	09:00	10-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY-	
148	400 kV Bus-I Jeypore	07-03-2017	09:30	07-03-2017	13:30:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection	
149	400 kV Bus-II Jeypore	07-03-2017	14:00	07-03-2017	18:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection	
150	400KV Rourkela-SEL#2 Main Bay (Bay No-426)	07-03-2017	09:00	07-03-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
151	220KV Bay 206	07-03-2017	09:00	07-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	
152	220kv NSLG-BRP Ckt-I	07-03-2017	09:00	07-03-2017	17:00	ODB	ER-II/ Kol	Relay retrofitting / AMP	
153	400kv NSLG-Tala Ckt-2	07-03-2017	07:00	07-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	NLDC
154	132 KV RANGPO-CHUZACHEN	07-03-2017	09:30	07-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	
155	66KV Bulbulay (Line#1) Feeder	07-03-2017	9:00 Hrs.	07-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	CT tan delta and Line Isolator and Transfer Bus Isolator	SIKKIM

156	400 KV KHG - LKS Ckt. I	07-03-2017	09:00	07-03-2017	18:00	ODB	ER-I	For replacement Disc Insulator with Polymer Insulator.	
157	765kv S/C Gaya-Balia line	07-03-2017	09:00	07-03-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant 200,202	NLDC
158	403 Main Bay ICT-1 AT LAKHISASARAI	07-03-2017	10:00	07-03-2017	14:00	ODB	ER-I	AMP	
159	400 KV BUS-2 AT MUZ	07-03-2017	10:00	08-03-2017	18:00	ODB	ER-I	AMP WORK	
160	400KV RNC-RLK-II	07-03-2017	10:00	07-03-2017	17:30	ODB	ER-I	insulator.	
161	220KV SIDE BAY(201 BAY)OF ICT - 1 AT SSRM	07-03-2017	09:30	07-03-2017	17:30	ODB	ER-I	TBC will be taken into service during AMP work	
162	400 KV Kahalgaon - Farakka line-3	07-03-2017	09:30hrs	07-03-2017	17:30 hrs	ODB	NTPC	PM works & relay testing	
163	400kv BkTPP - Arambag	07-03-2017	07:00	07-03-2017	15:00	ODB	WBSETCL	WINTER MAINTENANCE	
164	220 kV Bus-I Jeypore	08-03-2017	09:30	08-03-2017	13:30:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection	OPTCL
165	220 kV Bus-II Jeypore	08-03-2017	14:00	08-03-2017	18:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection	OPTCL
166	765/400kV, 3*500MVA ICT#3 Anugul	08-03-2017	09:00	08-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	NLDC
167	400KV SEL#2 - 125MVAR B/R Tie Bay (Bay No- 427)	08-03-2017	09:00	08-03-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
168	TALCHER HVDC POLE-1 & POLE-2 (BIPOLE SHUTDOWN)	08-03-2017	07:00	09-03-2017	18:00	OCB	ER-II/Odisha	Bipole shutdown for LVDC CB servicing at both	NLDC
169	TALCHER HVDC POLE-2	08-03-2017	07:00	11-03-2017	18:00	OCB	ER-II/Odisha	POLE-2 Shutdown for OLTC overhauling works, LVDC CB servicing at both stations and other maintenance activities	NLDC
170	132 KV RANGPO-GANGTOK-1	08-03-2017	09:30	08-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	SIKKIM
171	400 KV BUS-II of NTPC Farakka	08-03-2017	09:00	09-03-2017	17:00	ODB	ER-II/ Kol	Bus-II connection for newly constrcted 400 KV Farakka	
172	400 KV KHG - LKS Ckt. II	08-03-2017	09:00	08-03-2017	18:00	ODB	ER-I	For replacement Disc Insulator with Polymer Insulator.	
173	220 KV BUS-II AT PATNA	08-03-2017	09:00	09-03-2017	18.00	ODB	ER-I	AMP works. No power interruption	
174	400 KV PTN - BARH-4	08-03-2017	08:00	12-03-2017	17:00	ODB	ER-I	POLYMER INSULATOR	
175	765kv S/C Gaya-Varanasi-1	08-03-2017	09:00	08-03-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant118,120	NLDC
176	400 KV KHLG - BARH -1 AND 2	08-03-2017	09:00	10-03-2017	18:00	OCB	ER-I	400 KV KHLG - BANKA T/L UNDER BUS SPLIT SCHEME AT	May be allowed after restoration of
177	132 KV PURNEA - PURNEA BSPTCL#3 OF BSPTCL	08-03-2017	09:00	08-03-2017	17:00	ODB	ER-I	FACILITATE CONSTRN. OF GIS BUS DUCT AND SF6 TO	BIHAR
178	160 MVA ICT-3 AT PURNEA	08-03-2017	09:00	08-03-2017	17:00	ODB	ER-I	FACILITATE CONSTRN. OF GIS BUS DUCT AND SF6 TO	BIHAR
179	400KV RNC-SIPTA-II	08-03-2017	10:00	08-03-2017	17:30	ODB	ER-I	insulator.	NLDC
180	220KV SIDE BAY(203 BAY) OF ICT - 2 AT SSRM	08-03-2017	09:30	08-03-2017	17:30	ODB	ER-I	TBC will be taken into service during AMP work	
181	400 KV DURGAPUR MAIN BUS - A	08-03-2017	08:00	08-03-2017	15:00	ODB	WBSETCL	WINTER MAINTENANCE	
182	400KV Rourkela-Chaibasa#1 L/R (Bay No-416LR)	09-03-2017	09:00	09-03-2017	18:00	ODB	ER-II/Odisha	AMP Work-	
183	765KV Bus-I sundergarh	09-03-2017	08:00	09-03-2017	18:00	ODB	ER-II/Odisha	Disconnecting of Extended Busbar	NLDC
184	220kv NSLG-SLG Ckt-I	09-03-2017	09:00	09-03-2017	17:00	ODB	ER-II/ Kol	Relay retrofitting / AMP	
185	400kv NSLG-Tala Ckt-3	09-03-2017	07:00	09-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	NLDC

186	132 KV RANGPO-RANGIT	09-03-2017	09:30	09-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	
187	66KV Tadong (Line#2) Feeder	09-03-2017	9:00 Hrs.	09-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	CT tan delta and Line Isolator and Transfer Bus Isolator AMP	SIKKIM
188	220kV D/C Dalkhola-Kishaganj TL (One circuit at a time).	09-03-2017	8:00 Hrs	16-03-2017	17:00 Hrs	ODB	ER-II/ Kol	Porcelain Insulator replacement work, One ckt S/D shall be taken, other ckt shall remain in service	
189	400 KV LKS - BSF Ckt. I	09-03-2017	09:00	09-03-2017	18:00	ODB	ER-I	For replacement Disc Insulator with Polymer Insulator.	
190	765kV S/C Gaya-Varanasi-2	09-03-2017	09:00	09-03-2017	17:00	ODB	ER-I	100, 106	NLDC
191	407 Main Bay KHG-2 AT LAKHISARAI	09-03-2017	10:00	09-03-2017	14:00	ODB	ER-I	AMP	
192	400 KV BUS-1 AT MUZ	09-03-2017	10:00	10-03-2017	18:00	ODB	ER-I	AMP WORK	
193	132 KV PRN - PRN (BSPTCL)-2	09-03-2017	09:00	23-03-2017	17:00	OCB	ER-I	EQUIPMENTS AND CONVERSION TO GIS INCLUDING HV	BIHAR
194	160 MVA ICT-3 AT PURNEA	09-03-2017	09:00	23-03-2017	17:00	OCB	ER-I	EQUIPMENTS AND CONVERSION TO GIS INCLUDING HV	BIHAR
195	SSRM	09-03-2017	09:30	09-03-2017	17:30	ODB	ER-I	AMP WORK	
196	220 KV ICT#2 incommet at Durgapur.	09-03-2017	11:00	09-03-2017	12:00	ODB	ER-II	Final commissioning of CB.	
197	765/400kV, 3*500MVA ICT#3 at Angul	09-03-2017	08:00	10-03-2017	18:00	ODB	ER-II/Odisha /Angul SS	AMPWORK & RTV Coating Work on Trench make Bushings	NLDC
198	765KV Bus-II Sundergarh	10-03-2017	08:00	10-03-2017	18:00	ODB	ER-II/Odisha	Disconnecting of Extended Busbar	NLDC
199	400KV Rourkela-Raigarh#2	10-03-2017	09:00	10-03-2017	09:30	ODB	ER-II/Odisha	For isolating Line Reactor for AMP Work-	NLDC
200	400KV Rourkela-Raigarh#2 L/R Bay(Bay No-419LR)	10-03-2017	09:30	10-03-2017	17:30	ODB	ER-II/Odisha	Line Reactor AMP Work-	NLDC
201	400KV Rourkela-Raigarh#2	10-03-2017	17:30	10-03-2017	18:00	ODB	ER-II/Odisha	For connecting Line Reactor after its AMP Work-	NLDC
202	Tala-2 L/R AT BINAGURI	10-03-2017	07:00	10-03-2017	17:00	ODB	ER-II/ Kol	CSD Commissioning / Tan Delta in Variable Frequency	NLDC
203	132 KV RANGPO-GANGTOK-1	10-03-2017	09:30	10-03-2017	18:00	ODB	ER-II/ Kol	AMP Work	SIKKIM
204	400 KV BONG- NEW SLG-1&2- LINE	10-03-2017	07:00	11-03-2017	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE IN -AP18/0 -	NLDC
205	315 MVA ICT-V & 400 KV Bus-II AT MALDA.	10-03-2017	8:00 Hrs	10-03-2017	17:00 Hrs	ODB	ER-II/ Kol	Isolator alignment works.	WEST BENGAL
206	400kv Maithon-JAMSHEDPUR	10-03-2017	10:00	10-03-2017	17:30	ODB	ER-II/ Kol	AMP work for line Bay.	
207	401 KV LKS - BSF Ckt. II	10-03-2017	09:00	10-03-2017	18:00	ODB	ER-I	For Insulator replacement found defective after PID	
208	400 KV BUS -4 AT BSF	10-03-2017	10:00	13-03-2017	18:00	OCB	ER-I	PROJECT.	
209	412 Bay( ICT-1 Main Bay) AT PATNA	10-03-2017	09:00	10-03-2017	18.00	ODB	ER-I	AMP work. No power interruption	
210	765KV BUS-I at Gaya S/S	10-03-2017	10:00	10-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extrn. package	NLDC
211	220 KV CHAIBASA(PG)-Chaibasa (JUSNL) CKT -2	10-03-2017	09:00	10-03-2017	17:00	ODB	ER-I	For AMP Work	
212	SSRM	10-03-2017	09:30	10-03-2017	17:30	ODB	ER-I	AMP WORK	
213	400 KV Binaguri-Purnea-1 & 2.	10-03-2017	10:00	12-03-2017	17:00	ODB	ER-II	For Insulator replacement work.	
214	765KV Bus Reactor-1 at Angul	11-03-2017	08:00	11-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
215	220 KV BUS COUPLER BAY-203 Baripada	11-03-2017	09:00	14-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY-	



216	125MVAR Bus Reactor Rourkela	11-03-2017	09:00	11-03-2017	18:00	ODB	ER-II/Odisha	Removal of Control & Power cable for testing at third party Lab by M/s Siemens-	
217	400KV Bay 401 02 Bolangir	11-03-2017	09:00	11-03-2017	18:00	ODB	ER-II/Odisha	For Construction works of Bay extension & Reactor package	
218	Bangaigaon-III L/R AT BINAGURI	11-03-2017	07:00	11-03-2017	17:00	ODB	ER-II/ Kol	Tan Delta in Variable Frequency	
219	66KV Lagyp (Line#3) Feeder	11-03-2017	9:00 Hrs.	11-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	CT tan delta and Line Isolator and Transfer Bus Isolator	SIKKIM
220	416 Bay( Ballia-2 Main Bay) AT PATNA	11-03-2017	09:00	11-03-2017	18:00	ODB	ER-I	AMP work. No power interruption .	
221	765KV BUS-II at Gaya S/S	11-03-2017	10:00	11-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extn. package	NLDC
222	408 Tie bay associated with KHG-2 & Bus Reactor AT LAKHISARAI	11-03-2017	10:00	11-03-2017	14:00	ODB	ER-I	AMP	
223	400 KV SAGARDIGHI - SUBHASGRAM	11-03-2017	06:00	12-03-2017	16:00	ODB	WBSETCL	STRINING OF GOKARNA - SAGARDIGHI D/CTR LINE	
224	765KV Bus Reactor-1 at Angul	11-03-2017	08:00	11-03-2017	18:00	ODB	ER-II/Odisha /Angul SS	RTV Coating Work on Trench make Bushings	NLDC
225	765/400kv, 3*500MVA ICT#3 at Angul	12-03-2017	08:00	13-03-2017	18:00	ODB	ER-II/Odisha	AMP WORK & RTV Coating Work on Trench make Bushings	NLDC
226	125 MVAR Bus Reactor-I AT BINAGURI	12-03-2017	07:00	12-03-2017	17:00	ODB	ER-II/ Kol	Tan Delta in Variable Frequency	
227	125 MVAR Bus Reactor-II AT BINAGURI	13-03-2017	07:00	13-03-2017	17:00	ODB	ER-II/ Kol	Tan Delta in Variable Frequency	
228	400kv MTN -Rightbank 1 Line	13-03-2017	10:00	13-03-2017	17:30	ODB	ER-II/ Kol	Insulator replacement.	MPL
229	TIE BAY OF MAITHAN & CHAIBASA -1 AT JASHEDPUR	13-03-2017	09:30	19-03-2017	17:30	OCB	ER-I	BHEL CB REPLACEMENT WORK.	
230	400 KV Malda-Pumea-D/C	13-03-2017	10:00	15-03-2017	17:00	ODB	ER-II	For Insulator replacement work.	May be allowed after restoration of Kisan - Patna D/c or Pumea - Bsf -
231	765/400kv, 3*500MVA ICT# 1 at Angul	14-03-2017	08:00	14-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
232	Tie Bay-717 of 765KV Sunderagrah-Dharamjaygarh Line	14-03-2017	08:00	18-03-2017	18:00	OCB	ER-II/Odisha	REFURBISHMENT OF 765KV CB FOR DCRM	NLDC
233	315MVA ICT#1 AT BINAGURI	14-03-2017	07:00	14-03-2017	17:00	ODB	ER-II/ Kol	Tan Delta in Variable Frequency / 220kv Bay AMP	WEST BENGAL
234	132KV WBSETCL-132 KV COOCHBEHAR- ALIPURDUAR	14-03-2017	07:00	15-03-2017	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE IN-AP 17/0 -AP	WEST BENGAL
235	765 KV NEW RANCHI DHARAMJAYGARH -2	14-03-2017	08:00	15-03-2017	18:00	ODB	ER-I	For replacement of QUAD dropper into TWIN for CVT/LA AT NEW RANCHI	NLDC
236	765KV NEW RANCHI DHARAMJAYGARH -2 Main Bay	14-03-2017	08:00	15-03-2017	18:00	ODB	ER-I	AMP( No Power Interruption)	NLDC
237	765KV NEW RANCHI DHARAMJAYGARH -2 Tie Bay (714) AT NEW RANCHI	14-03-2017	08:00	15-03-2017	18:00	ODB	ER-I	AMP( No Power Interruption)	NLDC
238	400 KV CHAIBASA-JSR Ckt-2	14-03-2017	09:00	14-03-2017	17:00	ODB	ER-I	FOR replacement of insulator damaged by miscreants.	
239	220 KV BUS -1 AT MUZ	14-03-2017	10:00	15-03-2017	18:00	ODB	ER-I	FOR CONSTN. WORK	
240	765/400kv, 3*500MVA ICT# 1 at Angul	14-03-2017	08:00	14-03-2017	18:00	ODB	ER-II/Odisha /Angul SS	RTV Coating Work on Trench make Bushings	NLDC
241	765/400kv, 3*500MVA ICT# 4 at Angul	15-03-2017	08:00	15-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
242	220KV Budhipada-Korba Line-III at OPTCL Budhipada	15-03-2017	08:00	15-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	OPTCL

243	765KV Sundergarh-Dharamjaygarh Line-I	15-03-2017	09:00	16-03-2017	18:00	ODB	ER-II/Odisha	For insulator replacement at Loc No- 100 & 119 and fixing of repair sleeve at loc- 86-87	NLDC
244	220 KV SIDE OF 315 MVA ICT-II, BAY-204	15-03-2017	09:00	18-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH	
245	220kV Bus-I AT BINAGURI	15-03-2017	07:00	15-03-2017	17:00	ODB	ER-II/ Kol	Bus isolator hot spot rectification / CVT replacement	WEST BENGAL
246	400kV NSLG-Rangpo Ckt-1	15-03-2017	07:00	16-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	SCHEDULE MAY BE PRE Poned.
247	315MVA ICT#2 AT BINAGURI	15-03-2017	07:00	15-03-2017	17:00	ODB	ER-II/ Kol	Tan Delta in Variable Frequency / 220kV Bay AMP	WEST BENGAL
248	400kV NSLG-Rangpo Ckt-I	15-03-2017	09:00	16-03-2017	17:00	ODB	ER-II/ Kol	Sag adjustment	SCHEDULE MAY BE PRE Poned. WORK MAY BE COMPLETED BEFORE
249	400kV MTN Mejia-I line	15-03-2017	10:00	15-03-2017	17:30	ODB	ER-II/ Kol	AMP Work.	DVC
250	220 KV Binaguri-Birpara-D/C. (One circuit at a time).	15-03-2017	10:00	20-03-2017	17:30	ODB	ER-II/ Kol	Porcelain Insulator replacement work, One ckt S/D shall be taken, other ckt shall remain in service.	NLDC
251	400 KV PTN - BARH -1 AND 400 KV KHLG - BARH -2	15-03-2017	08:00	18-03-2017	17:00	ODB	ER-I	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER INSULATOR	
252	400 KV CHAIBASA-RKL Ckt-2	15-03-2017	09:00	15-03-2017	17:00	ODB	ER-I	FOR replacement of insulator damaged by miscreants.	
253	409 MAIN BAY OF B/R AT LAKHISARAI	15-03-2017	10:00	15-03-2017	14:00	ODB	ER-I	AMP	
254	220KV RNC-HATIA-II	15-03-2017	10:00	15-03-2017	17:30	ODB	ER-I	Changing of porcelain by Polymer Insulator,During S/D Line Out of service.	JHARKHAND
255	400 KV GMR - Anugul - II	15-03-2017	09:00	25-03-2017	17:00	ODB	GMR	LINE MAINTENANCE WORK	
256	765/400kV, 3*500MVA ICT# 4 at Angul	15-03-2017	08:00	15-03-2017	18:00	ODB	ER-II/Odisha /Angul SS	RTV Coating Work on Trench make Bushings	NLDC
257	400kV Talcher - Rourkela D/C Line	16-03-2017	08:00	19-03-2017	18:00	ODB	ER-II/Odisha	Replacement of Porcelain Insulators by Polymer Long Rod Insulators at road crossing / Raily crossing /	NLDC
258	765kV Line Reactor-1 at Angul ( Angul-Sng Line)	16-03-2017	08:00	16-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
259	400 KV Indravati-Rengali line	16-03-2017	08:00	21-03-2017	18:00	ODB	ER-II/Odisha	Replacement of Porcelain Insulators by Polymer Long Rod Insulators at road crossing / Raily crossing / Powerline crossing/ Pollution stretch.	NLDC
260	500MVA ICT-I at Maithon	16-03-2017	10:00	16-03-2017	17:30	ODB	ER-II/ Kol	Leakage arresting work.	DVC
261	400 KV BUS -2 AT BSF	16-03-2017	10:00	16-03-2017	15:00	ODB	ER-I	JUMPER CONNECTION OF TENUGHAT MAIN BAY NO. 16 TO BUS -2 UNDER CONSTRUCTION WORK	
262	220KV BUS-I at Gaya S/S	16-03-2017	10:00	16-03-2017	18:00	ODB	ER-I	For KHIJARSARAI bay commisioning work	
263	220 KV BUS -2 AT MUZ	16-03-2017	10:00	17-03-2017	18:00	ODB	ER-I	FOR CONSTN. WORK	
264	220KV RNC-CHANDIL-I	16-03-2017	10:00	16-03-2017	17:30	ODB	ER-I	Changing of porcelain by Polymer Insulator,During S/D Line Out of service.	JHARKHAND
265	132KV TRANSFER BUS COUPLER (101 BAY) AT SSRM	16-03-2017	09:30	16-03-2017	17:30	ODB	ER-I	AMP WORK	BIHAR
266	400 KV Farakka - Kahalgaon line-2	16-03-2017	09:30hrs	17-03-2017	17:30 hrs	ODB	NTPC	Relay and 400kV breaker testing and CVT replacement	
267	765kV Line Reactor-1 at Angul ( Angul-Sundargarh Line)	16-03-2017	08:00	16-03-2017	18:00	ODB	ER-II/Odisha /Angul SS	RTV Coating Work on Trench make Bushings	NLDC
268	400KV QUAD BONGAIGAON - ALIPURDUAR CIRCUIT #	17-03-2017	07:00	18-03-2018	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE OUT-AP 7/0 -AP	NLDC
269	765kV Line Reactor-2 at Angul ( Angul-Sng Line)	17-03-2017	08:00	17-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
270	765KV Sundergarh-Dharamjaygarh Line-I	17-03-2017	09:00	18-03-2017	18:00	ODB	ER-II/Odisha	For insulator replacement at Loc No- 110 and fixing of	NLDC
271	132KV S/C Sambalpur-Rairakhol TL (OPTCL)	17-03-2017	08:00	17-03-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-jharsuguda D/C transmission line	

272	765KV Bus Reactor-II sundargarh	17-03-2017	08:00	17-03-2017	13:00	ODB	ER-II/Odisha	To Take BPh Reactor in service after attending of Oil	NLDC
273	220kv Bus-II AT BINAGURI	17-03-2017	07:00	17-03-2017	17:00	ODB	ER-II/ Kol	Bus isolator hot spot rectification	WEST BENGAL
274	400kv NSLG-Rangpo Ckt-2	17-03-2017	07:00	18-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	SCHEDULE MAY BE PRE Poned. WORK MAY BE COMPLETED BEFORE
275	400kv NSLG-Rangpo Ckt-II	17-03-2017	09:00	18-03-2017	17:00	ODB	ER-II/ Kol	Sag adjustment	SCHEDULE MAY BE PRE Poned.
276	132KV WBSETCL-132 KV COOCHBEHAR- ALIPURDUAR LINE	17-03-2017	07:00	18-03-2017	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE OUT-AP 18/0 -AP 19/0	WEST BENGAL
277	400kv MTN -Rightbank 2 Line	17-03-2017	10:00	17-03-2017	17:30	ODB	ER-II/ Kol	Insulator replacement.	MPL
278	220 kV Ara-I Bay at Khagaul ( BSPTCL) AT PATNA	17-03-2017	09:00	20-03-2017	18:00	OCB	ER-I	CB OVERHAULING WORK	BIHAR
279	220KV BUS-II at Gaya S/S	17-03-2017	10:00	17-03-2017	18:00	ODB	ER-I	For KHIJARSARAI bay commisioning work	
280	200 MVA ICT-2 AT LAKHISASRAI	17-03-2017	08:00	20-03-2017	18:00	ODB	ER-I	Construction of Firewall	BIHAR
281	220KV RNC-HATIA-I	17-03-2017	10:00	17-03-2017	17:30	ODB	ER-I	Line Out of service.	JHARKHAND
282	132KV BAY OF 10MVA ICT - 1 (102 BAY) AT SSRM	17-03-2017	09:30	17-03-2017	17:30	ODB	ER-I	AMP WORK	BIHAR
283	765kv Line Reactor-2 at Angul ( Angul-Sundargarh	17-03-2017	08:00	17-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
284	400KV ICT#4 & Future Tie Bay (420)	18-03-2017	09:00	18-03-2017	15:00	ODB	ER-II/Odisha	AMP WORK	
285	400KV D/C IB-Meramundali TL (OPTCL)	18-03-2017	08:00	19-03-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-jharsuguda D/C	Pls confirm the line name..
286	765kv ICT#2 & Sundargarh Line-1 Tie Bay (708)	18-03-2017	09:00	18-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	NLDC
287	220kv D/C Malda-Dalkhola TL (One circuit at a time).	18-03-2017	8:00 Hrs	31-03-2017	17:00 Hrs	ODB	ER-II/ Kol	Porcelain Insulator replacement work, One ckt S/D shall	
288	400kv MTN Durgapur 2 Line	18-03-2017	10:00	18-03-2017	17:30	ODB	ER-II/ Kol	AMP work for line Bay.	
289	400KV BUS-I at Gaya S/S	18-03-2017	10:00	18-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extn. package	
290	220KV RNC-CHANDIL-II	18-03-2017	10:00	18-03-2017	17:30	ODB	ER-I	Changing of porcelain by Polymer Insulator, During S/D Line Out of service.	JHARKHAND
291	220 KV SIDE OF 315 MVA ICT-I, BAY-208	19-03-2017	09:00	22-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH	
292	400 KV PTN - BARH-2 AND 400 KV KHLG - BARH -1	19-03-2017	08:00	21-03-2017	17:00	ODB	ER-I	REPLACEMENT OF PORCELAIN INSULATOR WITH POLYMER INSULATOR	
293	765KV D/C Angul-Jharsuguda TL (Ckt -I & II)	20-03-2017	08:00	21-03-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-jharsuguda D/C	NLDC
294	765kVSundargarh Line-1 Main Bay (709)	20-03-2017	09:00	20-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	
295	Main Bay-703 of 765/400KV ICT-I	20-03-2017	08:00	20-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	NLDC
296	765KV 240MVAR Bus Reactor-I	20-03-2017	08:00	21-03-2017	18:00	ODB	ER-II/Odisha	FOR RTV COATING OF 765KV BUSHING	NLDC
297	400kv NSLG-Pumea Ckt-1	20-03-2017	07:00	22-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	
298	400 KV NEW RANCHI CHANDWA -1	20-03-2017	08:00	21-03-2017	18:00	ODB	ER-I	For replacement of damaged insulators by miscreants (Loc No. 135 & 156)	
299	TIE BAY OF CHAIBASA -2 & ANDAL -1 AT JAMSHEDPUR	20-03-2017	09:30	26-03-2017	17:30	OCB	ER-I	BHEL CB REPLACEMENT WORK.	

300	400KV BUS-II at Gaya S/S	20-03-2017	10:00	20-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extrn. package	
301	500 MVA ICT-3 AT MUZ	20-03-2017	10:00	26-03-2017	18:00	OCB	ER-I	For attending construction defect of bushing by OEM.	NLDC
302	400 KV Farakka - Durgapur line-2	20-03-2017	09:30hrs	21-03-2017	17:30 hrs	ODB	NTPC	400kv CT testing and CVT replacement	
303	Main Bay-706 of 765/400KV ICT-II sundargarh	21-03-2017	08:00	21-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	NLDC
304	765kv side of ICT#3 Main Bay (710)	21-03-2017	09:00	21-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	NLDC
305	400Kv Sundargarh-Indbharat	21-03-2017	09:00	21-03-2017	17:00	ODB	ER-II/Odisha	Replacement of Porcelain Insulators by Polymer Long Rod Insulators at road crossing / Raily crossing /	NLDC
306	132KV / 66KV 50 MVA ICT#2 Gangtok	21-03-2017	9:00 Hrs.	21-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	ICT AMP	SIKKIM
307	220 kV Ara-II Bay at Khagaul ( BSPTCL) AT PATNA	21-03-2017	09:00	24-03-2017	18.00	OCB	ER-I	CB OVERHAULING WORK	BIHAR
308	400kv D/C Maithon Gaya-I line AT GAYA	21-03-2017	09:00	22-03-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant 25,28	
309	80 MVAR B/R AT LAKHISARAI	21-03-2017	08:00	24-03-2017	18:00	ODB	ER-I	Construction of Firewall	
310	400 KV KHLG - FKK-1 AND 2	21-03-2017	09:00	24-03-2017	18:00	OCB	ER-I	400 KV KHLG - BANKA T/L UNDER BUS SPLIT SCHEME AT NTPC S/Y.	
311	132 KV PRN - PRN (BSPTCL)-1	21-03-2017	10:00	23-03-2017	17:00	OCB	ER-I	foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF THIS BAY	BIHAR
312	132KV MAIN BAY (103 BAY) OF PSL – KARMNASA	21-03-2017	09:30	21-03-2017	17:30	ODB	ER-I	AMP WORK	BIHAR
313	400 KV ICT-1 BARH	21-03-2017	09:30hrs	23-03-2017	18:00 hrs	OCB	NTPC	PM Job of ICT # 1 Annual testing	
314	400 KV Kahalgaon - Farakka line-4	21-03-2017	09:30hrs	21-03-2017	17:30 hrs	ODB	NTPC	PM works & relay testing	
315	400KV QUAD BONGAIGAON - ALIPURDUAR CIRCUIT #	22-03-2017	07:00	23-03-2017	16:00	ODB	ER-II/ Kol	800KV LILO work- Crossing at LINE IN-AP 10/0 -AP	NLDC
316	400KV Indbharat-Raigarh	22-03-2017	09:00	22-03-2017	17:00	ODB	ER-II/Odisha	Replacement of Porcelain Insulators by Polymer Long Rod Insulators at road crossing / Raily crossing / Powerline crossing/ Pollution stretch.	NLDC
317	765kv ICT#3 & Bus Reactor-1 Tie Bay (711)	22-03-2017	09:00	22-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	NLDC
318	Main Bay-710 of 765KV Sundergarh- Angul Line-I	22-03-2017	08:00	22-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	NLDC
319	765KV 240MVAR Bus Reactor-II sundargarh	22-03-2017	08:00	23-03-2017	18:00	ODB	ER-II/Odisha	FOR RTV COATING OF 765KV BUSHING	NLDC
320	400 KV NEW RANCHI CHANDWA -2	22-03-2017	08:00	23-03-2017	18:00	ODB	ER-I	For replacement of damaged insulators by miscreants (Loc No. 161, 172, 174, 178, 184 & 195)	
321	400 KV PTN - BALIA -3	22-03-2017	08:00	23-03-2017	17:00	ODB	ER-I	POLYMER INSULATOR	NLDC
322	80 MVAR L/R OF RNC-SIPAT-I AT RANCHI	22-03-2017	10:00	22-03-2017	13:00	ODB	ER-I	service for 30 minutes. After that line may be charged w/o L/R.	

323	132KV BAY OF 10MVA ICT-2 (104 BAY) AT SSRM	22-03-2017	09:30	22-03-2017	17:30	ODB	ER-I	AMP WORK	BIHAR
324	Tie Bay-714 of 765KV Sundergarh-Dharamjaygarh Line-I	23-03-2017	08:00	23-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	NLDC
325	765kv Line Reactor-2 bay (709R) Anugul	23-03-2017	09:00	23-03-2017	17:00	ODB	ER-II/Odisha	AMP WORK	NLDC
326	220 KV SIDE OF 160 MVA ICT-I, BAY-209	23-03-2017	09:00	26-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY- FOR OVERHAULING OF 220 KV CGL CB OPERATING	
327	400kv NSLG-Pumea Ckt-2	23-03-2017	07:00	23-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	
328	400kv D/C Maithon Gaya-II line AT GAYA	23-03-2017	09:00	24-03-2017	17:00	ODB	ER-I	28,30	
329	132KV MAIN BAY(105 BAY) OF PSL – DEHRI AT SSRM	23-03-2017	09:30	23-03-2017	17:30	ODB	ER-I	AMP WORK	BIHAR
330	400 KV Farakka - Malda line-1	23-03-2017	09:30hrs	24-03-2017	14:00 hrs	ODB	NTPC	Relay testing and 400kv CT testing	May be allowed after restoration of Kisan - Patna D/c or Pumea - Bsf -
331	765kv Angul-Srikakulam Line-1	24-03-2017	08:00	24-03-2017	18:00	ODB	ER-II/Odisha	PLCC Problem Rectification Work-	NLDC
332	63 MVAR Bus Reactor	24-03-2017	09:30	24-03-2017	15:30:00	ODB	ER-II/Odisha	For AMP works	
333	Tie Bay-708 of 765KV Sundergarh-Angul Line-II	24-03-2017	08:00	24-03-2017	18:00	ODB	ER-II/Odisha	AMP Work	NLDC
334	765KV 240MVAR Angul Line Reactor-I	24-03-2017	08:00	23-03-2017	18:00	ODB	ER-II/Odisha	FOR RTV COATING OF 765KV BUSHING	NLDC
335	132KV / 66KV 50 MVA ICT#1 Gangtok	24-03-2017	9:00 Hrs.	24-03-2017	17:00 Hrs.	ODB	ER-II/ Kol	ICT AMP	SIKKIM
336	132 KV MAIN BUS AT BANKA	24-03-2017	10:00	24-03-2017	13:00	ODB	ER-I	FOR AMP.. Powerflow from all 132 kv lines shall be interrupted.	
337	765kv Angul-Srikakulam Line-2	25-03-2017	08:00	23-03-2017	18:00	ODB	ER-II/Odisha	PLCC Problem Rectification Work-	NLDC
338	220kv SLG-Kishanganj Ckt-1	26-03-2017	09:00	26-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	
339	160 MVA ICT-1 AT PURNEA	26-03-2017	09:00	28-03-2017	17:00	OCB	ER-I	foundation. Dismantling of 132 kv EXISTING AIS BAY	BIHAR
340	765kv Angul-Sundargarh Line-1	27-03-2017	08:00	27-03-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability	NLDC
341	400 KV KEONJHAR LINE	27-03-2017	09:00	27-03-2017	18:00	ODB	ER-II/Odisha	MAIN 2 RELAY RETROFICATION WORK	
342	765KV 240MVAR Angul Line Reactor-II	27-03-2017	08:00	28-03-2017	18:00	ODB	ER-II/Odisha	FOR RTV COATING OF 765KV BUSHING	NLDC
343	132 KV PRN - PRN (BSPTCL)-3	27-03-2017	09:00	27-03-2017	14:00	ODB	ER-I	SHIFTING AND GIS BUSHING ENTRY . IT IS NOW AT PRESENT GOING OVER THE BSPTCL -3 BAY	BIHAR
344	400KV RNC-MTN-I	27-03-2017	10:00	27-03-2017	17:30	ODB	ER-I	maintenance work,During S/D Line Out of service.	
345	400 KV Farakka - Sagardighi	27-03-2017	09:30hrs	27-03-2017	14:00 hrs	ODB	NTPC	400kv CVT replacement	WEST BENGAL
346	220 KV SIDE OF 160 MVA ICT-II, BAY-210	28-03-2017	09:00	28-03-2017	18:00	ODB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY-	
347	765kv Angul-Sundargarh Line-2	28-03-2017	08:00	28-03-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability	NLDC
348	400KV Sundergarh-Raigarh and 400KV Sterlite-Raigarh	28-03-2017	08:00	28-03-2017	18:00	ODB	ER-II/Odisha	For removal Bambu(apx 1800 nos- at Loc no- 426)	NLDC
349	220kv SLG-Kishanganj Ckt-2	28-03-2017	09:00	28-03-2017	17:00	ODB	ER-II/ Kol	Insulator replacement in crossings	

350	315MVA ICT-II AT RANCHI	28-03-2017	10:00	28-03-2017	17:00	ODB	ER-I	service.	JHARKHAND
351	400 KV Kahalgaon - Lakhisarai line-2	28-03-2017	09:30hrs	28-03-2017	17:30 hrs	ODB	NTPC	PM works & relay testing	
352	400/220 KV 315 MVA ICT#1 MAIN BAY (403)	29-03-2017	09:00	29-03-2017	18:00	ODB	ER-II/Odisha	NO OUTAGE ICT WILL REMAIN IN SERVICE THROUGH TIE BAY-	
353	400kV Angul-Bolangir Line	29-03-2017	08:00	29-03-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability	NLDC
354	765/400KV ICT-I Sundergarh	29-03-2017	08:00	30-03-2017	18:00	ODB	ER-II/Odisha	FOR RTV COATING OF 765KV BUSHING	NLDC
355	400kV Angul-Meramundali Line-1	30-03-2017	08:00	30-03-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability	
356	400/220 KV 500 MVA ICT#3 Baripada	30-03-2017	09:00	30-03-2017	18:00	ODB	ER-II/Odisha	COMMISSIONING OF CSD	
357	400 KV Farakka - Malda line-2	30-03-2017	09:30hrs	31-03-2017	14:00 hrs	ODB	NTPC	Relay testing and 400kV CT testing	May be allowed after restoration of Kisan - Patna D/c or Purnea - Bsf -
358	125 MVAR, 400 KV BUS REACTOR Rourkela	31-03-2017	09:00	31-03-2017	18:00	ODB	ER-II/Odisha	COMMISSIONING OF CSD	
359	765/400KV ICT-II Anugul	31-03-2017	08:00	31-03-2017	18:00	ODB	ER-II/Odisha	FOR RTV COATING OF 765KV BUSHING	NLDC
360	400kV GMR-Angul Line II	15-03-2017	09:00	25-03-2017	17:00	odb	gmr	Maintenance Work	
Outages proposed in other RPCs requiring ERPC approval									
1	400 Rourkela-Raigarh#2	1-Mar-17	9:00	7-Mar-17	18:00	Continuous	POWERGRID	Dismantling of old Tower at Location No-1134 which is in very vulnerable condition due to major soil erosion from tower legs for flooded river crossing and erection of balance tower portion at new pile foundation Location No-1134 and re-stringing works.	WRPC
2	765 D'JAIGARH- JHARSUGUDA II	3-Mar-17	9:00	3-Mar-17	18:00	Daily	POWERGRID	Non auto mode	WRPC
3	765 D'JAIGARH- JHARSUGUDA II	6-Mar-17	9:00	6-Mar-17	18:00	Daily	POWERGRID	Non auto mode	WRPC
4	Sipat Ranchi Circuit 1&2	6-Mar-17	9:00	10-Mar-17	18:00	Continuous	POWERGRID	Rectification of bend tower at location No. 664	WRPC
5	400 D/C sipat- Ranchi - 1&2	9-Mar-17	9:00	10-Mar-17	18:00	Continuous	POWERGRID	Power line crossing of 400 D/C Korba - Champa ( M/s Lanco )	WRPC
6	400 KV VEMAGIRI-NUNNA-III	15-Feb-17	0:00	15-Feb-17	0:00	Daily	APTRANSCO	For General maintainance works	SRPC
7	Salem-Udumalpet-I	20-Feb-17	8:00	24-Feb-17	18:00	Daily	POWERGRID	Insulator replacement work in polluted stretches.	SRPC
8	HVDC Talcher-Kolar pole 1&2	OCC approved for availing these outages from 04.03.2017 to 08.03.2017. PGCIL, SR-II will furnish the Pole wise dates				Daily	POWERGRID	For insulator replacement & OLTC Maintenance works in Pole	SRPC
9	HVDC Talcher-Kolar pole 1					Daily	POWERGRID	OLTC Maintenance works in Pole-1	SRPC
10	HVDC Talcher-Kolar pole 1&2					Daily	POWERGRID	For insulator replacement & OLTC Maintenance works in Pole	SRPC
11	HVDC Talcher-Kolar pole 1					Daily	POWERGRID	OLTC Maintenance works in Pole-1	SRPC
12	HVDC Talcher-Kolar pole 1&2					Daily	POWERGRID	For insulator replacement & OLTC Maintenance works in Pole	SRPC
13	HVDC Talcher-Kolar pole 1&2					Daily	POWERGRID	OLTC Maintenance works in Pole-1 & Pole-2	SRPC
14	HVDC Talcher-Kolar pole 1&2					Daily	POWERGRID	for insulator replacement & OLTC Maintenance works in Pole	SRPC
15	HVDC Talcher-Kolar pole 2					Daily	POWERGRID	OLTC Maintenance works in Pole-2	SRPC
16	HVDC Talcher-Kolar pole 1&2					Daily	POWERGRID	for insulator replacement & OLTC Maintenance works in Pole	SRPC
17	HVDC Talcher-Kolar pole 2					Daily	POWERGRID	OLTC Maintenance works in Pole-2	SRPC
18	HVDC Talcher-Kolar pole 1&2					Daily	POWERGRID	for insulator replacement & Testing of Converter Transformers	SRPC
19	765kV Fatehpur-Sasaram	21-03-2017	09:30	21-03-2017	18:00	Daily	POWERGRID	39 mtr CVT Quad jumper replacement to Twin, NGR bypassing commissioning work, AMP works at Fatehpur	NRPC
20	400kV Balia-Biharshariff-1	01-03-2017	09:00	01-03-2017	17:30	Daily	POWERGRID	Oil Sampling of 3 nos. 400kV BHEL bushing(R,Y,B) of Line Reactor at Balia	NRPC
21	400kV Balia-Biharshariff-2	02-03-2017	09:00	02-03-2017	17:30	Daily	POWERGRID	Oil Sampling of 3 nos. 400kV BHEL bushing(R,Y,B) of Line Reactor at Balia	NRPC
22	220 kV Salakati-Alipurduar II	06-03-2017	08:00	06-03-2017	16:00	Daily		AMP	NERPC



पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)

**POWER GRID CORPORATION OF INDIA LIMITED**  
(A Government of India Enterprise)



प्लॉट नं.- 4, यूनिट - 41, निलाद्री विहार, चंद्रशेखरपुर - 751021,  
दुरभाष : 0674 - 2720754

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

Ref. No: ODP/BB/AM/TLM/

Date: 13.02.2017

To  
The Member Secretary,  
Eastern Regional Power Committee  
14, Golf Club Road,  
Tollygunje, Kolkata - 700033

Sub: Request for approval of deemed availability for the Insulator replacement works at NH/SH/ River/ Power line/ Railway crossings in various transmission lines of Odisha in 130<sup>th</sup> OCC.

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 above said crossing spans will be provided with puncture proof Composite Long Rod Polymer Insulator for which no incident of de-capping has been reported. Insulator replacement work in the above said crossings in most of the transmission lines in Odisha have been completed except few lines. Tentative program for insulator replacement of the remaining lines have been scheduled in Feb-March'2017 as follows:

Sl. No.	Name of the Line	Date	Time	Date	Time	Remarks
1	400 kV Jeypore-Indravati S/C Line	27.02.2017	06:00	28.02.2017	18:00	ODB
2	400KV Bolangir-Jeypore Line	01.03.2017	09:00	01.03.2017	18:00	ODB
3	400KV Bolangir-Angul Line	02.03.2017	09:00	03.03.2017	18:00	ODB
4	400kV Talcher - Rourkela D/C Line	12.03.2017	08:00	15.03.2017	18:00	ODB
5	765KV Sundergarh-Dharamjaigarh Line-I	15.03.2017	09:00	16.03.2017	18:00	ODB

कारपोरेट सेन्टर : 'सौदामिनी', प्लॉट नं.2, सेक्टर-29, गुरुगांव (हरियाणा) - 122 001, दुरभाष: 0124-2571700 to 719, फैक्स: 0124-2571760, 2571848

Corporate Centre: 'SAUDAMINI', Plot No.2, Sector-29, Gurgaon (Haryana) - 122001, Tel:0124-2571700-719, Fax: 0124-2571760, 2571848

पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीटयुशनल एरिया, कटवारिया सगई, नई दिल्ली - 110016, Registered Office: B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi-110016


EPABX : 011-26560112, 26560121, 26564892, Website: <http://www.powergridindia.com>



Sl. No.	Name of the Line	Date	Time	Date	Time	Remarks
6	400 KV Indravati-Rengali Line	16.03.2017	08:00	21.03.2017	18:00	ODB
7	765KV Sundergarh-Dharamjaygarh Line-I	17.03.2017	09:00	18.03.2017	18:00	ODB
8	400Kv Sundargarh-Indbharat Line	21.03.2017	09:00	21.03.2017	17:00	ODB
9	400KV Indbharat-Raigarh Line	22.03.2017	09:00	22.03.2017	17:00	ODB

It is requested that shutdown proposed for the said lines in the 130<sup>th</sup> OCC may please be approved & deemed availability for the shutdown may please be granted.

Regards.

  
 (S. Victor P. Selva Kumar)  
 General Manager(AM),  
 Odisha