

# Minutes of 117<sup>th</sup> OCC meeting

# **Eastern Regional Power Committee**

Date: 04.02.2016 Eastern Regional Power Committee 14, Golf Club Road, Tollygunge Kolkata: 700 033

### Eastern Regional Power Committee

### Minutes of 117<sup>th</sup> OCC Meeting held on 22<sup>nd</sup> January, 2016 at ERPC, Kolkata

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

Member Secretary, ERPC chaired the meeting. He welcomed all the participants in the meeting. He informed that a meeting with the stakeholders for consultation on National Electricity Plan, 2015 is scheduled on 11.02.2016 at ERPC, Kolkata under the Chairmanship of Member (E&C), CEA. He requested all the generators constituents to participate in the meeting with the requisite information for a fruitful deliberation.

He also added that information for "Sub-committee on Transmission Planning for National Electricity Plan 2015" is also required to be furnished by constituents at the earliest. The formats for the data has been circulated ERPC vide letter dated 20.01.16 and available at ERPC website also. The formats were also circulated in the meeting (which is placed at **Annexure-1**).

GM, ERLDC informed that in 3<sup>rd</sup> FOLD meeting a format of questionnaires on SLDC performance/logistics improvement has been circulated to all the SLDCs. He requested all SLDCs to submit the duly filled questionnaire to ERLDC/NLDC at the earliest.

#### Item no. 1: Confirmation of minutes of 116<sup>th</sup> OCC meeting of ERPC held on 23.12.2015

The minutes were uploaded in ERPC website and circulated vide letter dated **07.01.2016** to all the constituents. No comments were received till date.

Members may confirm the minutes.

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

Members confirmed the minutes of 116<sup>th</sup> OCC meeting.

### <u>PART A</u>

#### (List of Items to be discussed for which the details are given at "Part B")

- B.1. Teesta White Water Rafting Expedition by Indian Army
- B.2. Charging of 220 KV Raigarh (PGCIL)- Budhipadar line
- B.3. Reliability Trial Run (RTR) of Raghunathpur TPS U#2 (600MW) of DVC
- B.4. Under performance of Thermal Power Stations of Eastern Region
- B.5. Constraints in evacuation of JITPL power
- B.6. Status of UFRs healthiness installed in Eastern Region
- B.7. Healthiness of SPS existing in Eastern Region
- B.8. Network & Chuzachen SPS review proposal in view of reduced NOC Chuzachen
- B.9. Status of Islanding Schemes of Eastern Region
- B.10. 11KV Auxiliary power supply of Powergrid Substation
- B.11. Status of PLCC system installed in Eastern Region
- B.12. Status update of previous decisions/follow up actions
- B.13. Third Party Protection Audit
- B.14. Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN
- B.15. Certification through BIS as per IS 18001:2007 to all generating/ transmission units

- B.16. Energy Generation data management from Renewable Energy Sources
- B.17. Sub-committee on "Integration of Renewable Energy Sources".
- B.18. Data of Peak Demand
- B.19. Erroneous recording of data by Interface Meters
- B.20. Replacement/repair of meters on Various Locations
- B.21. Time drift in L & T Energy meters
- B.22. Non-payment of Reactive energy charges by WBSETCL/WBSEDCL
- B.23. Pollution mapping for Eastern Region
- B.24. Updating of Restoration Procedure of Eastern Region for 2015
- B.25. Recovery Procedures of ER Constituents
- B.26. Nodal coordinators for web based scheduling software
- B.27. Dynamic data of Generator Models required in PSSE for Simulations
- B.28. Furnishing of data for preparation of reports
- B.29. Scheduling of Un-requisitioned Surplus (URS) power from ISGS
- B.30. Antitheft charging of lines from Meramundali end
- B.31. Drawal of start up power by BRBCL
- B.32. Auto-Reclose (A/R) scheme of 400kV Jeypore- Gajuwaka D/C line
- B.33. Mock Black start exercises in Eastern Region
- B.34. Restoration of SCADA data
- B.35. Restricted Governor Mode of Operation
- B.36. Reactive Power performance of Generators and GT tap position optimization

### PART B

#### (Items to be discussed as listed in "Part A")

#### Item No. B.1: Teesta White Water Rafting Expedition by Indian Army

Indian Army, 2 Engineer Regiment vide letter dated 07.01.2016 intimated that they wanted to conduct White Water Rafting Expedition on Teesta river. The proposed dates and stretches are as tabulated below:

SI. No.	Stretch	Dates of Conduct	Waters to be released from	Timing
а	NHPC Stn V (Servani) to	21 Jan 16	Teesta V	0800-1100 hrs
	Bardong (ECANT)		Power House	
b	Bardong to Melli	22 Jan 16	Teesta V	0800-1100 hrs
			Power House	
С	Melli to Kalijhora	23 Jan 16	TLDP III	0800-1100 hrs
	-		Power House	
d	Kalijhora to Coronation Bridge	24 Jan 16	TLDP III	0800-1100 hrs
	(Sevoke)		Power House	

2 Engineer Regiment is conducting this expedition to commemorate its Golden Jubilee and to help the participants in inculcating a sense of adventure and camaraderie, improve self-confidence, mental robustness and leadership qualities.

Therefore, they requested to confirm the release of water from Teesta V and TLDP III on above mentioned dates from 0800 to 1100 hrs when the stretches demand release of water for conduct of the above expedition.

Members may discuss and co-operate to Indian Army.

#### Deliberation in the meeting

Teesta-V, NHPC requested that the timings may be pre-poned by one hour as local people comes to river by 11 hours. After detail deliberations, OCC agreed to release of water from Teesta- V and TLDP- III as per the scheduled given below:

SI. No.	Stretch	Dates of Conduct	Waters to be released from	Timing
а	NHPC Stn V (Servani) to	25 Jan 16	Teesta V	0700-1000 hrs
	Bardong (ECANT)		Power House	
b	Bardong to Melli	26 Jan 16	Teesta V	0700-1000 hrs
			Power House	
С	Melli to Kalijhora	27 Jan 16	TLDP III	0700-1000 hrs
			Power House	
d	Kalijhora to Coronation Bridge	28 Jan 16	TLDP III	0700-1000 hrs
	(Sevoke)		Power House	

#### Item No. B.2: Charging of 220 KV Raigarh (PGCIL)- Budhipadar line

WRPC vide letter dated 21.10.15 & 18.12.15 informed that as per the study committee of WR's recommendations the LILO of 220 KV Raigarh(CSPTCL)-Budhipadar line at 400/200 KV PGCIL Raigarh s/s has been completed two months back and to save theft incidents the LILO for both the section has been idle charged from 11.08.2015. GM, WRLDC has taken up the matter with ERLDC and Odisha state to charge the line from Budhipadar end since PGCIL is ready for charging the both portion of above line from Raigarh(PGCIL) end. The charging of 220 KV Raigarh(CSPTCL)-220 KV Raigarh (PGCIL)- Budhipadar line will provide additional inter regional link in addition to existing inter regional link between 220 KV Korba (E) and Budhipadar in this section.

Further, both CSPTCL and PGCIL are ready with the Chhattisgarh section. It is, therefore, requested to kindly look into the matter and arrange for charging of the said line at the earliest so that additional inter regional link in addition to existing inter regional link between 220 KV Korba(E) and Budhipadar in this section are available.

ERLDC/OPTCL may update.

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

It was informed that the owner of the said line is OPTCL. So, OCC advised OPTCL to submit B1 to B5 formats to ERLDC and review the protection settings at Budhipadar end for charging the line.

The formats related to other end will be submitted by CSPTCL to WRLDC.

Further, OCC requested ERPC to communicate the issue to appropriate authority of OPTCL to resolve the issue at the earliest.

#### Item No. B.3: Reliability Trial Run (RTR) of Raghunathpur TPS U#2 (600MW) of DVC

DVC vide mail dated 06.01.2016 intimated the RTR program of RTPS unit-2 as follows:

1. Boiler is already under lighted up condition and process of Steam Dumping and pressure raising for Safety Valve Setting under progress. Safety Valve setting is likely to be completed by tomorrow noon.

2. Synchronization of unit will be done by 07.01.2016 late evening.

3. Load raising on the machine and unit stabilization : upto 10.01.2016

4. Start of RTR : from 10.01.2016 onwards for a duration of 14 days

5. During RTR, average load on the machine will be apprx. 400 to 500 MW. During this 14 days period of RTR, machine load will be raised to Full Load i.e. 600 MW and will be kept at 600 MW for continuous 72 hrs, depending upon Grid Permission and Unit condition.

The schedule may undergo some minor changes as per actual conditions, as machine is being rolled and synchronized for the first time which will be intimated in accordance.

DVC/ERLDC may update.

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

DVC informed that Reliability Trail Run (RTR) of RTPS Unit #2 may take 10-12 more days than mentioned in above schedule.

ERLDC intimated that loading of RTPS unit #2 with 2 units of DSTPS, N-1 security criterion is not satisfying for 400kV RTPS-Ranchi D/C line as 400kV RTPS-Maithon D/C line is getting overloaded.

OCC advised DVC to take care of grid security while RTR of RTPS unit #2 in co-operation with ERLDC.

#### Item No. B.4: Under performance of Thermal Power Stations of Eastern Region

The Monthly Generation Report for the month of September, 2015 published by CEA indicates the dismal performance of the Thermal Power Generating Stations of the country as a whole and Eastern Region in particular. The analysis of data and subsequent examination shows that the thermal power stations of Eastern Region are running on low PLF. The list of such Thermal Power Stations running under PLF less than the national average PLF of 60.90% is enclosed at **Annexure-B.4**.

The efforts could have been initiated for improvement of the operating parameters of these stations viz a viz PLF, Heat Rate, Secondary Fuel Oil consumption and Aux Power consumption as well as early rectification of the outages.

CEA communicated the issue to all the respective constituents vide letter dated 2<sup>nd</sup> November, 2015 and advised to place their proposals to improve the performance.

The utilities place their concrete proposal/action plan for the entire financial year for improvement of PLF, Heat Rate, secondary fuel oil and auxiliary power consumption of their Thermal Power Stations.

In 116<sup>th</sup> OCC, TVNL submitted their proposal.

NTPC informed that they have low PLF because of less schedule and not because of poor performance of their generators.

NTPC & other generators were advised to submit their comments along with the road map for improvement.

Members may update.

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

NTPC informed that their Corporate Office submit the reply to CEA directly.

WBPDCL informed that their Dir (O&M) has submitted the action plan to CEA.

OCC advised NTPC and WBPDCL to forward a copy to ERPC Secretariat also.

OCC advised all the other constituents to go through the **Annexure-B4** and submit their action plan to CEA/ERPC at the earliest.

#### Item No. B.5: Constraints in evacuation of JITPL power

JITPL vide letter dated 28-07-2015 informed that both the units of Derang, Angul, Odisha were declared CoD (unit#1 on 6<sup>th</sup> June, 2014 and unit#2 on 12<sup>th</sup> Feb, 2015) but to it NOC for 980 MW transaction only was issued against 1044 MW LTA.

JITPL cited that LILOs of 400kV Meramundali-Bolangir/Jeypore S/c line at Angul s/s and LILO of one line of 400kV Talcher-Meramundali D/c line at Angul S/s are causing constraint in evacuation.

JITPL further mentioned that as per the 17<sup>th</sup> standing committee meeting held on 25-05-2015, the above LILOs are to be removed.

112<sup>th</sup> OCC decided to refer the issue of removal of LILOs of 400kV Meramundali-Bolangir/Jeypore S/c line at Angul s/s and LILO of one line of 400kV Talcher-Meramundali D/c line at Angul S/s to next Standing Committee meeting as it will be done by CTU.

31<sup>st</sup> TCC felt decision taken in standing committee meeting and subsequently ratified in ERPC need no further deliberation under ERPC forum.

JITPL vide letter dated 29.12.15 again raised the issue citing that they are connected to 400 kV Angul pooling station and LILOs are causing constraints in evacuation of power. The export is restricted to 980 MW causing revenue loss to the company on daily basis. JITPL once again requested to take up the issue of removing the LILOs on urgent basis so that low cost generation is evacuated to its full capacity.

Members may discuss.

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

ERLDC informed that the present system conditions do not permit enhancement of the allowable quantum of JITPL injection more than 980 MW as (n-1) security in 400 kV system around Angul is not getting satisfied.

The scope of enhancing the JITPL injection would be reviewed after the commissioning of 765 *kV* Angul- Jharsuguda line.

#### Item No. B.6: Status of UFRs healthiness installed in Eastern Region

UFR Healthiness Certification for the month of December, 2015 has been received from DVC & CESC only.

However, it was found that the following UFRs of DVC and JUSNL were not in service:

SI	Name of	Name of	Feeder Details	CD	In-	Results/Remarks
No	Utility	sub-station		(MVA)	service	
1		Durgapur	Graphite India+ Jai Balaji	74	No	PT Fuse of the UFR
			Industries+ Jai Balaji			was removed to avoid
			Sponge			unwanted tripping.
2	DVC	Durgapur	SRB Steel+ Brahma	67	No	PT Fuse of the UFR
	DVC		Alloy+ Venky Steel+ VSP+			was removed to avoid
			Shri Gopal Hi-tech			unwanted tripping.
3		Hazaribagh	JSEB Hazaribagh	50	No	Commissioning taken
						up.
4		Jamtara	33 kV Jamtara feeder		No	Not in service
5	JUSNL	Adityapur	33 kV Adityapur-I		No	Not in service
6			33 kV Adityapur-II		No	Not in service

DVC and JUSNL may update.

WBSETCL, OPTCL, JUSNL and BSPTCL may submit UFRs healthiness certificate.

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

It was informed that all the constituents have sent the healthiness certificate except WBSETCL.

WBSETCL informed that it will be submitted within fortnight.

Regarding UFRs which were listed for not in service, DVC informed that the Durgapur UFRs are presently in service and Hazaribagh UFR is under commissioning.

JUSNL informed that the Jamtara UFR is now in service and UFRs of Adityapur will be brought into service by next OCC.

Chief Engineer (NPC) informed that RPCs should physically visit the site and carry out the audit of UFRs for at least 20% of the total UFRs in a year.

MS, ERPC informed that ERPC is covering 1/3<sup>rd</sup> of total UFRs in a year.

#### Review of load relief under various stages of UFR

It was pointed out that---

in 93<sup>rd</sup> OCC, ERLDC informed that most of the constituents have furnished maximum MW demands of the feeders covered under this load shedding scheme. ERLDC desired that the load quantum should be taken as average load for actual load relief. ER constituents however felt that setting UFRs at average demand is not feasible due to huge variation in peak and average load.

Since four stages implementation of AUFLS and total load relief quantum for ER was decided in 2<sup>nd</sup> Meeting of NPC held on 16<sup>th</sup> July, 2013, therefore, it is requested to place the above issue as agenda item in NPC meeting for clarification and further guidance.

Chief Engineer (NPC) informed that the total load relief was finalized at NPC level on the basis of Peak load, however, he agreed to take up the issue in next NPC meeting.

#### Item No. B.7: Healthiness of SPS existing in Eastern Region

SPS healthiness certificate for the month of December, 2015 has been received from Vedanta and GMR.

NTPC, Powergrid, JITPL and Chuzachen may update the status.

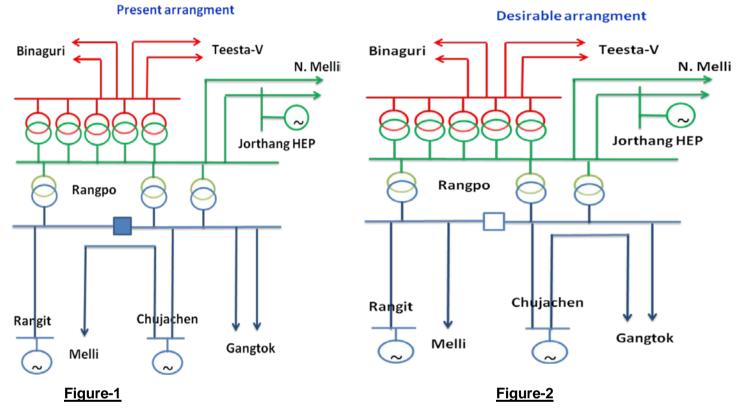
#### **Deliberation in the meeting**

It was informed that Powergrid-odisha has submitted the healthiness certificate.

OCC advised NTPC (TSTPS), Powergrid ER-II, JITPL and Chuzachen to submit the healthiness certificate at the earliest.

# Item No. B.8: Network & Chuzachen SPS review proposal in view of reduced NOC – Chuzachen

To accommodate generators like Teesta, Chuzachen, Jorthang HEP to the maximum extent possible through already congested network a modification scheme in the associated network was discussed in 114<sup>th</sup> OCC and OCC accepted the following arrangement.



ERLDC explained that at present one 132 kV ckt of Chuzachen is directly connected to Melli without terminating to 132 kV Rangpo. The all other 132 kV feeders i.e. one ckt from Rangit, one ckt from Chuzachen and two ckts from Gangtok are terminating at 132 kV feeders. The same is shown in **figure-1**.

Now for bus split operation the 132 kV Melli ckt will be terminated at Rangpo and will be with 132 kV Rangit feeder in one section of 132 kV Rangpo bus. The 132 kV Chuzachen feeder will be directly connected to one ckt of 132 kV Gangtok feeder. And the second ckt of 132 kV Gangtok along with other ckt of 132 kV Chuzachen will be on another section of 132 kV Rangpo bus. The Bus sectionalizer will be kept in open condition for split bus operation. The scheme configuration is shown in **figure-2**.

In 31<sup>st</sup> TCC PGCIL informed that the proposal of Bus-Split scheme at 132KV Rangpo S/S as approved in 114th OCC meting are being studied by its engineering wing and roadmap for implementation of the scheme will be placed in 115 th OCC meeting scheduled to be held on 20.11.15.

In 115<sup>th</sup> OCC, Powergrid informed that for implementation of the above scheme site visits from its corporate engineering division is required.

OCC requested Powergrid to expedite it so that the eastern grid could avoid loss of crucial hydro generation from Chuzachen and Jorthang HEP by early implementation of bus split operation as accepted by OCC.

In the 116<sup>th</sup> OCC, Powergrid informed that corporate engineering division has visited the site and they will submit the report within 10 days.

It was felt that the cost may be born by Chuzachen and Jorthang HEP as they are being benefited with this SPS.

Chuzachen informed that they could comment if they know the total cost.

Powergrid was advised to place the schedule and total cost for implementation of the scheme in the next OCC meeting.

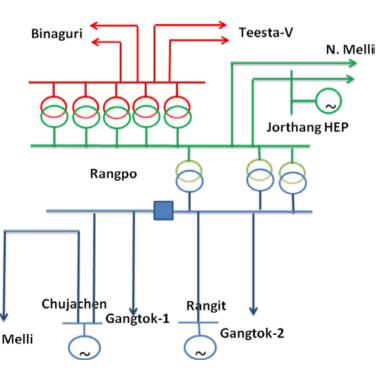
Chuzachen was advised to interact with CTU regarding total cost for implementation of the scheme and Jorthang HEP for cost sharing, so that the issue could be settled in next OCC meeting without further delay on cost sharing issue.

Subsequently, Chuzachen has submitted a write up vide mail dated 28.12.2015 providing the existing and proposed bus arrangements along with the site photographs. The same is appended at *Annexure B.8*.

Chuzachen may explain the same. Chuzachen/CTU may update.

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

It was informed that the exact configuration of feeders at Rangpo S/s is not as per the earlier shown diagram; the present distribution of feeders at Rangpo S/s is as given below:



#### **Present arrangment**

Powergrid informed that CTU has studied the proposal and provided two solutions, however the study report is expected within a week.

OCC advised Powergrid to submit the study report along with the feasible solution at least prior to 32<sup>nd</sup> ERPC meeting so that the same may be placed before the Board.

#### Item No. B.9: Status of Islanding Schemes of Eastern Region

#### B.9.1: 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, WBPDCL
- 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 December 2015 has been received from BkTPS, Tata Power, and CTPS, DVC.

CESC may submit. Members may note.

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

Healthiness certificate for islanding scheme has been received from CESC.

#### B.9.2: FSTPS Islanding Scheme, NTPC

In 113<sup>th</sup> OCC, NTPC informed that cable laying for implementation of islanding scheme was completed. Cable termination for bay wise breaker trippings and unit-linked wirings is in progress and will be completed by 30.09.2015.

In 115<sup>th</sup> OCC, Powergrid informed that the PLCC panels will be delivered by December, 2015 and Battery and Charger by January, 2016.

In 116<sup>th</sup> OCC, Powergrid informed that PLCC panels have been delivered to the site and the battery will be delivered by 15<sup>th</sup> January 2016. The PLCC system will be commissioned by March, 2016.

Powergrid/NTPC may update the latest status.

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

NTPC informed that their part is ready for implementation.

Powergrid informed that the battery would be delivered by 31<sup>st</sup> January, 2016. The PLCC system will be commissioned by March, 2016.

#### B.9.3: Bandel Islanding Scheme, WBPDCL

The islanding scheme has been placed before 31<sup>st</sup> TCC Meeting for further concurrence and in 31<sup>st</sup> TCC/ERPC meetings, members agreed and advised WBPDCL to go ahead with the implementation of islanding scheme.

In 115<sup>th</sup> OCC, OCC advised WBPDCL/WBSETCL to place the tentative roadmap for implementation of Bnadel Islanding Scheme.

WBPDCL/WBSETCL agreed to place the tentative roadmap by next OCC.

In 116<sup>th</sup> OCC, WBSETCL gave a detailed presentation of the islanding scheme and explained that additional load is included for winter season (December to February months) to improve the reliability of the islanding scheme.

WBSETCL was appreciated for detailed analysis and WBPDCL was advised to go ahead with the implementation.

WBSETCL/WBPDCL may update the latest status.

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

WBSETCL informed that the tentative roadmap for the implementation of islanding scheme has been forwarded to WBPDCL.

OCC advised WBPDCL to initiate the implementation of islanding scheme positively in next OCC

#### Item No. B.10: 11KV Auxiliary power supply of Powergrid Substation.

#### a) <u>11KV Aux. power supply at 400/220KV Patna Substation:</u>

In 112<sup>th</sup> OCC, BSPTCL informed that the issue is being considered and they are exploring to give 33 kV supply from 220/132/33 kV Sipara GSS with existing load of 420 KVA (which is lesser than 1000 KVA load for getting 33 kV supply) as a special case.

In 114<sup>th</sup> OCC, BSPTCL informed that load requirement at Patna and Biharsharif S/s of Powergrid are very low for getting 33 kV supply however it may be considered as special case if intervened at higher level at SBPDCL.

OCC advised Powergrid to interact with higher authority of SBPDCL for getting 33 kV supply at Patna and Biharsharif S/s of Powergrid as a special case.

In 115<sup>th</sup> OCC, Powergrid informed that the matter is still pending at SBPDCL/BSPTCL.

OCC advised Powergrid to interact with BSPTCL and SBPDCL on the issue.

In the 116<sup>th</sup> OCC, Powergrid requested BSPTCL to give an official communication to PGCIL on minimum load restriction of 1000 kVA for getting 33kV supply for further course of action at PGCIL end.

BSPTCL was advised to send the letter with a copy to ERPC Secretariat.

BSPTCL/POWERGRID may update.

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

OCC advised Powergrid to interact with SBPDCL on the issue.

#### b) Auxiliary power supply for 400KV Berhampore Powergrid Substation--Powergid

As per Practice, 400KV Substation should have two nos auxiliary power supplies from two different sources. Accordingly, an application had been sent to WBSEDCL for arrangement of 11kV dedicated feeder from nearby Nabagram & Sagardighi Substations on deposit basis for the auxiliary supply of 400KV Berhampore Substation.

The construction of 11kV dedicated feeder from Nabagram has been completed and at present auxiliary power supply of Berhampore Substatiion is met from the said feeder. However, the reliability and availability of auxiliary supply from the Nabagram feeder is very poor.

Berhampore is a very important station of POWERGFRID, feedeing power to Bangladesh and West Bengal. The reliability and availability of 11KV auxiliary supply is very much essential for the reliable operation of Berhampore Substation.

WBSEDCL to maintain the reliability and availability of 11KV Nabagram feeder used for supplying auxiliary supply to Berhampore Substatioon and construct the dedicated Sagardighi feeder as second source of auxiliary supply to Berhampore Substation.

In 116<sup>th</sup> OCC, Powergrid was advised to interact with Director (Dist), WBSEDCL.

Powergrid may update.

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

Powergrid informed that they are facing frequent interruption of auxiliary supply at 400kV Behrampore S/s and the reliability of feeder is 40% (approx).

WBSETCL requested Powergrid to forward the interruption report along with duration and dates.

For second dedicated feeder, OCC advised Powergrid to interact with Director (Dist), WBSEDCL.

#### Item No. B.11: Status of PLCC system installed in Eastern Region

In 30<sup>th</sup> TCC/ERPC, Powergrid agreed to restore the PLCC system at both ends (its own end as well as the constituent end) of a line wherein the other ends are not operational for some reasons or others as one time job.

In 115<sup>th</sup> OCC, all the constituents were requested to go through the details of their respective control area and give their comments/suggestion, if any, by next OCC.

In 116<sup>th</sup> OCC, JUSNL informed that they have submitted the cost estimation to their management for approval.

WBSETCL informed that they have referred the cost estimation to their communication wing.

OPTCL submitted that they are installing OPGW and they are planning to implement carrier protection using OPGW.

It was felt that implementing digital carrier protection using OPGW is much costlier than PLCC and advised OPTCL to review the proposal once again.

OPTCL may update. Members may update.

#### Deliberation in the meeting

OPTCL submitted that OPGW communication installation is under way and they are planning to implement carrier protection using OPGW. They will convene a joint meeting with Powergrid for finalization of scheme.

WBSETCL informed that they will have a separate meeting with the competent authority on the issue.

JUSNL informed that they have forwarded the cost estimate to their highest authority for approval.

### Item No. B.12: Concerned members may update the latest status.

#### B.12.1. Commissioning of 400 kV Ind-Bharath to Jharsuguda D/C (dedicated line)

Ind-Bharath updated the status in 116<sup>th</sup> OCC as follows:

- All the 125 towers foundations have been completed and 118 have been erected.
- Due to route alignment one tower (i.e. 126<sup>th</sup> tower) has been increased which is under ROW negotiation.
- Stringing work of 34 km out of 39.74 km line has been completed.
- The bay work at 400 kV Jharsuguda (Kenapalli) S/s is in advanced stage, being executed under the consultancy of Powergrid, will be completed ahead of line.
- Line is expected to be commissioned by 15<sup>th</sup> January, 2016.

Ind-Bharath may update the latest status.

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

Ind-Bharath was not available for discussion.

#### B.12.2. Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

In 31<sup>st</sup> TCC/ERPC followed by 115<sup>th</sup> OCC Vedanta informed that out of 66 tower foundations, 21 have been completed and rest is expected to be completed by December, 2015. Commissioning of line is expected by 15 April, 2016.

TCC advised Vedanta to strictly adhere to the schedule.

In 116<sup>th</sup> OCC, Vedanta informed that forest clearance is still pending. However, it was informed that considerable progress has been made in tower foundations. Commissioning of line is expected by 15 April 2016.

Latest progress report on construction of Sterlite-Jharsuguda D/C lines as on 11.01.2016 has been received from Vedanta Ltd vide mail dated 11.01.2016. The same is appended at **Annexure 12.2**.

Vedanta may update.

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

Vendanta informed that 40 out of 66 foundations and installation of one tower have been completed. Vedanta informed that the target date of commissioning for the line is April, 2016.

#### B.12.3. Status of construction of Chuzachen bay at Rangpo S/s.

In 31<sup>st</sup> TCC/ERPC meeting, Powergrid informed that payment has been received from Sikkim and they will start the construction work at the earliest.

In 116<sup>th</sup> OCC, Powergrid informed that tendering documents will be ready by December, 2015 after that DoP, Sikkim will do the tendering.

Sikkim, Powergrid may update.

#### Deliberation in the meeting

Powergrid informed that tendering documents will be ready within a week & after that DoP, Sikkim will do the tendering.

#### B.12.4. Non availability of important bays at FSTPP end

In 109<sup>th</sup> OCC, NTPC informed that 400kV FSTPP-KhSTPP-IV Tie bay will be charged by 1<sup>st</sup> week of June, 2015.

In 116<sup>th</sup> OCC, NTPC informed that the work will be done in January, 2016.

NTPC may update.

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

NTPC informed that the work will be done in February, 2016.

#### B.12.5. Non-availability of Tie bay of 400kV Sagardighi-Behrampore-II

In 114<sup>th</sup> OCC, WBPDCL informed that the relay settings have been finalized and the tie bay is expected to be commissioned by 15<sup>th</sup> November 2015.

In 115<sup>th</sup> OCC, WBPDCL informed that the tie bay will be in service within 2 weeks.

In 116<sup>th</sup> OCC, WBPDCL informed that 90% work has been completed and the tie bay will be in service by next OCC.

WBPDCL may update.

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

WBPDCL informed that the tie bay will be in service by February, 2016.

#### B.12.6. Non availability of both line Reactors of 400KV Malda-Purnea D/C

It has been observed that both the 63MVAR line reactors of 400kV Malda-Purnea D/C at Malda end are presently under outage. It may be noted that no reply has been received i.r.o mails forwarded by ERLDC to Powergrid in this regard. It may also be noted that on 20/11/15 during evening hours, while charging attempt of 400 KV Malda – Purnea –II was being taken from Malda end, 400 KV Malda - Purnea –I tripped on stage –I overvoltage protection.

Considering the necessity of availability of line reactors at Malda end, Powergrid may intimate the details regarding the outage date of the line reactors, their current status and their expected restoration dates.

In 116<sup>th</sup> OCC, Powergrid informed that the reactors will be in service by January, 2016.

Powergrid may update.

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

Powergrid informed that Reactor-1 is not healthy & problem in winding is suspected. BHEL is taking abnormal time & for winding replacement NIT is under process. Commissioning of this reactor may take another 6 months.

Reactor-2 will be in service by end of January, 2016.

#### B.12.7. Status of Bus splitting works at Maithon and Durgapur

It is understood that presently, Bus splitting works at Durgapur have been completed while at Maithon coupling between Bus-II and Bus-IV have been completed, and the works for commissioning of Bus sectionalizer between Bus-I and Bus-II is in progress. Powergrid may furnish the latest status in this regard. On confirmation, fault studies would be done and final decision would be taken in the appropriate forum to run the substations in decoupled mode to ensure that the fault levels are well within the line/equipment ratings.

NTPC/Powergrid may also furnish the latest status/progress of Bus splitting works in the other remaining substations as decided in the SCMs.

In 116<sup>th</sup> OCC, Powegrid informed that segregation of bus 1 and 3 are completed at Maithon and Bus 2 and 4 would be completed by 2nd week of January, 2016.

Powergrid was advised to share post splitting SLD and fault level of the sub-station to PCC in order to facilitate revise the protection settings as per the new bus bar scheme.

Powergrid/NTPC may update.

#### Deliberation in the meeting

Powergrid informed that bus segregation has been completed at 400kV Maithon S/s. Busbar relay panels are installed and CT connections have to be bifurcated which will take 15-20 days.

Powergrid informed that bus bar protection REB 670 is installed at 400kV Durgapur and it is in service.

Regarding Khahalgaon bus splitting NTPC informed that NIT for Bus segregation has been invited and NIT for Switchyard elements will be done by next month.

#### B.12.8. Non-availability of Main bay of 400kV Purnea-Biharshariff-I

Due to blasting of CB of main bay of 400kv Purnea-Biharshariff-I(at Purnea end) the main bay is under outage w.e.f 08/12/15. Under the above circumstances, in case of any outage of the tie bay due to Bus shutdowns, the line would go under outage. As presently, 400kv FSTPP-Malda D/c is under outage, availability of all bays in the section are essential.

Powergrid may hence note that the bay needs to be restored at the earliest. The expected date of restoration may also be confirmed.

In 116<sup>th</sup> OCC, Powergrid informed that the main bay of 400kV Purnea-Biharshariff-I will be restored by 20<sup>th</sup> January 2016.

Powergrid may update.

#### Deliberation in the meeting

Powergrid informed that the main bay of 400kV Purnea-Biharshariff-I will be in service within a week.

# B.12.9. 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 116<sup>th</sup> OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

SI. No.	Name of the transmission line	Completion schedule				
1.	2x315MVA 400/220kV Bolangir S/s					
a.	LILO of one circuit of Sadeipalli-Kesinga220 kV D/C line at Bolangir S/S	5 out of 14 completed. Dec, 2015 (Severe ROW problem)				
b.	LILO of one circuit of Katapalli-Sadeipalli220 kV D/C line at Bolangir S/S	To be completed by March, 2016				
2.	400/220 kV Keonjhar S/S					
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	Tender opening 18 Nov 2015				
b.	Keonjhar (PG)-Turumunga (OPTCL) 220 kV D/C line	Yet to be awarded				
3.	400/220kV Pandiabil Grid S/s					
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	It will take 1 year for completion.				
b.	LILO of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	May, 2016				

OPTCL may update.

#### Deliberation in the meeting

OPTCL updated that work order will be issued for Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line in February, 2016.

OPTCL informed that they are facing severe ROW problem for LILO of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S and it is not possible to fix up a completion date at this juncture.

#### B.12.10. 220 kV inter-connecting lines of BSPTCL with 2x200 MVA, 400/132 kV substations at Lakhisarai & Banka

In 30<sup>th</sup> TCC, BSPTCL informed that at present they are drawing power from 400/132 kV Lakhisarai S/s through LILO of 132 kV Lakhisarai (BSPTCL)-Jamui S/C at Lakhisarai(PG).

In 112<sup>th</sup> OCC, BSPTCL informed that LILO of 132 kV Lakhisarai (BSPTCL) - Jamui S/C at Lakhisarai(PG) was removed after the charging of 132 kV Lakhisarai (PG)-Lakhisarai (BSPTCL) D/C line which was earlier temporary arrangement for drawing power from 400/132 kV Lakhisarai (PG).

In 116<sup>th</sup> OCC, BSPTCL updated the latest status as follows:

SI. No.	Name of the transmission line	Completion schedule
1.	The 2x200 MVA, 400/132 kV Lakhisarai sub-statio	n
a.	132 kV Lakhisarai (PG)-Lakhisarai (BSPTCL) D/C	Charged
	line	
b.	132 kV Lakhisarai-Jamui (BSPTCL) D/C line	Charged on 5 <sup>th</sup> Oct,
		2015
2.	2x200 MVA, 400/132 kV Banka sub-station	
a.	LILO of 1 <sup>st</sup> circuit of Banka (BSPTCL)-Sabour	Charged.
	(BSPTCL) 132 kV D/C line at Banka (PG)	
b.	LILO of 2 <sup>nd</sup> circuit of Banka (BSPTCL)-Sabour	Line completed. Bays
	(BSPTCL) 132 kV D/C line at Banka (PG)	will be completed by

		31 <sup>st</sup> January, 2016
C.	132 kV Banka (PG)-Sultanganj (BSPTCL) line-I	Completed
d.	132 kV Banka (PG)-Sultanganj (BSPTCL) line-II	Completed

BSPTCL may update.

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

Regarding LILO of 2nd circuit of Banka (BSPTCL)-Sabour (BSPTCL) 132 kV D/C line at Banka (PG), BSPTCL updated that the material are awaited for construction of bays.

#### Item No. B.13: 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).

Members may comply.

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

OCC advised all the constituents to comply the pending observations at the earliest.

#### 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)
- 2) Subashgram (PG)
- 3) Kolaghat TPS (WBPDCL)-
- 4) Kharagpur (WBSETCL) 400/220kV -
- 5) Bidhannagar (WBSETCL) 400 &220kV
- 6) Durgapur (PG) 400kV S/s
- 7) DSTPS(DVC) 400/220kV
- 8) Mejia (DVC) TPS 400/220kV
- 9) 400/220/132kV Mendhasal (OPTCL)
- 10) 400/220kV Talcher STPS (NTPC)
- 11) 765/400kV Angul (PG)
- 12) 400kV JITPL

Completed on 15<sup>th</sup> July 2015 Completed on 16<sup>th</sup> July 2015 Completed on 7<sup>th</sup> August 2015 Completed on 7<sup>th</sup> August 2015 Completed on 8<sup>th</sup> September, 2015 Completed on 10<sup>th</sup> September, 2015 Completed on 9<sup>th</sup> September, 2015 Completed on 11<sup>th</sup> September, 2015 Completed on 2<sup>nd</sup> November, 2015 Completed on 3<sup>rd</sup> November, 2015 Completed on 5<sup>th</sup> November, 2015 13) 400kV GMR

In 115<sup>th</sup> OCC, Members decided to carry out the audit for 400kV Bakreswar (WBPDCL), Sagardighi (WBPDCL), Farakka (NTPC), Malda (PG) & Behrampur(PG) in December/January.

In 116<sup>th</sup> OCC, it was decided to carry out the audit for 400kV Bakreswar (WBPDCL), Sagardighi (WBPDCL), Farakka (NTPC), Malda (PG) & Behrampur(PG) in January, 2016.

Members may discuss and decide.

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

OCC advised to speed up the audit process with timely publication of audit observations under category A & Category B in ERPC web site.

### Item No. B.14: 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.15: 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, WBPDCL 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.

Members may note and update the status.

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

Members noted.

#### Item No. B.16: Energy Generation data management from Renewable Energy Sources

As per Electricity Act, 2003, CEA has been entrusted with the task of collecting electricity generation data. CEA is monitoring all the existing generating stations with capacity more than 25 MW (Conventional sources only). In recent years there has been appreciable growth in generation from Renewable Energy Sources (RES).

In view of above it was decided to monitor all the generating stations under RES connected to the grid and also to bring out month wise, state wise and sector wise report on RES generation in MU including peak generation from RES.

CEA already requested to nominate Nodal officers at the level of SLDC for the above purpose. However, only few states have responded.

Those SLDCs who have not yet nominated the nodal officers for Energy Generation Data management from RES are requested to furnish the details at following email/Fax:

Email: ceaopmwind@gmail.com with a copy to rishika.engineer@gmail.com and s.sewak@cea.nic.in

Nodal officers from CEA: Mrs. Rishika Sharan, Director, CEA, 011-26732663 and 26102263(Fax), Mobile: 9868021299, Mrs. Sarita Sewak, Dy. Director, 011-26732656

SLDCs may note and comply.

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

Members noted.

#### Item No. B.17: Sub-committee on "Integration of Renewable Energy Sources".

In the first meeting of the committee for National Electricity Plan (NEP) held on 1<sup>st</sup> September, 2015, it was decided to constitute a sub-committee on integration of renewable energy sources with following terms of references:

- a) Issues relating to integration of renewable energy into Power System
- b) Balancing requirement for renewable energy
- c) Flexible Generation

This sub-committee would be headed by Member (Power System), CEA.

In view of above all the constituents are requested to nominate a member, not below the level of Chief Engineer/Director. It is requested that information including address, email and mobile of the nominated member may be sent to CEA, PSP&PA-II Division within 15 days.

In 114<sup>th</sup> OCC, OCC requested each constituent to nominate a member for the above sub-committee.

Subsequently nominations received from BSPTCL, WBSETCL, OPTCL and CESC.

Other constituents may nominate the committee member.

#### Deliberation in the meeting

Members noted.

#### Item No. B.18: 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 Postion 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.

CESC has submitted the data for the month of December, 2015.

It has been observed that constituents (JUSNL, BSPTCL & WBSETCL) were not submitting the data on regular basis.

Members may discuss.

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

JUSNL, BSPTCL & WBSETCL have submitted the requisite data.

OPTCL agreed to submit within a week.

#### Item No. B.19: Erroneous recording of data by Interface Meters --- ERLDC

#### i. Lalmatia(JUVNL)

SEM data received from Lalmatia (JUVNL) of 220 KV Lalmatia(JUVNL) – Farakka (NTPC) line showing erroneous(2/3rd reading as compared to Farakka end) since last six months. The matter is already informed to the official of JUVNL. However the problem still persists.

In 115<sup>th</sup> OCC, JUSNL informed that the issue will be taken up at the earliest and resolved.

In 116<sup>th</sup> OCC, JUSNL informed that they have checked the PT, PT fuse and connections and reported that the meter is not working properly.

Powergrid was advised to replace the meter.

Powergrid/JUSNL may update.

#### Deliberation in the meeting

Powergrid informed that SEM has been installed.

#### Item No. B.20: Replacement/repair of meters on Various Locations

#### i. Installation of Stand-by Meters at Malda for 400kV Farakka-Malda D/C

Stand-by SEMs are already installed at the other end of all outgoing feeders of ISGS. In case of Farakka station, no stand-by SEM is installed at Malda end for 400kV Farakka-Malda D/C. Two nos. of SEM at Malda end may be installed to avoid any critical situation.

In 116<sup>th</sup> OCC, Powergrid agreed and informed that SEMs will be installed by January, 2016.

Powergrid may update.

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

Powergrid informed that SEMs have been installed.

#### ii. Patratu (DVC)

Meter NP-6006-B installed at Patratu DVC end of 132 KV Patratu-Patratu Line is not working since last one month and due to that meter data is not being received at ERLDC end. The above issue is long pending and matter was earlier intimated to Powergrid OS department. Being a Tie line, defective meter is required to be replaced on priority basis.

Powergrid is requested to divert one B type meter to replace the above defective meter immediately.

DVC/Powergrid may update.

#### Deliberation in the meeting

Powergrid informed that SEMs have been replaced.

#### iii. Replacement/Repair of Defective meter at Mendhasal – SLDC, Odisha

Meter at Mendhasal (GRIDCO) end of Mendhasal (GRIDCO) – Baripada (PG)- I is defective since more than last two months.

SLDC, Odisha vide mail dated 05.01.2016 have requested for early replacement/repair of meter at Mendhasal.

Powergrid(Odisha) may update.

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

Powergrid-Odisha informed that the Meter will be replaced by end of January, 2016.

#### iv. Installation of New SEMs at B/C panels at Joda Grid S/s of OPTCL - OPTCL

OTPCL vide mail dated 30.12.2015 have requested for installation of new SEMs at B/C panel at their Joda GSS for 220kV Joda- Ramchandarpur & Joda – Jindal Interstate tie lines.

ERLDC/ Powergrid(Odisha) may opine.

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

Powergrid informed that required meters are already installed and SEM for bus coupler is not required.

ERLDC informed that the SEM reading at both ends of the 220kV Joda- Ramchandarpur line is not matching and advised OPTCL to check for any tapping in the line. It was also informed that SEM for 220kV Joda- Jindal is not required as it is an intra-state line.

#### OPTCL agreed.

#### Item No. B.21: Time drift in L & T Energy meters -- APNRL

APNRL vide letter dated 02.01.2016 have informed that differences in data collected from L & T make SEMs installed at 400kV Switchyard of APNRL and of those installed at GT-1 & GT-2 have been observed. Details, as furnished by APNRL, tabulated below:

SI. No.	Constituent	Meter No.	Time Drift wrt to GPS
At APNR	L 400 kV S/s		•
1	Line 1	NP-8642-A	00:00:04 (Advanced)
2	Line 2	NP-7884-A	00:06:06 (Advanced)
3	GT 1	NP-7836-A	00:04:11 (Advanced)
4	GT 2	NP-8643-A	00:02:03 (Lagging)

Time drift in SEMs may have commercial implications due to erroneous DSM calculation.

APNRL/ERLDC/POWERGRID may update.

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

OCC advised APNRL to carry out the time correction of SEMs on regular basis and submit the report to ERLDC.

#### Item No. B.22: Non-payment of Reactive energy charges by WBSETCL/WBSEDCL

The updated position of Receipt/Payment of Reactive Energy Charges in the pool as on 01.12.2015 (considering bill up to 08.11.2015) is indicated that the total outstanding receivable on account of Reactive charges from WBSETCL/WBSEDCL is 227.61429 Lac.

ERLDC identified some drawal/injection points of WBSETCL/WBSEDCL system from where WBSETCL/WBSEDCL either draws reactive power during low voltage condition or injects reactive power in high voltage condition. As a result of this WBSETCL/WBSEDCL has to make huge amount as payment of VAR charges in ERPC Reactive pool account.

It has been observed that for the last six months that some of the designated points where Var is being injected to the grid during High Voltage period (103% or above) by WBSETCL/WBSEDCL are as below:

- 1. 220kV Binaguri-Jaipaiguri D/C
- 2. 400kV Durgapur-Bidhannagar D/C
- 3. 400kV Durgapur-Sagardighi D/C
- 4. 220kV Subhasgram-Haldia D/C
- 5. 220kV Subhasgram-Newtown/Bantala
- 6. 400kV Sagardighi-Behrampore D/C
- 7. 132 KV Siliguri NBU D/C

On the other hand it has been also observed that there are some points through which WBSETCL/WBSEDCL is drawing Var during Low Voltage period (97% or Below) resulting in defaulter and liable of making payment. The details of WBSETC/WBSEDCL lines are given below:

- 1. 220kV Subhasgram EM Bypass D/C
- 2. 400kV Jeerat Baherampore
- 3. 400kV Jeerat Subhasgram

An amount of 4.30 Cr. is payable by WBSETCL from Apr'15 to Nov'15. WBSETC/WBSEDCL may take suitable action for VAR management at those points to improve voltage profile.

In 116<sup>th</sup> OCC, WBSETCL was advised to take appropriate action to manage the reactive power.

ERPC Secretariat also pointed that Meramundali S/s is also injecting VAR during high voltage and therefore OPTCL is paying huge VAR charges.

OPTCL was advised to take appropriate action to control the VAR injection during high voltage at Meramundali S/s.

WBSETCL & OPTCL may update

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

WBSETCL requested ERLDC to control the voltage of 400 kV S/s within ± 3% of rated voltage.

ERLDC informed that the voltages of all the 400 kV sub-stations are within the IEGC band i.e.  $\pm 5\%$  of the rated voltage.

WBSETCL/WBSEDCL informed that due to this margin (i.e. from 3% to 5%) they have to pay reactive charges and requested OCC to look into the matter.

OCC advised WBSETCL/WBSEDCL to take up the issue with appropriate forum i.e. CERC.

OPTCL requested for opening of one ckt of under loaded 400kV double ckt line during high voltage to avoid the VAR injection. OPTCL also requested to change the tap position of 400/220 kV ICTs.

ERLDC informed that opening of one ckt to avoid the VAR injection charges is not possible as it may endanger the grid security. Regarding changing of ICT tap they agreed to look into it.

#### Item No. B.23: Pollution mapping for Eastern Region

The Pollution Mapping work in ER was started with on-site measurement of ESDD and NSDD. The latest available status is as follows:

Utility	Scope	Installed Locations	Number of locations where 1 <sup>st</sup> set of Measurements Completed
JUSNL	67	27	21
BSPTCL	59	52	44
WBSETCL	73	70	43
OPTCL	164	102	102
Sikkim	12	9	6
Powergrid ER 1	99	99	99
Powergrid ER 2	40	40	40
Powergrid Odisha	43	43	43

112<sup>th</sup> OCC advised all constituents to complete the 1<sup>st</sup> set of measurements and send to Powergrid/CPRI.

In 115<sup>th</sup> OCC, Powergrid informed that 2 kits of WBSETCL are defective; the same will be sent to CPRI for replacement as kits are under AMC.

Powergrid vide mail dated 10<sup>th</sup> December, 2015 requested to complete the 2<sup>nd</sup> set of measurements.

Powergrid also requested to provide probable pollution sources and direction details near the site with specific details e.g. type of pollution sources (factories, Brick Kiln, Agricultural pollutant, Saline pollutant from sea coast), direction form site, distance from site etc.

In 116<sup>th</sup> OCC, all the constituents were advised to complete the measurements and send to Powergrid/CPRI.

Concerned members may update.

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

Members updated the status which is depicted in the above table.

OCC advised all the constituents to complete the 2<sup>nd</sup> set of measurements by end of January, 2016.

#### Item No. B.24: Updating of Restoration Procedure of Eastern Region for 2015

In fulfilment of section 5.8 (a) and (b) of IEGC, the Restoration Procedure of Eastern Region has been updated till the current year. Soft copy of the draft-updated procedure would be circulated among OCC members during the meeting. Members may offer their valuable observations by 04<sup>th</sup> Jan 16 for finalization of the procedure.

In 116<sup>th</sup> OCC, ERLDC circulated the restoration procedure of ER and presented the major changes in the procedure.

ERLDC requested all the constituents to send their views by 10<sup>th</sup> January, 2016.

ERLDC may update.

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

Kolaghat TPS, WBPDCL requested for some correction in the restoration procedure.

ERLDC informed that they will finalize the procedure with above correction.

#### Item No. B.25: Recovery Procedures of ER Constituents – ERLDC

As per IEGC clause 5.8 (b) "Detailed plans and procedures for restoration after partial/total blackout of each user's/STU/CTU system within a Region, will be finalized by the concerned user's/STU/CTU in coordination with the RLDC. The procedure will be reviewed, confirmed and/or revised once every subsequent year".

Constituents may discuss.

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

ERLDC informed that all STUs have to develop their own restoration plan and procedure of their state in coordination with ERLDC/ERPC.

If such restoration plans are already available, it may be shared with ERLDC.

OPTCL and DVC informed that they are having the restoration plan and agreed to share with ERLDC/ERPC.

WBSETCL also agreed to prepare their restoration procedure and forward to ERPC/ERLDC.

OCC advised BSPTCL, JUSNL and Sikkim to prepare their restoration plan and procedure in coordination with ERLDC/ERPC.

#### Item No. B.26: Nodal coordinators for web based scheduling software

Presently, development of the web-based scheduling software is at an advanced stage and testing of the same is required before the final commissioning. It is hence requested that nodal persons may be identified for being associated with the testing and commissioning phase of the software.

In 116<sup>th</sup> OCC, ERLDC informed that photo type web based scheduling software is ready and it will be tested soon. So ERLDC requested all members to nominate one coordinator from each concerned constituent. It was intimated that all the coordinators will be called and demonstration of software will be done.

However, response has been received from DVC and GMR only.

Other Constituents/members may nominate the Nodal Officer.

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

It was informed that OPTCL has also given their nomination. MPL also nominated their nodal officer as given below:

Mr. Sudip Dash, GH (Comml.), M- 9204652869 e-mail: sudipdash@tatapower.com

OCC advised all the other constituents to nominate their Nodal Officer and send the nomination along with mobile number and mail id to ERLDC.

#### Item No. B.27: Dynamic data of Generator Models required in PSSE for Simulations --ERLDC

To carry out proper simulation studies in PSSE, actual generator parameters are required as incomplete or incorrect modelling of generator may not give valid simulation result. Hence all the generating companies are requested to furnish data for generator, exciter, governor, PSS of their all generating units in the format.

In 114th OCC, the house was informed that the formats are available at ERPC website. (www.erpc.gov.in)

OCC advised all the generating utilities to submit the relevant information as per the format.

All generating utilities agreed to submit.

Till 115<sup>th</sup> OCC, the data received only from NTPC Kahalgaon & Barh, NHPC Teesta-V, GMR and CESC.

In 116<sup>th</sup> OCC, all the other constituents were advised to send the requisite information and ERLDC was requested to give the description of symbols and abbreviations for proper understanding of the constituents.

Subsequently, Vedanta Ltd. has submitted the relevant information vide mail dated 11.01.2016.

ERLDC may update.

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

OCC advised all the other constituents to send the requisite data at the earliest.

#### Item No. B.28: Furnishing of data for preparation of reports

ERLDC Control room collects data on daily basis during night hours for computation of Interregional and Transnational energy transfers including maximum/minimum flows for incorporation in the daily reports. However, certain difficulties have been faced at times in collection of data w.r.t exchange of power with WR. As System Operators are severely time constrained, it is essential that all such data are made available through a single window vide mail within the shortest possible time after completion of 24:00hrs of the day. As such data furnishing is being handled by CPCC, ER-II, Powergrid(ERTS-II) may kindly ensure that such data is available to ERLDC control Room without any delay.

In 116<sup>th</sup> OCC, Powergrid informed that this problem has come due to implementation of unmanned substation.

Powergrid was advised to give the relevant data/report of all substations in a single window as that will facilitate ERLDC in discharging effective service.

Powergrid may update.

#### Deliberation in the meeting

ERLDC informed that data is coming from Powergrid ER-1 in a single window except the data from Rourkela.

OCC advised Powergrid-Odisha take appropriate action.

Powergrid-Odisha agreed to look into it.

#### Item No. B.29: Scheduling of Un-requisitioned Surplus (URS) power from ISGS – ERLDC

CERC vide order Dtd.05/10/15 in petitionNo.310/MP/2014 had directed the following in modification to the order dated 11.1.2010 in Petition No.134/2009(regarding scheduling of URS from ISGS):

"(a) All generating companies whose tariff is determined by this Commission under section 62 or adopted by this Commission under section 63 of the Act shall be permitted to revise their schedule for URS power from one beneficiary to another beneficiary of the same power station in terms of Regulation 6.5.18 of the Grid Code within 4 time blocks. Consent of the original beneficiary and the new beneficiary shall be submitted by the ISGS intending to avail revision of schedule to the concerned RLDC by mail.

(b) If the original beneficiary requests back its share of power, then its schedule and the schedule of beneficiary who had availed URS power shall be revised in 4 time blocks again. Concerned ISGS shall submit the request of the original beneficiary to recall the power to concerned RLDC by mail.

(c) The revision of schedules shall be permitted under Regulation 6.5.18 in respect of URS power subject to availability of transmission corridor and in case of congestion, RLDCs shall be at liberty to revise the schedule in terms of Regulation 6.5.20 of the Grid Code.

(d) Revision of schedule for sale of URS power to third parties shall not be permitted. Concerned ISGS may seek short term open access for sale of URS power to third parties.

(e) NLDC and RLDCs are directed to implement the above directions. In case any difficulty is experienced, NLDC/RLDCs/ISGSs/Beneficiaries are granted liberty to bring such difficulty to the notice of the Commission."

Subsequently, CERC vide ROP to Petition No.16/SM/2015, Dtd.05/01/16 in the matter of Difficulty encountered in implementation of the Commission's order dated 5.10.2015 in Petition No. 310/MP/2014 regarding scheduling of unscheduled surplus power from the inter-State generating stations directed the following:

"Where both the generating station and its beneficiaries (surrendering and requesting beneficiaries) give their standing consents in writing to RLDC that the decision of the concerned RLDC will be binding on them with regard to scheduling and dispatch of URS power, the concerned RLDC shall schedule such URS power to the requesting beneficiaries in relative proportion to the quantum requested by them. In other cases, RLDCs shall schedule URS power on the basis of the consents submitted by the generating stations in terms of the order dated 5.10.2015."

Considering all of above it is hereby intimated that in future for scheduling of URS power, the concerned ISGS would need to furnish the consent of the surrendering beneficiaries alongwith their consent in case the beneficiaries of the ISGS do not submit the standing consents i.r.o above. Also, in case of surrender by more than one beneficiary wherein the URS pool power cannot be demarcated source-wise in terms of the surrendering beneficiary, consents of all the beneficiaries who have surrendered at that instant need to be obtained by the concerned ISGS and furnished to RLDC alongwith their own consent. However, in case standing consent is furnished by all the beneficiaries of the concerned ISGS, repeated consent every time need not be taken. Beneficiaries can give their standing consents stating vide

letter/mail stating that the concerned beneficiary gives their unconditional consent for such revision of URS power by RLDCs as stated above and that they indemnify RLDCs/NLDC in all respects i.r.o the same.

Members may note and confirm accordingly.

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

ERLDC informed that now onwards clearance from surrendering beneficiary is also required to be submitted for scheduling of URS power from ISGS. This procedure will be implemented from 1<sup>st</sup> February, 2016.

It was decided that all beneficiaries of ISGS will explore feasibility of conveying their standing consent for allocation of their surrendered power from ISGS.

#### Item No. B.30: Antitheft charging of lines from Meramundali end --ERLDC

In the last OCC meeting it was discussed that format B5 was required to be furnished when antitheft charging of a part of the line was done from one end and for tapping of 66kV class and above lines Sub-regulation(6) of regulation 44 were to be strictly complied with for which the matter was to be taken up with the Chief Electrical inspector, CEA. However, ERLDC has not yet received any format or permissions from the appropriate authorities in this regard.

In 115<sup>th</sup> OCC, OPTCL informed that they have not yet charged the line for antitheft purpose and assured that necessary formats B2 and B5 will be submitted before antitheft charging.

Thereafter, ERLDC informed that no intimation has been received from OPTCL regarding status of antitheft charging of lines or regarding B2 and B5 formats. Pending any intimation it is concluded that OPTCL is not resorting to any antitheft charging of lines.

In 116<sup>th</sup> OCC, ERLDC intimated that formats B2 and B5 are not yet received from OPTCL and informed that they will not give the code for anti theft charging of the line until they receive formats B2 and B5.

OPTCL informed that they would not require anti theft charging the line as the line will be bought into service by 28<sup>th</sup> December 2015.

Subsequently, it was informed by ERLDC that Meramundali-Sterlite D/c has been taken into service on 06/01/16.

Members may note.

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

Members noted.

#### Item No. B.31: Drawal of start up power by BRBCL- ERLDC

BRBCL, Nabinagar has indicated that they are in need of start-up power for commissioning activities. In this regard ERLDC has already informed BRBCL, Nabinagar regarding the pending documents which are required for availing such start-up power. These include furnishing the filled up formats for requisitioning the start-up power and furnishing of the undertaking as per the requisite format. These are necessary to confirm opening of LC and other requirements which are mandatory prior to drawal of the startup power. On receipt of all the documents RLDC would issue formal permission vide the format for grant of startup power. Only after receipt of the same can the startup power be availed.

The CERC approved procedure for drawal of starup power containing the formats is attached alongwith. It may be noted that pending grant of approval for drawal of startup power the same cannot be availed by any Generating Station.

In 116<sup>th</sup> OCC, requisite formats were handed over to representatives from Railway for further necessary action at their end to avail start up power.

As informed by ERLDC, BRBCL, Nabinagar has submitted the required documents for availing start-up power. Accordingly, grant of permission for drawal of start-up power upto 15MW maximum was allowed to BRBCL, Nabinagar w.e.f 08/01/16.

Members may note.

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

Members noted.

#### Item No. B.32: Auto-Reclose (A/R) scheme of 400kV Jeypore- Gajuwaka D/C line

In the past many incidents of overvoltage tripping of 400kV lines emanating from Jeypore S/Stn had occurred. On further examination, it was observed that most of these over voltages were associated with SLG faults in 400kV Jeypore-Gajuwaka line.

In the 33rd PCC meeting held on 21-07-15, it was clarified by PGCIL that for 400kV Jeypore-Gajuwaka line, 3-ph tripping and auto-reclosing scheme has been implemented at Gajuwaka end, whereas, at Jeypore 1-ph tripping and auto-reclosing would occur for any SLG fault (in Z-I). PGCIL further explained that 3-phase tripping scheme had been adopted at Gajuwaka end on advice of OEM of HVDC, for avoiding commutation failure of the converter on AC side voltage unbalance & 3rd harmonics, which might occur if 1-ph tripping scheme had been implemented.

In this connection, it is stated that 3-ph tripping at Gajuwaka end and 1-ph tripping at Jeypore end is likely to trigger high voltage condition at Jeypore, as the two healthy phases of the 220km long line remain idle-charged during the dead time. PGCIL may therefore consider implementing 3-ph tripping at Jeypore end also.

It is further requested to take necessary action to ensure that voltage input for the PMU at Jeypore is obtained directly from the 400kV bus PT, instead of the arrangement existing at present. This is essential so that the PMU records the true bus voltage of Jeypore for all possible trippings.

112<sup>th</sup> OCC advised Powergrid to consider implementation of 3-ph tripping and auto-reclosing scheme at Jeypore end.

Powergrid informed that voltage input to the PMU at 400kV Jeypore S/s has been connected from 400kV bus PT.

In 114<sup>th</sup> OCC, Powergrid informed that they referred the issue to their corporate office and reply is awaited.

In 115<sup>th</sup> OCC, Powergrid informed that they will submit their reply by next week.

In the 116<sup>th</sup> OCC, Powergrid agreed to implement 3-ph auto-reclosure for 400kV Jeypore-Gajuwaka D/C line. However, they requested ERLDC to carry out the study.

It was felt that before implementation of the scheme, CTU should do proper study and therefore Powergrid was advised to do the needful at the earliest.

Powergrid may update.

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

Powergrid informed that 3-ph auto-reclosure for 400kV Jeypore- Gajuwaka D/C line at Gajuwaka end was advised by the OEM HVDC to avoid commutation failure at Gajuwaka HVDC.

OCC felt that 3-ph auto-reclosure at one end and 1-ph auto-reclosure at other is not appropriate and advised Powergrid-Odisha to implement the same auto-reclosure feature at both ends after doing proper study.

Powergrid-Odisha agreed to pursue with CTU.

#### Item No. B.33: 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 2015-16 is as follows:

Sl	Name of Hydro	Schedule	Tentative	Schedule	Tentative
no	Station		Date		Date
		Test-	·I	Test-	Π
1	U.Kolab	Last week of	Done on	Last Week of	
		May, 2015	16/07/15	January 2016	
2	Maithon	1 <sup>st</sup> week of June		1 <sup>st</sup> Week of	Done on
		2015		October 2015	23-12-2015
3	Rengali	2 <sup>nd</sup> week of June	Done on	Last week of	
		2015	13/10/15	November 2015	
4	U. Indravati	3 <sup>rd</sup> week of June	Done on	2 <sup>nd</sup> week of	
		2015	16/07/15	February 2016	
5	Subarnarekha	2 <sup>nd</sup> week of	Done on	1 <sup>st</sup> week of	
		October 2015	09/06/15	January 2016	
6	Balimela	1 <sup>st</sup> week of		1 <sup>st</sup> week of	
		November 2015		March 2016	
7	Teesta-V	2 <sup>nd</sup> week of		Last week of	2nd Half
		November 2015		February 2016	Jan,2016
8	Chuzachen	1 <sup>st</sup> week of May,		2 <sup>nd</sup> week of	2nd Half
		2015		January, 2016	Feb,2016
9	Burla	Last week of	Jan,2016	Last week of	
		July15		February, 2016	

Members may update.

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

Members updated the status as given in the above table.

#### ii) Mock Black Start exercise for Chuzachen and Teesta

As per decision taken in the previous OCC meetings, mock blackstart exercise of Teesta and Chuzachen with load segregation in Sikkim and North Bengal(for running in islanded mode)has been planned. Accordingly, ERLDC would be presenting the network for finalization of the load segregation and the procedure of switching actions to be adopted sequentially for successful islanding and re-synchronization of the islands. Sikkim and SLDC,WBSETCL may confirm/suggest to finalize the load segregation and the switching actions. Also, nodal persons may be identified to ensure that the operators are well versed with the procedure/switching actions to be performed. The dates may also be finalized.

In 116<sup>th</sup> OCC, ERLDC presented the procedure to carry out black start exercise for Teesta-V and it was decided to carry out black start exercise for Teesta-V in January, 2016 and for Chuzachen in February, 2016.

ERLDC vide mail dated 10.01.2016 submitted a detailed procedure for mock black start exercise of Teesta V unit. The detailed procedure as submitted by ERLDC is appended at **Annexure-B.33**.

ERLDC may explain the procedure. Sikkim, WBSETCL, NHPC and Chuzachen may confirm.

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

ERLDC explained the procedure of mock black start procedure of Teesta V and Chuzachen which is given at **Annexure- B.33a & B.33b**.

It was agreed to carry out the black start exercise of Teesta V and Chuzachen in February, 2016.

#### iii) 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 and erldcoutage@gmail.com.

Constituents may kindly ensure compliance.

#### Deliberation in the meeting

The test run reports has not been received from constituents. But in the meeting constituents ensured the healthiness of DG sets under each control area.

#### Item No. B.34: Restoration of SCADA data

Updated latest status is circulated in the meeting. During deliberations in 99<sup>th</sup> OCC it was pointed out by most of the constituents that SCADA problem in many locations are due to behind the schedule progress of work on the part of CTU/PGCIL. OCC advised Powergrid/CTU to expedite and restore at least the priority RTUs by 31<sup>st</sup> July, 2014.

Updated status is enclosed at Annexure-B.34.

CTU/ERLDC may update.

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

ERLDC informed that they had shifted to new SCADA system from January, 2016. There will be some smoothing problem and the system will be stabilized within 1-2 months.

#### Item No. B.35: Restricted Governor Mode of Operation

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

In 108<sup>th</sup> OCC, ERLDC informed that the RGMO/FGMO response of the generators needs monitoring on continuous basis.

OCC advised ERLDC to intimate the event of sudden drop in frequency to the generators and requested all generators to provide the RGMO/FGMO response data to ERLDC during the said incidents.

In 115<sup>th</sup> OCC, ERLDC informed that for effective monitoring of unit wise governor response, ERLDC proposes to create a web-group wherein SCADA data recorded by ERLDC following an event of sudden load-generation imbalance would be posted within 2-3 days of occurrence of the event. The login id and password to access the web-group would be duly intimated by ERLDC to all concerned.

Coordinators from all the concerned generating stations would post the unit wise MW response as recorded at their respective ends, for a period +/- half-an-hour of the instant, within two days of posting by ERLDC. For the purpose of analysis, wherever significant variation would be observed w.r.t. to SCADA data, generator`s data would be adopted for detailed analysis.

In this connection, SLDCs of E. Region are requested to extend cooperation by coordinating with nodal officers of generators under their respective jurisdiction, in data collection and posting in webgroup.

OCC requested all the constituents to provide their respective e-mails which can be added to the web group.

E-mails can be provided by all SLDCs, Hydro generators of having capacity 10 MW & above and Thermal generators of having capacity 200 MW & above.

SLDCs will co-ordinate with their IPPs of 10 MW & above Hydro generation and 200 MW & above Thermal generation.

Thereafter, ERLDC informed that one web group was formed for sharing governor response of various generators in ER. The url of the group is

#### https://in.groups.yahoo.com/neo/groups/er\_gov\_respons/info

ERLDC requested to send email ids where invitation will be sent. Yahoo mail ids are preferable.

Governor response for the event of 12-11-2015 at 23:05 hrs based on ERLDC SCADA data is already posted in the group.

In 116<sup>th</sup> OCC, all the constituents were requested to give their e-mail ids.

Members may update.

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

ERLDC informed that the performances of the governor response are being uploaded in the yahoo group. It was also informed that DVC, CESC and Odisha were already added in the web-group.

OCC advised other constituents to join the web group at the earliest by providing their e-mail ids (preferably yahoo ids).

# Item No. B.36: Reactive Power performance of Generators and GT tap position optimization

Maximum and minimum voltage was observed (data taken from SCADA)

Generating stations have been monitored for sample dates in the month of December 15:

Power Plant	Max and Min Voltage observed	Date for monitoring		
	for Dec 2015 (KV)	(December 2015)		
Farakka STPS	424,413	2,9,16		
Khalgaon STPS	416,403	16,25,31		
Talcher STPS	409,399	5,9,18		
Teesta	418,391	8,9,26		
Bakreshwar TPS	412,397	16,18,25		
Kolaghat TPS	425,404	5,12,18		
Sagardighi TPS	Data not Available	NA		
MPL	422,412	2,14,25		
Mejia-B	425,416	14,18,24		
DSTPS	427,420	2,16,25		
Adhunik TPS	425,417	5,10,15		
Sterlite	428,417	5,18,22		

ERLDC may update.

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

ERLDC presented the performance of the generators. It was informed that except Barh and JITPL the reactive performance of all the generators were satisfactory.

OCC advised NTPC, Barh and JITPL to look into the matter.

#### a) Schedule for reactive capability tests

In 115<sup>th</sup> OCC, members updated the status as follows:

- a. Adhunik TPS(both units) –Yet to be confirmed by Adhunik
- b. DSTPS (Unit#2 only pending) Not yet done
- c. Mejia#8(only U#8 pending) -done
- d. Koderma TPS Unit#1
- e. JITPL(both units) Procedure given. Not yet done

Members may update.

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

Members noted.

#### PART C:: OPERATIONAL PLANNING

# Item no. C.1: Shutdown proposal of transmission lines and generating units for the month of February' 16

Members may finalize the Shutdown proposals of the generating stations for the month of February' 16 as at **Annexure-C.1**.

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 Feb, 2016 is given at **Annexure-C.1**.

Chief Engineer (NPC) informed that calculation of ATC/TCC of the inter regional lines take approximately 10 days and OCC meeting may be scheduled by 15<sup>th</sup> of every month to finalize the shutdown of transmission lines/elements to enable ATC/TTC calculation before approving the shutdown of interregional lines.

ERPC Secretariat informed that in general, OCC and PCC meetings are scheduled in second week of every month. However, it is not possible for every month because of pre occupancy of other important meetings.

#### A. Shutdown of 400KV Farakka-Malda D/C line for HTLS re-conductoring

In 116<sup>th</sup> OCC, Powergrid was advised to bring the 400kV Farakka-Malda D/C in service positively by 20<sup>th</sup> January 2016.

Powergrid ER-II vide letter dated 08.01.16, informed that in recent past, there were unfortunate reported incidents of violence involving public & police in the vicinity of working area (Kaliachak Malda). Due to this unfortunate incident, district authorities have cancelled the shutdown of LT Lines as well as mobilized state administration resources to tackle the law and order situation. We already lost 05 working days and the same situation is likely to continue for the next 07-10 days. It has been advised by the District Authority to restrict the mobilization in the violence affected area.

Under the circumstances, it may not be possible to complete the reconductoring work by the end of January as committed earlier. In such a situation, we feel that the following are the available options:-

- i) The S/D of both the circuits may be extended till the end of February'2016, so that we can complete the entire works.
- ii) If there is a constraint in grid operation during Republic Day, we will put our best efforts to take back both the circuits by 24/01/2016. In such case, line shall be partially with HTLS and Farakka- Malda-I and shall be connected to Farakka through Tie bay only.

Further, they mentioned that West Bengal Madyamik and Higher Secondary examination shall be conducted during 15<sup>th</sup> Feb to 15<sup>th</sup> March, 2016. The West Bengal Assembly Election is also expected during March – April, 2016. During which S/D of any distribution/transmission system would be almost impossible and hence it is advisable to complete the restringing work by February, 2016.

In view of foregoing, Powergrid requested for continuation of S/D upto end of February, 2016 for completion of subject work in totality.

SLDC, WBSETCL vide letter dated 09.01.16 requested for normalisation of 400kV Farakka-Malda D/C lines by 24.01.2016 citing increase in demand due to West Bengal Madhyamik and Higher Secondary Examinations in February, 2016 and then onset of summer season.

Members may discuss.

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

Powergrid informed that due to river/railway/line crossings, ROW problems and other unfortunate circumstances, it may not be possible to complete the re-conductoring work by the end of January as committed earlier. Therefore the S/D may be allowed upto end of February, 2016 for completion of subject work in totality.

On query, Powergrid informed that they have completed 50 ckt km out of 84 ckt km of the line.

WBSETCL pointed out that from 01.02.16 West Bengal Madyamik examination is going to start and after that Higher Secondary examination. So, any shutdown which may affect the West Bengal power supply can not be allowed.

After detailed deliberation OCC extended the shutdown 400kV Farakka-Malda D/C line till 31.01.2016 and advised Powergrid to return the line by 01.02.2016.

Powergrid assured OCC for completion of at least 8 ckt Km stretch within the allotted time.

Further, OCC decided to convene a special meeting to review the progress of HTLS reconductoring work of 400kV Farakka-Malda and for further course of action.

#### Item no. C.2: Anticipated power supply position during February'16

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of February'16 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.2**.

Members may confirm.

#### Deliberation in the meeting

Modified anticipated power supply position for the month of February, 2016 after incorporating constituents' observations is given at **Annexure-C.2**.

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

Generating Station	UNIT NO	CAP(MW)	REASONS FOR OUTAGE	DATE	Date of restoration
ADHUNIK	1	270	BOTTOM ASH PROBLEM	5-Jan-16	
JITPL	1	600	GENERATOR	8-Jan-16	
GMR	2	350	OVERHAULING	9-Jan-16	
STERLITE	3	600	ID FAN PROBLEM	10-Jan-16	
MEJIA	2	210	STATOR EARTH FAULT	5-Dec-15	
MEJIA	3	210	GT DISSOLVED GAS	31-Oct-15	
MEJIA	4	210	DUE TO LOW DEMAND	10-Dec-15	
DSTPS	2	500	COAL SHORTAGE	16-Sep-15	
KODERMA	1	500	ASH POND PROBLEM	11-Nov-14	
BOKARO B	3	210	TUBE LEAKGE	2-Jan-16	
DPL	8	250	COAL SHORTAGE	21-Aug-15	

#### (i) Generating units:

KOLAGHAT	2	210	TUBE LEAKGE	9-Nov-15
KOLAGHAT	4	210	BOILER TUBE LEAKAGE	5-Jan-16
SAGARDIGHI	1	300	DUE TO LOW DEMAND	24-Nov-15
WARIA	3	140	TUBE LEAKGE	19-Oct-15
MUZAFFARPUR	1	110	FURNACE PRESSURE	3-Jan-16
BOKARO B	1	210	DUE TO LOW DEMAND	29-Dec-15
CHANDRAPURA	7	250	ROTOR EARTH FAULT	7-Jan-15
BAKERSWAR	3	210	ESP MAINTENANCE	30-Dec-15

#### (ii) Transmission elements

Name of the Line/Element	Outage	Reason	Date of restoration
NIL			

Members may update.

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

Members noted.

#### Item no. C.4: Information regarding commissioning of new transmission element

- 1. 220kV 400kV Bus Sectionalizer Breaker-II at Maithon S/s first time charged at 20:15hrs of 08/12/15.
- 2. 765kV New Ranchi-Dharamjaygarh-II first time charged at 16:41hrs of 24/12/15.
- 3. 160MVA ICT-I at Birpara S/s first time charged at 22:58hrs of 28/12/15 on no load .But tripped at 00:35hrs of 29/12/156 on over flux and again charged at 09:15hrs of 29/12/15.
- 4. 400kV Meramundali-Sterlite-D/C first time charged at 19:33 and 19:34hrs respectively of 30/12/15 on no load from Meramundali end.
- 5. 400/220 kV, 500MVA ICT-III at Muzaffarpur S/s first time idle charged at 22:32hrs of 30/12/15 from 400kV side.
- 6. 220/132kV, 160MVA ICT-III at Arrah first time charged at 10:24hrs of 31/12/15.

Members may update.

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

Members noted.

#### Item no. C.5: Status of commissioning of generating station and transmission elements

#### New generating units:

S.No.	Power Plant	Plant Size	Expected date
1	Raghunathpur Unit#1	2x600MW	
2	Sagardighi Unit #3	500 MW	

#### New transmission elements:

SI 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	LILO of Baripada-Mendhasal D/C at New Duburi	Completed
8	765kv Anugul-Srikakulum D/C	
9	400kV Sasaram-Daltonganj D/C &Daltonganj S/Stn	
10	400 kV Ranchi-Raghunathpur D/C	

11	400 kV Meramandali-Dubri D/C	Completed
12	400 kV Vedanta-Meramandali D/C	Charged on 6 <sup>th</sup> Jan,
		16
13	220 kV TLDP-IV – NJP ckt-2	
14	220 kV Bidhansai-Cuttack D/C	
15	220 kV Girdih-Koderma D/C	

Members may update.

## **Deliberation in the meeting**

Members updated the above table.

## PART D:: OTHER ISSUES

#### Item no. D.1: UFR operation during the month of December'15

System frequency touched a maximum of 50.32 Hz at 06:02Hrs of 06/12/2015 and a minimum of 49.59Hz at 07:47Hrs of 30/12/15. 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 December'15.

Members may note.

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

Members noted.

#### Item no. D.3: Grid incidences during the month of December, 2015

Sl no	Disturbance Place	Date & Time	Generation loss (MW)	Load loss (MW)	Remark	Cate- gory
1	BSPTCL (220kV Dehri S/s)	16.12.15, 08:42 hrs	0	170	Total power failure occurred at 220kV Dehri S/s due to R-Ø jumper of 132kV Dehri-Kochas snapped on Y phase of same line at Dehri.	GD-1
2	BSPTCL (220kV Dehri S/s)	17.12.15, 17:10hrs	0	410	Total power failure occurred at 220kV Dehri S/s due to tripping of both the ICTs at Gaya (PG) S/s. 220kV Dehri-Sasaram(PG) S/C tripped on overloading.	GD-1
3	220kV Arrah S/s	23.12.15, 23:06hrs	0	100	While first time charging attempt of 220/132kV,	GD-1

		160MVA ICT-III at Arrah(PG) was taken, all the 220kV	
		lines emanating from Arrah (PG) S/s tripped from	
		remote end resulting total power failure at Arrah.	

Members may note.

### **Deliberation in the meeting**

Members noted.

#### Item no. D.4: Any other items: Additional agenda

#### D4.1. Loading of 400/220 KV 315 MVA ICT

Powergird vide mail dated 14.01.2016 informed that the present load of 315MVA ICT-1&2 (at 18:38hrs on 14.01.2016) at Maithon Substation as below:

ICT-1: 290 MW ICT-2: 290 MW

You are requested to take necessary action to control the load of 315 MVA ICT-1&2 at Maithon SS as per capacity of the equipment.

Members may discuss.

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

OCC advised ERLDC to monitor the loading of Maithon ICTs till the augmentation of Maithon ICTs.

#### D4.2. Commissioning of 400/220 KV Rajarhat GIS

POWERGRID intimated that under Project ERSS-V, 400/220 KV Rajarhat GIS will be ready by April'2016 with 500 MVA, 400/220 KV ICT, LILO of 400 KV Jeerat-Subhasgram (one circuit) at POWERGRID Rajarhat & Bays for 220 KV Lines.

Discussion is to be held for taking best advantage to pool power from Rajarhat S/S after commissioning of the same.

Members may discuss.

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

OCC refer the issue to Standing Committee on Transmission Planning for State sectors (SSCM).

#### D4.3. Repair of 03 no's 50 MVA (220/132) ICT

As per decision taken on 29<sup>th</sup> ERPC meeting, 03 no's 50 MVA (220/132) ICT has been taken up for repairing. The minimum cost for repairing comes to Rs. 3,63,34,950/- as per approved tendering procedure. After repairing all three transformers will be available as Regional Spares at Malda (02 Nos) & Birpara (01 No).

Discussion is to be held for sharing the cost of repairing for 03 no's transformers among constituents.

Members may discuss.

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

OCC felt that it is a commercial issue and refer the issue to Commercial Committee.

## D4.4. Complete shut down of 400 KV Malda S/S

Complete 400 KV shut down of Malda S/S for stringing of Quad Moose in place of existing twin Moose conductor for upgradation of bays under ERSS-XIII. Several times shut down applied but due to load constraint, ERLDC not able to give shut down. Without upgradation to quad moose conductor the subject bay will not be able to carry 3000 A as designed.

Discussion is to be held for complete 400 KV shut down for 24.01.16 & 31.01.16.

Members may discuss.

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

It was informed that the above shut down was scheduled in January, 2016 but was not granted as Bihar has not given consent for load shedding of 110 MW.

OCC requested BSPTCL to allow the shutdown for upgradation work under ERSS-XIII on holidays as load shedding is less.

It was agreed to allow shutdown on 07.02.16 & 14.02.16 with load restriction of 100 MW for WBSETCL and 110 MW for BSPTCL on proportionate basis.

### D4.5. Shifting of 2 nos 63MVAR Line Reactors from Mendhasal to Pandiabili S/s

Two nos 63MVAR non-switchable Line Reactors have been installed for 400KV Baripada-Mendhasal D/C line (presently renamed as 400KV Baripada-Mendhasal#1 and 400KV Duburi-Mendhasal line) at Mendhasal S/s (OPTCL). POWERGRID is constructing a GIS Substation at Pandiabili nearby Mendhasal. The lines will have LILO at Pandabili S/S.

In 109<sup>th</sup> OCC, under item no.D4(1); it has been planned to shift the two nos 63MVAR Line Reactors mentioned above from Mendhasal S/S(OPTCL) to Pandiabili S/S and further, the Line Reactors shall be converted to switchable type. The works are to be taken up in phased manner. Powergrid has requested to accord approval of following shut downs for above works of Reactor shifting.

S.	Name of	Fror	n	То	)	Туре	Details of Works
No	elements	Date	Time	Date	Time		
1	400KV Duburi- Mendhasal	24.01.16	09:00	24.01.16	11:00	ODB	Construction works-Removal of jumpers for shifting of 63MVAR Line Reactor from Mendhasal to Pandiabii (under construction)
2	400KV Duburi- Mendhasal	25.01.16	09:00	25.01.16	18:00	ODB	Construction works- Dismantling of bushings, conservators for shifting of 63MVAR Line Reactor from Mendhasal to Pandiabii (Construction)
3	400KV Baripada- Mendhasal#1	02.02.16	09:00	16.02.16	18:00	OCB	Construction works-Pandiabili LILO line termination of from Baripada- Mendhasal both circuits Pandiabili(SD
4	400KV Duburi- Mendhasal	02.02.16	09:00	16.02.16	18:00	OCB	of both the circuits required simultaneously).

Members may discuss.

## **Deliberation in the meeting**

ERLDC informed that shifting of 63MVAR line Reactors from Mendhasal S/S(OPTCL) to Pandiabili S/S is advisable after the commissioning of Pandiabili S/s.

After deliberation, OCC allowed the shifting subject to the consent of OPTCL.

## D4.6. Construction work of GIS substation at Baripada S/s

Construction work of GIS substation, pacakge- SS01 for (i) Extension of 400/220 KV Baripada Substation (400 KV with GIS Bay & 220 KV with AIS bay) under ERSS-XII is in final stage of completion. It is scheduled to charge the GIS Bay on or before 31.03.2016. The GIS Bus duct (Main Bus-II) of about 900mtr long is passing by the side of existing 400KV switchyard and going under the main bay of 315 MVA ICT-I&II and also coming nearby 400KV Main Bus-I &II. Since, the safety clearance for crane movement for erection of the Bus duct under the Transformer bays and nearby 400 KV Main Bus-I &II, shutdown of the 315 ICT-I & II, 400 KV main Bus-I&II are required during erection. Further, High Voltage testing of the GIS Bus duct to be done before connecting with existing 400KV main Bus-I &II, during that time also for safety of crane movement and induction in nearby bays and make connection of the GIS Bus-I & II with existing 400KV Main Bus-Iⅈ shutdown of 400KV Main Bus-I & II, 315 MVA ICT-I &II are required time to time. Hence, Powergrid has requested to accord approval of following shut downs under head above GIS construction works at Baripada S/s.

S.	Name of	Fro	n	То		Туре	Details of Works
No.	elements	Date	Time	Date	Time		
1	315 MVA ICT-2 at Baripada	26.02.16	09:00	27.02.16	18:00	ODB	Construction work- Erection of GIB Main Bus-II
2	400 KV MAIN BUS-I at Baripada	28.02.16	09:00	01.03.16	18:00	ODB	Construction work- Erection of GIB Main Bus-II
3	315 MVA ICT-1 at Baripada	03.03.16	09:00	04.03.16	18:00	ODB	Construction work- Erection of GIB Main Bus-II
4	400KV MAIN BUS- II at Baripada	09.03.16	09:00	10.03.16	18:00	ODB	Construction work- Erection of GIB & Bushing of GIS Main Bus-II
5	315 MVA ICT-2 at Baripada	17.03.16	09:00	18.03.16	18:00	ODB	Construction work- HV Test of GIS Main Bus-I
6	400KV MAIN BUS- II at Baripada	19.03.16	09:00	20.03.16	18:00	ODB	Construction work- HV Test of GIS Main Bus-II

Members may discuss.

## **Deliberation in the meeting**

After deliberation, OCC allowed the above shutdown subject to the consent of OPTCL.

#### D4.7. Inclusion of additional OPGW of 137KM for 3/4 nos line sections-- DVC

DVC vide mail dated 18.01.2016 intimated that PGCIL has recently ordered 901KM of OPGW installation work for DVC network, out of which 137KM of OPGW is required to be included as additional for 3/4 nos line sections. It is learnt that such lines were initially included in the list forwarded to M/s PGCIL in 2012, but somehow M/s PGCIL has missed to include. The matter has already been taken up with M/s PGCIL by CE(Communication), DVC and M/s PGCIL has opined that they may include those lines provided the same is vetted by ERPC forum.

Details of lines, length etc can be provided in the meeting itself.

Members may discuss.

## **Deliberation in the meeting**

OCC agreed for the list of line as given by DVC for inclusion of additional OPGW of 137 km. The details of lines etc are given at **Annexure-D.4.7**.

Further, OCC referred the issue to 32<sup>nd</sup> TCC & ERPC for their concurrence.

## D4.8. Shut down of 160 MVA Auto-transformer at DPL --DPL

DPL requested that an emergency shutdown for their Auto-transformer at DPL may be granted at the earliest.

Members may discuss.

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

WBSETCL informed that at present the 100 MVA Auto-transformer at Durgapur is under shut down till 31<sup>st</sup> January, 2016. After that it will be allowed.

OCC advised WBSETCL to look into the matter and resolve at the earliest.

\*\*\*\*\*\*

Innexuse - A

## Participants in 117<sup>th</sup> OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 22.01.2016 (Friday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
1	Ak baudy fondly	Ms/ERPe	9433068533	mserpe-power@nic.iu	Dendyim
2	U.K. Verma	CHE (ERLIC	08902496220	4 jwalteeur : Verve &	Manas
3	P. P. BANDYOPADHY	DBM (GM), ERUDE	7044083323	Porth lang @ yetre co.	पाःबन्जी
4	P.S. Das	AsstqM(so), ERIN	9433041837	psdas-psd Oyahro cos	Menth &
5	G. Chakrabonly	DGM (MO) ERLDO	9433041815	C. goutam 62@gmail. low	artur
6	SBANERJEE	DGM, ERIDE	9433041823	surprito Egonaik um	Kg.
7	K · Rajendra	CM (POWEREY)	9434740014 9903247102	Krajendra @ Powergridin	iclia. Jon 4
8	B. Pan	CE/SLOC/OVE	9903247102	brahmananda.pou O dvc.govin.	Bronger 22/1
9	S.K.Sharna	AGM/05) ER-FHO,NTBCH	9471008359	sksharme 06@ntpe. 00,4	- 88
10	R-K-MANDAL	AGM (DEMY)	9431600132	organdal anspe.co	.m. f.
11	S. p. Reth	MAR.LO TEESTA-VPS NHPS LM.	8170005662	Retti 1975 Ognail.	Fred
12	Tenzin Dorji	DrucGreen, Bhutan	7044124205	Edorji 226@gmail.com	poza!
13	S. Chow only	Anong UL	07937294226	Suripti chow dany	Shower
14	R. Biswals	SH/APL		Vargan bistas (Ognai).	phi V
15	Somir Pandals	Head-offer) MPL	9031000323	Spondab Cotatopraci.	Fordel
16	Manj Ky. Thakur	Dg. Manages(ERIDC)	9432357832	mktclect@guil.com	האונק
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"Coming together is a beginning, staying together is progress, and working together is success." -Henry Ford

## Participants in 117<sup>th</sup> OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 22.01.2016 (Friday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
21	Sanchard Deb	AM (PS)/ WBPDCL	9231898200	Sanchare de la gracilian	S-Deb_
22	SUDDEPTA GUESH	HOP DCL	9474363864	9-sudiptar Oredit	S- Those
23	Abhishek Cuma	sterlite hand.	Γ	abhishek. Euronaxa	Almon .
24	Sudeep Kumar	PG7CIL, Patra	9431820338	Sudeep - Kumar 1234@gmail-	Succep.
25	PARTHA CIHOSH.	Sr. Err. RUCH	9434748263	partha-ghvon epowersmiling	Polon
26	S.K. Naile	Chingr, PG, BBSR	9437962169	onmodes gmael. cum	80.
27	T.R. Mohapatra.	Dy My ERIDE	9433041873	tushen m hepatral gmanl.com	Tul
28	B.C. Mallick	CE (MPC), CEA	9821166055	6 CENPCCEA BANAIL	Bullik
29	D K Bauri	EE, EPPC	2883617236	eeop. erpc@gov.m	Drif
30	V. Noy	ACE NOVETO	743470543	vabra-60 @ yahoo	Re
31	G.K. Thakusta	DGM(EE) BRBCL	9470001117	gktakurter entperco	Grit
32	D.K. Singh	ESE (SLDS) BSPTCL	7763817716	side. bseb@gmail.com	4 sup
33	SUDIP SINGHA	JUSNL, JEE, CRITL	9386729386	Sudipsingla 833 grail. Con_	Julip bigt
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35	Z Raichardton	CESLDC	9434910030	raicharshin 2017 Stanid ba	0.01
36	A. Ghosh	CE (CPD) WBSETCL	9434910019	epd@wbsetel.w arundhati,ghosh@wbsetel.w	Asher
37	Processer to	DGTM ( \$ 79) KIPS/WBROOM	833690396	pgrupta @ uppal, co.ii	" R
38	PRASHANT KUMAR DAS	-	9438307408	prashantk das Qyahootoin	De
39	Madhu Sudan Saha	1011 101 7 10	9692427876	gridco.ebc. @ gmail.com	M.S.Sahar
40	H. P. Mahapatra	Ngy(E)) OHPC Bubmenway	9861164943	hpm other Ogmeil. um	the

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## Participants in 117<sup>th</sup> OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 22.01.2016 (Friday)

CI	Namo	Designation /	Contact	Emoil	Cignoturo
Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
41	R CHAKKANDEN	O S M C ESL	98310-54	Vohel : chikravarty & Vp-5g-von	RULT
42	Jetendra Pr. Mellik.	AM/GMR	9777456727	jeterdra. Malik@ gnogroup, in	Matte
43	N. Mandal	SrGM / Gati	8016082299	gatinfra com	22116
44	Nivaj Sinha	AGM/Steslil Gnd	e 7091091152	niraj. sinha @ sterlite.com	WK 87 m/2
45	Anircedha Setty	D.M/GRIDCU	9438506357	ele asethi Ognido co. is).	Detry
46	P.K. Shnivastava	Manager APNRL	3771415731	bradeupshrivastava @ adhunikegsoup.co.in	Keuralein
47	Sachin Gidk	Dy. Mgr APNRL	858508430	sachingide cathunit group	act 3
48	Asit Karmakar			azit-kamakan Carbsetdin	A
49	C. K. Haldar	Addi.ce WBSERL	9432209503	Ckhaldar @ Jahoo . co. in	A
50	T.K.De	C. E/WBSEDCL	9433870748	Kumasterpande Ogmail. (	en Shak
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53	P. K. Kundn	ACE/SLDE/WESETCH	9934910263	pkundre - 1961 @ yahro. co. en	1002
54	V. Elyaraman	SG, ERPC	8902495969	a lavenson of aredigher 1	Car
55	P. Bononi	SE MOJERL	9472140765	presbar Fr. C. Jma I. cn Sanjeev. Chanfooxor Egmail. com	lh.
56	R.K. Grove	DATH'S Eng	9898940955	negeneral ( mil.	Story
57	SKCHANDRAM	A Ch. mgr	9433041800	Sanjeev. Chantoexar @ gmail. com	Fist
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"Coming together is a beginning, staying together is progress, and working together is success." -Henry Ford

## Annexure-1

## Demand on ISTS(State/UT-wise)

	Upto	2020	Upto	2022
State	-	Expected maximum injection(MW) into ISTS	Expected maximum drawl (MW)from ISTS	Expected maximum injection(MW) into ISTS
	State	Expected maximum	Expected maximum injection(MW) into	Expected maximum Expected maximum Expected maximum

## Generation data available(State/UT)

S.NO	Name of Generating Station	Type: Hydro/Thermal/ Gas/Nuclear/Wi nd/Solar	(State/Central/P	Location, District	Unit Size	Total Installed Capacity (IC) MW	IC expected upto 2020 in MW	IC expected upto 2022 in MW	IC expected Beyond 2022 in MW

## Transmission Plan(State/UT-wise)

## Transmission Line

								Remarks (SERC
			No of circuits	Type of		Expected date of	Purpose and Scheme	approved, if
S.No	Transmission line	Voltage level	S/C, D/C,M/C	conductor	Length,ckm	commisssioning	under which covered	any)

Substation

					Remarks (SERC
Substation	Voltage level			-	approved, if
	Substation	Substation Voltage level			



### No. CEA/GO&D/OPM/TPR/2015/ Government of India Ministry of Power Central Electricity Authority OPM Division

Sewa Bhavan, R.K. Puram New Delhi - 110066 Dated: 28.10.2015

## Sub. : Under performance of Thermal Power Stations of Eastern Region-reg.

Reference is invited to the Monthly Generation Report (18 coloumn) for the month of September, 2015 published by CEA, which indicates the dismal performance of the Thermal Power Generating Stations of the country as a whole and Eastern Region in particular. The analysis of data and subsequent examination shows that the thermal power stations of Eastern Region are running on low PLF. The list of such Thermal Power Stations running under PLF less than the national average PLF of 60.90% may kindly be seen at Annexure. Looking into the Annexure it may be concluded that efforts could have been initiated for improvement of the operating parameters of these stations viz a viz PLF, Heat Rate, Secondary Fuel Oil consumption and Aux Power consumption as well as early rectification of the outages.

It is, therefore, suggested that a meeting may be called by ERPC at Kolkata of all the stake holders to discuss the reasons and possible remedies of the same. A convenient date and timing of such meeting may kindly be intimated to this division for attending the meeting. The agenda of the meeting would be as below:

The utilities may come out with a concrete proposal/action plan for the entire financial year for improvement of PLF, Heat Rate, secondary fuel oil and auxiliary power consumption of their Thermal Power Stations.

Encl. As above.

(Chandra Shekhar) Chief Engineer (OPM)

Member Secretary, Eastern Regional Power Committee (ERPC), Kolkata No.CEA/GO&D/OPM/Misc./2015/ dated 28.10.2015

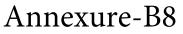
## Central Electricity Authority Operation Performance Monitoring Division List of Power Stations of Eastern Region operating below the National Average PLF of 60.90

List of Power S		Capacit		Utility	Date of	Fuel	Comm PLF
Station		y	Cluid	• time,	Stabilization		
PATRATU TPS	6	90	JHARKHAND	JSEB	17/12/1971	COAL	16.2
PATRATU TPS	10	110	JHARKHAND	JSEB	01/09/1986	COAL	56.62
MUZAFFARPUR TPS	1	110	BIHAR	NTPC Ltd.	01/03/1986	COAL	43.74
MUZAFFARPUR TPS	2	110	BIHAR	NTPC Ltd.	01/04/1987	COAL	36.81
TENUGHAT TPS	1	210	JHARKHAND	TVNL	01/04/1997	COAL	58.26
MAHADEV PRASAD STPP	1	270	JHARKHAND	ADHUNIK	01/02/2013	COAL	54.49
MAHADEV PRASAD STPP	2	270	JHARKHAND	ADHUNIK	01/06/2013	COAL	33.29
CHANDRAPURA(D VC) TPS	1	130	JHARKHAND	DVC	30/09/1964	COAL	56.94
DURGAPUR TPS	3	130	WEST BENGAL	DVC	31/05/1967	COAL	52.87
DURGAPUR TPS	4	210	WEST BENGAL	DVC	01/12/1982	COAL	17.94
Bokaro `B` TPS	1	210	JHARKHAND	DVC	01/05/1987	COAL	27.56
BOKARO `B` TPS	3	210	JHARKHAND	DVC	01/08/1994	COAL	17.61
MEJIA TPS	1	210	WEST BENGAL	DVC	01/04/1998	COAL	56.78
MEJIA TPS	2	210	WEST BENGAL	DVC	01/11/1999	COAL	45.42

MEJIA TPS	3	210	WEST BENGAL	DVC	01/06/2000	COAL	40.48
MEJIA TPS	4	210	WEST BENGAL	DVC	01/05/2005	COAL	3.87
MEJIA TPS	5	250	WEST BENGAL	DVC	01/10/2007	COAL	45.38
KODARMA TPP	1	500	JHARKHAND	DVC	01/08/2013	COAL	0
DURGAPUR STEEL TPS	2	500	WEST BENGAL	DVC	01/04/2013	COAL	32.52
STERLITE TPP	1	600	ORISSA	SEL	01/08/2011	COAL	25.1
STERLITE TPP	3	600	ORISSA	SEL	01/09/2011	COAL	30.61
STERLITE TPP	4	600	ORISSA	SEL	01/05/2012	COAL	34.72
KAMALANGA TPS	1	350	ORISSA	GMR ENERG	01/05/2013	COAL	59.42
DERANG TPP	1	600	ORISSA	JITPL	06/06/2014	COAL	59.48
DERANG TPP	2	600	ORISSA	JITPL	12/02/2015	COAL	45.97
BANDEL TPS	1	60	WEST BENGAL	WBPDC	30/11/1965	COAL	26.22
BANDEL TPS	2	60	WEST BENGAL	WBPDC	31/05/1966	COAL	37.31
BANDEL TPS	3	60	WEST BENGAL	WBPDC	30/11/1965	COAL	35.47
BANDEL TPS	4	60	WEST BENGAL	WBPDC	31/05/1967	COAL	39.26
BANDEL TPS	5	210	WEST BENGAL	WBPDC	01/04/1983	COAL	0.13

KOLAGHAT TPS	1	210	WEST BENGAL	WBPDC	01/03/1991	COAL	42.03
KOLAGHAT TPS	2	210	WEST BENGAL	WBPDC	01/10/1986	COAL	50.38
KOLAGHAT TPS	3	210	WEST BENGAL	WBPDC	01/04/1985	COAL	46.12
KOLAGHAT TPS	4	210	WEST BENGAL	WBPDC	01/10/1995	COAL	48.04
BAKRESWAR TPS	4	210	WEST BENGAL	WBPDC	01/07/2008	COAL	56.44
SAGARDIGHI TPS	1	300	WEST BENGAL	WBPDC	01/07/2008	COAL	56.99
SAGARDIGHI TPS	2	300	WEST BENGAL	WBPDC	01/02/2009	COAL	33.34
D.P.L. TPS	7	300	WEST BENGAL	DPL	01/06/2008	COAL	47.76
TITAGARH TPS	3	60	WEST BENGAL	CESC	01/08/1984	COAL	38.27
TITAGARH TPS	4	60	WEST BENGAL	CESC	01/08/1985	COAL	40.98
HALDIA TPP	2	300	WEST BENGAL	HEL	21/02/2015	COAL	46.73
FARAKKA STPS	4	500	WEST BENGAL	NTPC Ltd.	01/12/1996	COAL	56.69
FARAKKA STPS	6	500	WEST BENGAL	NTPC Ltd.	01/05/2012	COAL	58.17







# <u>132 KV Rangpo PGCIL BUS Re-arrangement Plan</u> <u>114<sup>th</sup> OCC meeting Agenda Item B.25</u>

In view of reduced NOC of Chuzachen HEP





- 1. Chuzachen HEP had entered the Eastern grid during 2013 in the 132 KV network of North Bengal Sikkim system prior to the commissioning of the 132KV/220KV/400KV Rangpo Pooling station with a Special protection Scheme designed to backdown Chuzachen generation in compliance to (n-1) contingency situation arising in the downstream network. Post commissioning of Rangpo pooling Station, No major system disturbance in North Bengal Sikkim system has occurred since September 2013 and the Sikkim North Bengal grid was assumed to have stabilized thereafter.
- 2. But, after advent of 2 X 48 MW Jorethang Loop Project in Eastern grid, NOC of Chuzachen HEP was reduced during the peak hours to 62 MW implemented **with effect from 30/09/2015**. This was done to avoid overloading of the 132Kv downstream network during the peak hours in (n-1) contingency of the 400 KV network of Rangpo substation.
- 3. However, load flow system study of ERLDC demonstrated that, with a minor rearrangement of the bays of the 132 KV bus at Rangpo keeping the BUS Sectionalizer in OPEN condition, can allow the operation of both Chuzachen & Jorethang HEP to operate in full capacity in both Peak and off peak scenarios.
- 4. Matter was raised in the 114<sup>th</sup> OCC meeting on 16/10/2015 to explore the issue and confirm the same in presence of ERPC / ERLDC / PGCIL for the needful.



## 114<sup>th</sup> OCC approved scheme for 132 KV Rangpo PGCIL bus rearrangement

RECONFIGURATION OF RANGPO SUBSTATION BUS ARRANGEMENT	PROPOSAL Details		
Reconfigure 132 KV RANGPO BUS arrangements such that power flow is optimized with both Jorethang and Chuzachen generation in full capacity: With the said arrangement, simulation system studies in all types of contingencies indicate that, load flows are optimum and within safe operable limits as enclosed :	<ul> <li>&amp; Chuzachen with both the Gangtok feeders are terminated in the other bus with bus coupler in closed condition in between.</li> <li>2. It is proposed to rearrange Rangit &amp; Melli feeder in one bus &amp; Chuzachen &amp; Gangtok feeder circuit</li> </ul>		
Present arrangment Binaguri Teesta-V N. Melli	Desirable arrangment Binaguri Teesta-V N. Melli Jorthang HEP		



ERLDC informed that the proposal of bus split operation of 132 kV Rangpo bus is actually a CTU proposal which was forwarded by CTU for study and review.

**PRESENT ARRANGEMENT :** ERLDC explained that at present one 132 kV ckt of Chuzachen is directly connected to Melli without terminating to 132 kV Rangpo. The all other 132 kV feeders i.e. one ckt from Rangit, one ckt from Chuzachen and two ckts from Gangtok are terminating at 132 kV feeders.

**DESIREABLE ARRANGEMENT :** Now for bus split operation, the 132 kV Melli ckt will be terminated at Rangpo and will be with 132 kV Rangit feeder in one section of 132 kV Rangpo bus. The 132 kV Chuzachen feeder will be directly connected to one ckt of 132 kV Gangtok feeder. And the second ckt of 132 kV Gangtok along with other ckt of 132 kV Chuzachen will be on another section of 132 kV Rangpo bus. Bus sectionalizer will be kept in open condition for split bus operation.

**DECISION**: Further, ERLDC informed that as per the study results the bus split operation of 132 kV Rangpo will allow the full evacuation of Chuzachen and Jorthang units without any cap for both peak and off-peak scenarios. After detailed deliberation, OCC agreed to the proposal of bus split operation of 132 kV Rangpo and advised ERLDC to communicate the results to CTU for implementation of the scheme at the earliest.



To expedite the process, the said issue was raised once again in the 31<sup>st</sup> TCC Meeting at Bhubaneswar on 13/11/2015 by Sikkim Power Department.

PGCIL assured that, the matter is being looked into and road map for the same will be placed in 115<sup>th</sup> OCC meeting.

Decision taken in 115<sup>th</sup> OCC Meeting of Eastern Grid Item No. B.24 – 20/11/2015

## **Deliberation in the meeting**

Powergrid informed that for implementation of the above scheme site visits from its corporate engineering division is required.

OCC requested Powergrid to expedite it so that the eastern grid could avoid loss of crucial hydro generation from Chuzachen and Jorthang HEP by early implementation of bus split operation as accepted by OCC.



In 31<sup>st</sup> TCC PGCIL informed that the proposal of Bus-Split scheme at 132KV Rangpo S/S as approved in 114th OCC meting are being studied by its engineering wing and roadmap for implementation of the scheme will be placed in 115 th OCC meeting scheduled to be held on 20.11.15.

In 115<sup>th</sup> OCC, Powergrid informed that for implementation of the above scheme site visits from its corporate engineering division is required.

OCC requested Powergrid to expedite it so that the eastern grid could avoid loss of crucial hydro generation from Chuzachen and Jorthang HEP by early implementation of bus split operation as accepted by OCC.

To expedite the process further, matter was again enquired with PGCIL for a firm date of activity during the 116<sup>th</sup> OCC Meeting on 23/12/2015.

PGCIL assured that, the proposal has been technically accepted by their HO after its clearance from ER – II and site level. However, the final consent for the start of activity is still held up due to some commercial aspects that is being looked into by their HO. Post consent, the bus rearrangement plan will be taken up immediately.





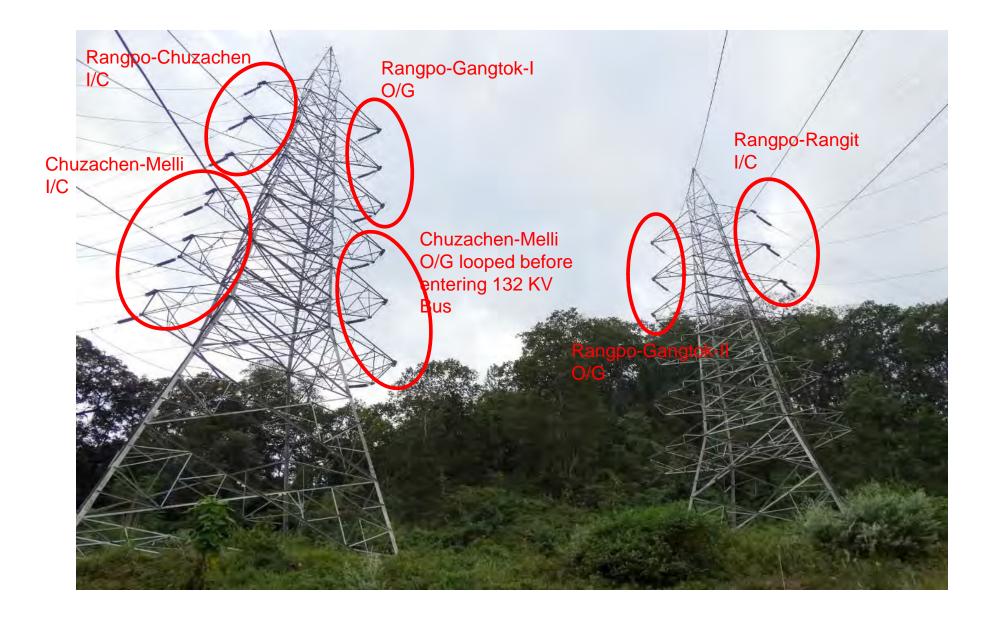
# 132 KV Rangpo PGCIL BUS Re-arrangement Plan

## 114<sup>th</sup> OCC meeting Agenda Item B.25

# PROPOSAL FEASIBILITY STUDY

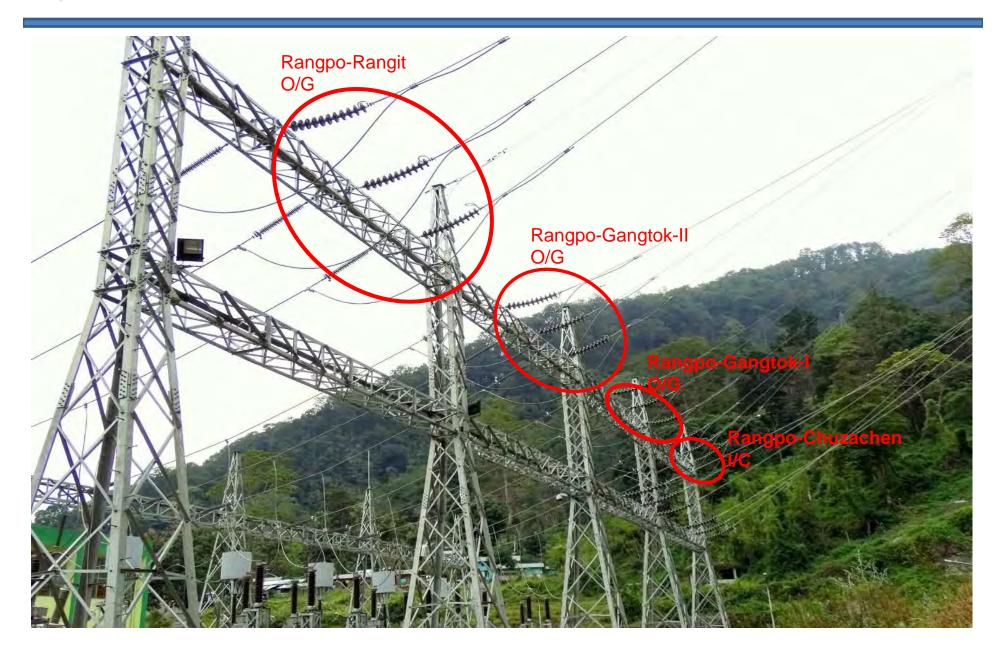


## **132 KV First Multi Circuit Tower** Feeders Identification diagram

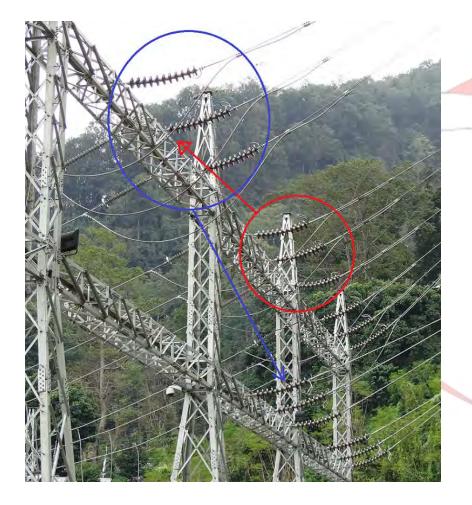




## **132 KV Gantry Tower Feeders** Identification diagram

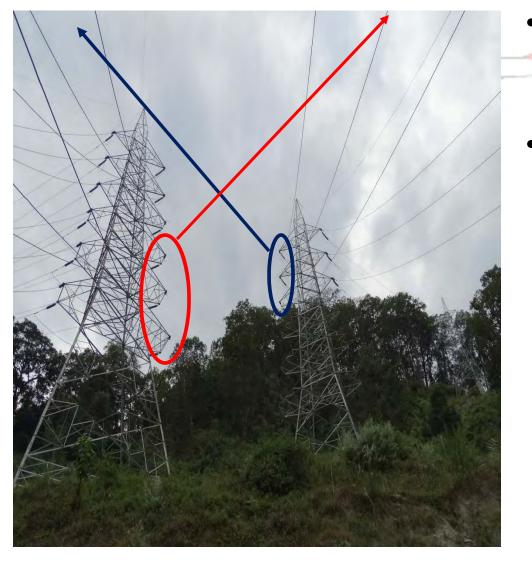






- GTK-I feeder (existing red colour bay) is modified to get directly connected with Chuzachen before entry to gantry by jumpering in the Multi circuit tower itself from left hand side to right hand side.
- Gtk –II feeder( initially blue colour bay and 2<sup>nd</sup> from left) is shifted to the red colour bay but in bottom part of gantry to maintain conductor clearance.
- Subsequently, Melli feeder which is directly looped with Chuzachen before gantry in first Multi Circuit tower as per existing scheme becomes free since GTK – I has replaced it, is shifted to the 2<sup>nd</sup> from left position in the blue colour bay beside Rangit feeder.
- For the above activities, new/Additional conductor of minor length may be required & additional suspension disc will be needed for providing jumper between gantry inside and outside part.

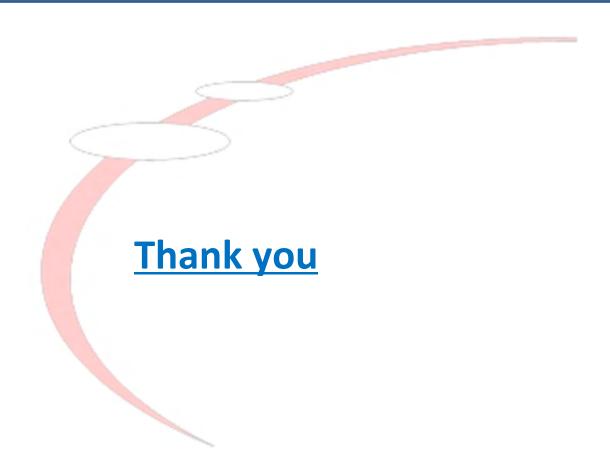




- Red circle which will form Melli-Rangpo feeder shall be shifted in place of GTK-II gantry point.
- Blue circle, which will form GTK-Rangpo feeder shall be shifted in place of lower gantry part of GTK I-Rangpo feeder.







#### MONITORING OF PROGRESS OF 400 kV D/C STERLITE - JHARSUGUDA T/ L.

	PORTION	I	400 kV D/C STERLITE - JHARSUGUDA T/ L.
Sl. No.	Activities	Status	Remarks
1	Release of Tower spotting data & Sag Template Curve	<ol> <li>Date of release of Tower spotting data: (please enclose copy)</li> <li>Date of release of Sag Template: (please enclose copy)</li> </ol>	1.Tower Spotting data released on dtd.05/07/2015 ,Submitted to PGCIL vide letter no.PGCIL/LILO/001 dtd.28/07/2015(COMPLETED) 2.Sag Template released on dtd.05/07/2015(COMPLETED)
2	Release of Drg. & BOM for Stub ( All type of Tower)	1. Date of release of Drawing For Stub: (please mention type & quantity of stub) 2. Date of release of BOM for Stub: please mention type & quantity of stub)	1.Structural Drawing released on 01/08/2015, DA+0 =15Nos, DA+3=05Nos,DA+6 =06Nos, DC+0=08Nos, DC+6 = 03Nos,DC+9=03Nos, DD+0=14Nos,DD+3=05Nos,DD+9=02Nos,DD+18=01Nos, DD+25=01Nos,DD+30=07Nos ( 2.BOM released on 01/08/2015, DA+0 =15Nos, DA+3=05Nos,DD+6 =06Nos, DC+0=08Nos, DC+6 = 03Nos,DC+9=03Nos, DD+0=14Nos,DD+3=03Nos,DD+9=02Nos,DD+18=01Nos, DD+25=01Nos,DD+30=07Nos (COMPLETED EXCEPT DA & DC TYPE TOWER)
3	Release of Structural Drg. & BOM, Shop floor Drg. For all type of Tower	1. Date of release of Structural/shop floor Drawing : (Please mention type & qty of tower) 2. Date of release of BOM for Tower: ( please mention type & quantity of Tower with type of extension)	1.(i)DD TYPE TOWER RELEASED ON 01/08/2015 (COMPLETED),(ii)DA & DC TYPE TOWER DESIGN HAS BEEN APPLIED TO PGCIL,PGCIL QUOTED THE OFFER,PAYMENT & UNDERTAKING HAS BEEN MADE.RECEIVING DESIGN BY 28/12/2015. 2.(i)DD TYPE TOWER RELEASED ON 01/08/2015,(ii)DA & DC type tower released on 11/01/2016 .QTY AS ABOVE.
4	Release of Drg. for Tower Accessories	1.Date of release of Drawing for Tower Accessories: ( please mention details of accessories & quantities)	All the drawings received on 07/10/2015,Approved drawing released on 15/10/2015.
5	Proto Fabrication and Assembly	Please Give details of proto fabrication and assembly according to the Tower type.	For DD type tower proto has been made.DA & DC type tower design expecting by 20/01/2016.
6	Release of apprvd. Proto corrected Drg.		For DD type tower Expected date of approved drawing 22/10/2015. DA & DC TYPE tower design proto corrected drawing by 17/01/2016.
7	Release of apprvd. Stringing Chart	Date of release of approved Stringing chart: ( if partly approved then please mention section of the line along with location no.)	Released of stringing chart 2/11/2015.From location no.AP-1/0 to 32/0 Stringing Chart is approved on 04/11/2015.Length20.345KM.
8	Manufacturing of Stub and receipt at site	Please mention total required quantity according to the Tower type and status of receipt till date at site of the same. Also mention the schedule of balance quantity.	Total DA =22Nos, DC=14Nos, DD=28Nos Received till date :Complete Set.
9	Manufacturing of Tower and receipt at site	Please mention total required quantity according to the type and status of receipt till date at site of the same. Also mention the schedule of supply for balance quantity.	DA+0 =15Nos, DA+3=05Nos,DA+6 =06Nos Recieved DC+0=08Nos, DC+6 = 03Nos,DC+9=03Nos, DD+0=14Nos,DD+3=03Nos,DD+9=02Nos,DD+18=01No DD+25=01Nos,DD+30=07Nos
10	Approval and Supply of Line Materials- Conductor/Earth wire/Hardware/Earthing Materials/ Bird Guard / Aviation Light	<ol> <li>Please mention total requirement of Line Materials(Conductor/ Earth wire/Hardware/ Earthing Materials/ Bird Guard / Aviation Light):</li> <li>Receipt at site of the above:</li> <li>Schedule of supply of balance quantity.</li> </ol>	1.Qty. finalised on dtd. 12/10/2015.(COMPLETED)

Note : 01. If related work has not been started yet, planning for starting & completion need to be provided.

02. As per detailed survey total quantity required for all supply items has already been finalised. Kindly provide Purchase order placement status including quantity for which PO placed & planning for placement of PO for balance quantity of supply.

#### ERECTION PORTION

ERECTI	ON PORTION		
Sl. No.	Activities Route Alignment	Status A. Please mention Date of finalization of route alignment ( along with name of important village/mouza/area etc.) B. Length of finalized route : C. Status of Notification for construction of line	Remarks         AFinalization of route alignment,28/07/2015 (COMPLETED)1.KENAPALI 2.         MAHULPALI 3.RANGIAMUNDA 4.KURGA 5.KEPSE 6.HUNDARMAL         7.KIRIPSIRA       8.PORHADIHI 9.SURDA 10.KHARMARBAHAL         11.JAMUNADHIPA 12.TELINGAPALI 13.MAHIPANI       14.NUAPARAH         15.PORHABAHAL 16.DHATAKDIPHA 17.PARDIADIHI 18.KUNDUKELA         19.DEULI 20.KAINTARA         B.Length of finalized route :20.345Km       C.Section         68 is in hand
2	Detailed Survey	1. Date of completion of detailed survey: ( if not completed please Mention the completed) length	Completion date of Survey,28/07/2015 (COMPLETED) .On village map plotting is completed on 20/09/2015.Length:20.345KM
3	Forest Survey	<ol> <li>Date of completion of survey:         <ol> <li>(if not completed please intimate the status)</li> <li>Total forest area involved( in Hectares)with bifurcation according to type of forest land</li> </ol> </li> </ol>	1.Earlier proposal Dt.20/02/2015 2.Forest area involved 11.03Ha.NOTE:Due to severe ROW apprehension & avoiding of extra 05nos low gantry crossing, original route was revised.The matter has been discussed with PGCIL,Sundergarh.As per the advice of PGCIL,Sundergarh line rerouting has been done . DGPS survey completed.DGPS survey maps submitted to ORSAC,Bhubaneswar (through DFO,Sundergarh)for certification.ORSAC CERTIFICATION is awaited. 2.Village forest : 5.975Hectares
4	Inputs for Forest Proposal	1. Date of submission of application.       2.         Please mention present status.       3. Anticipated date of clearance.         4. Proposal/ status of Compesatory Aforestation.(please Give details)	<ol> <li>Application will be submitted on dt.28/12/2015.</li> <li>DGPS survey completed.</li> <li>Expected by 15/03/2016</li> <li>Land identified for Compensatory afforestration. NOTE:Due to severe ROW apprehension &amp; avoiding of extra 05nos low gantry crossing, original route was revised.The matter has been discussed with PGCIL,Sundergarh.As per the advice of PGCIL,Sundergarh line rerouting has been done. Revised Forest Proposal will be submitted on 15/12/2015.</li> </ol>
5	Status of Detailed Survey Report	1. Please mention status of detailed survey( if survey done by other agency then mention the date of submission of detailed survey report)	Check survey has been carried out by M/s.SR Associates Infrastructure Pvt.Ltd & Survey report was approved on 01/08/2015.
6	Profiling	1.Please metion date of completion of preparation and approval of profiling.	1.Date of completion of profiling approval :01/08/2015
7	Tower spotting	1. Please mention date of completion.	Dt.07/08/2015
8	Approval of Detailed Survey	1. Please mention date of approval of detailed survey.	1.Earlier detail Survey was approved on dtd :08/12/2012.Due to revised route or account of severe ROW, rerouting has been done. Revised route survey approved on 01/08/2015.
9	Check Survey	1. Please mention date of completion of Check survey.	1.Date of completion of check survey :28/07/2015
10	Submission/Approval of Check Survey	1. Please mention date of submission/ approval of Check survey.	1.Date of completion of profiling approval :01/08/2015(COMPLETED)
11	Detailed Soil Investigation	1. Please mention present status along with no of loction done.	As on 11/09/2015,Soil investigation report done for 55Nos out of 66Nos. Balance will be completed by 29/11/2015
Sl. No.	Activities	Status	Remarks
12	Execution - Foundation	1. Please give location wise status and planning	35Nos of foundation completed & planning to complete another 09nos. by 31st Jan.2016. FOLLOWING LOCATION FOUNDATION COMPLETED 27/3 on dtd.24/05/2015, 27/0 on dtd.02/015/2015, and td.01/06/2015, 27/2 on dtd.12/06/2015, 27/0 on dtd.04/08/2015, 26/0 on dtd.17/06/2015, 22/1 on dtd.25/07/2015,20/0 on dtd.04/08/2015, 19/1 on dtd.11/08/2015, 15/0 on dtd.13/08/2015, 31/4 on dtd.03/09/2015, 31/3 on dtd.10/09/2015, 29/0 on dtd.01/09/2015, 31/4 on dtd.03/09/2015, 31/3 on dtd.10/09/2015, 29/0 on dtd.08/10/2015,13/1 on dtd.03/09/2015, 28/0 on dtd.26/10/2015, 18/0 on dtd.31/10/2015, 31/1 on dtd.09/12/2015, 19/0 on dtd.05/11/2015, 21/1 on dtd.18/12/2015,21/3 on dtd.09/12/2015,21/4 on dtd.05/11/2015, 21/1 on dtd.15/12/2015, 22/0 on dtd.16/12/2015, 22/2 on dtd.19/12/2015, 13/0 on dtd. 26/12/2015, 30/0 on dtd.29/12/2015, 31/0 on dtd.04/01/2016, 32/0 on dtd. 06/01/2016, 33/0 on dtd.12/01/2016
13	Execution- Tower Erection	1. Please give location wise status and planning	Erection start dt.11/01/2016 completion date25/03/2016.

14	Execution- Stringing	1. Please give strech wise status and planning	Stringing start dt.11/01/2016,Completion Dt.09/04/2016 27/1 Erection start dt.11/01/2016 & 27/2 Erection start date 11/01/2016.
15	Clearance for Power Line Crossing	<ol> <li>Please mention no of Power line crossings invloved in the finalised route with voltage level and name of line and ownership of line.</li> <li>Please mention status of submission and approvalof these Power line crossing proposals.</li> </ol>	1.(i)Line is crossing under 765KV Sundergarh -Dharmajaygarh Circuit-1 & 2 & proposed 765KV Sundergarh-Dharmajaygarh Circuit-3 & 4 line in low gantry system at Village Rangiamunda-Tangarapalli,Sundergarh (ii) Overhead crossing of 400KV Raigrh-Sundergarh Line at village Kirpisara-Tangarapalli-Sundergarh 2.Application for power line crossing & profile submitted vide letter no.VL/LILO/PGCIL/003 dtd.04th Sept.2015 at PGCIL,Sundergarh revised drawing. & documents submitted vide letter no.VL/LILO/PGCIL/009 dtd. 07th Nov.2015.Incorporated datas revised submitted vide letter no.VL/LILO/PGCIL/011 dtd19/12/2015
16	Clearance for Railway Crossing	<ol> <li>Please mention no of Railway crossings and name of route invloved in the final route.</li> <li>Please mention submission and status of approval.</li> </ol>	No Railway crossing is there.
17	Statutary Clearance for PTCC( Rail & DOT), including aviation clerance from Defence & Civil aviation .	<ol> <li>Please mention date of submission of application.</li> <li>Present status of PTCC proposal.</li> </ol>	For PTCC Clearance application submitted on 23/11/2015.
18	Clearance & Handing over of Forest Land	1.Please mention Present status. 2. Anticipated Date of Clearance & Handing over of Forest Land	1.Due to revised route, it is to submit FDP ,DGPS survey of forest land is completed on 04/01/2016 . Expecting to upload the FDP in the MOEF website-15/01/2016.
19	Clearance from CEA		Section -68 approval No.11/02/2010 dated,31st January,2014.
20	Clearance from ERLDC		After charging of line ERLDC clearance is required.
21	Readiness of Line Bays ( Both end)		IPP end bay is in charged condition.Construction of at PGCIL is under progress ,expected completion of date 31st January,2016.
22	Notification for Charging		After completion of line works & line inspection ,notification for charging will be made.
23	Final checking of Tower and corridor		After completion of line works final checking of Tower & Corridor will be carried out.
24	Testing & Commissioning	1. Please indicate Schedule/Target date of Testing & Commissioning	Target date of testing & commissioning is dt.15/04/2016

## Procedure for periodic exercise of blackstarting Teesta-V

## Mock exercise for black start of Teesta-V units

In order to facilitate the mock black start exercise of Teesta-V Power house following switching operationsare suggested at 400 kV Rangpo, 400kV Binaguri (POWERGRID), 220kV Binaguri and 132kV N. Jalpaiguri (WBSETCL).

The exercise will be undertaken during the period when the schedule of Teesta-V generation will be nil. During this exercise, about 150 MW load in N. Bengal comprising NJP, Siliguri, Moinaguri, Chalsa, and if required, Coochbehar is planned to be fed from the unit earmarked for black-starting at Teesta-V, in islanded mode. Thus, supply to the aforesaid sub-stations in W. Bengal would be disrupted for short durations during disconnection and reconnection to the main grid.

In order to carry out the exercise, an island would be created by splitting the 400kV bus at Rangpo, 400kV and 220kV buses at Binaguri(PG), and also switching off some of the 132kV lines from NJP 220kV (WBSETCL) S/Stnso that only the local load of NJP(WB), Siliguri(2<sup>nd</sup> Mile), Chalsa and Moinaguri get included within the island. Mock exercise would be carried out by supplying the island from the black-started unit of Teesta-V and then the island system would be synchronised back to the main grid. This exercise can be divided in three stages.

## Stage-1

## A. At Binaguri 400kV Bus

Distribute the feeders and ICTs on Bus-I & II as tabulated below.

SI. No.	400 kV BUS-I	400 kV BUS-II
1	315 MVA 400/220kV ICT-1	315 MVA 400/220kV ICT-2
2	400kV Rangpo-I and Rangpo-II (both in off condition)	400 kV Purnea-I to IV
3		400 kV Tala I to IV
4		400 kV Bongaigaon I to IV
5		125 MVAR Reactors I & II

**B.** At Binaguri 220kV – the various incoming / outgoing feeders to be distributed as

follows:

SI.	220 kV BUS-I	220 kV BUS-II
No.		
1	315 MVA 400/220kV ICT-1	315 MVA 400/220kV ICT-2
2	220kV NJP(W)-I (bus-to-bus	220kV Birpara I & II
	connection)	
3		220kV Siliguri(PG) I & II
4		220kV NJP(W)-II

C. At Rangpo 400kV – the various incoming / outgoing feeders to be distributed as

follows:

SI.	400kV kV BUS-I	400kV kV BUS-II
No.		
1	Rangpo-Teesta-I	Rangpo-Teesta-II
2	Rangpo-Binaguri-I	Rangpo-Binaguri-II
3	80MVAR Bus reactor-I	5X315MVA, 400/220kV ICTs
4		80 MVAR Bus reactor-II

This arrangement is suggested so that Gangtok and Jorethang HEP can still remain synchronized with the grid at Rangpo, while the black-start exercise of Teesta-V unit is being carried out.

During the exercise, since NER and Bhutan would remain synchronised at 400kV Binaguri Bus-2 only, HVDC Agra-B.Chariyali flow may be maintained at around 500MW towards NER (B. Chariyali), to minimise the impact of any contingency.

At Teesta-V, all necessary preparatory actions to be taken to keep the unit(s) scheduled for the self-start exercise, ready.

## Stage-2 – The Mock exercise

## A. Switching at different substations:

- At NJP(W), WBSETCL to ensure that both the 160MVA, 220/132kV ICTs are in service and connected to Bus-II. The 220kV bus coupler CB is to be opened to isolate the two buses. 220kV Bus-I to remain connected to 220kV Binaguri (PG) Bus-I. For this purpose, no separate code will be given by ERLDC.
  - At NJP(W) 132kV : TCF-I feeder to be switched off
  - 132kV tie lineto Siliguri(PG) and 132kV NJP(WB)-NBU S/C will be kept open from NJP(WB)
  - 132kV Siliguri(WB)-NBU to be also switched off so that NBU remains connected only to Siliguri(PG), Rammam, Lebong and TCF-I
  - All other remaining 132kV feeders from NJP(WB) i.e. Siliguri (WB) I & II, Moynaguri-I & II (Chalsa) along with 33kV local load of NJP (WB) to remain on 220kV Bus-II
  - 66kV Kalimpong-Chalsa line may be opened by WBSETCL, with consent of Sikkim, so that Kalimpong load is supplied from Melli only, during the exercise.
  - Further, Jaldhaka units, if already generating, are to be desynchronized as they may be re-synchronized only after completion of the exercise when Chalsa S/Stn finally gets supply at main grid frequency.

SLDC, WBSETCL to inform ERLDC after completing the above switching operations.

 On receiving clearance from ERLDC, Rangpo to open the CBs and isolators of 400kV Teesta-I, Teesta-II, Shunt Reactor-I and Binaguri-I;bus-coupler CB between 400kV Bus-1 and Bus-2 and shift Binaguri-II, Shunt Reactor-II and all the 400/220kV ICTs on 400kV Bus-II

- On receiving clearance from ERLDC, Binaguri to open
  - both main and tie CBs of 400/220kV ICT-I, Rangpo-I,
  - main CB of Rangpo-II and
  - main CBs of 400/220kV ICT-II, Purnea-I, Purnea-II, Purnea-III, Purnea-IV and Tala-IV

at Binaguri 400kV switchyard.

Accordingly, at Rangpo end the 400kV Bus-2 isolator and at Binaguri end the tie CB and 400kV Bus-2 CB of Rangpo-Binaguri-II line should remain closed to ensure that Jorethang-Rangit-Chujachen system remains synchronized with main grid through 400kV Rangpo-Binaguri-II.

- At Binaguri 220kV switchyard, after ensuring that 400/200kV ICT –I is connected to bus-I and all other feeders on bus-II, as already stated, the 220kV bus-coupler CB to be opened. Hence, 400/220kV ICT-I and Binaguri 220kV bus-I will now remain connected only to the 220kV Bus-I of NJP(WB) S/S.
- Thus Rangpo 400kV Bus-I, Binaguri 400kV Bus-I, 400/200kV ICT-I, Binaguri 220kV Bus-I and NJP(WB) 220kV bus-I will form a separate sub-system that remains dead / uncharged. Binaguri(PG) to confirm ERLDC when this status is achieved.
- ERLDC will now advise Teesta-V to self-start one of its units. It may be ensured by Teesta-V that auxiliary supply is taken from local DG set (as would be done during a real blackout). The 400kV bus voltage at Teesta-V may be maintained between 370-380 KV by controlling the excitation. A second unit may also be self-started at Teesta-V. The units would be on free governor mode of operation and their AVRs may be kept in AUTO mode.
- Rangpo to keep the Bus-I isolator of TeestaV-1 line and Binaguri-I line closed. Binaguri to keep Bus-I isolator of Rangpo-I line closed.
- On receipt of clearance from Rangpothe dead 400 kV Bus-1 at Rangpois to be charged, from Teesta-V using 400kV Teesta-V-Rangpo-I.
- On receipt of clearance from Binaguri, the dead 400 kV Bus-1 at Binaguri is to be charged from Rangpo using 400kV Rangpo-Binaguri-I line.
- Thereafter Binaguri(PG) is to close the 400kV side main CB and the 220kV side CB of ICT-I. This will charge the 220kV Main Bus-I at Binaguri(PG)
- In case of difficulty in extending power from Teesta-V uptoBinaguri 400kV Bus-I due to high voltage problem, the 80MVAR shunt reactor-1 at Rangpo may be taken into service on Bus-I prior to idle-charging 400kV Rangpo-Binaguri-I from Rangpo
- In consultation with NJP(WB), Binaguri(PG) to close the CB connecting 220kV Bus-I extension to 220kV NJP(WB) Bus-I, thus making Teesta-V power available upto 220kV Main Bus-I of NJP(WB).
- 400kV and 220kV voltages at Binaguri to be controlled within permissible limits through excitation control of Teesta-V unit(s).
- Once the NJP(WB) 220kV Bus-I is found to be within limit and ready for loading, the 132kV feeders and loads connected to Bus-II will be switched off from NJP(WB) i.e.
  - Siliguri I & II
  - Moynaguri I & II (Chalsa)
  - 33kV local load of NJP

- Following the above switching operations, NJP(WB) will give clearance to Binaguri and the CB connecting 220kV Binaguri (PG) bus-II extension to 220 NJP(WB) bus-II is to be switched off at Binaguri S/S, thus isolating the NJP(WB) 220kV Bus-II from Binaguri 220kV Bus-II.
- The 220kV Bus coupler at NP(WB) to be now closed to extend Teesta-V power from Bus-I to Bus-II. ERLDC should be informed after completion of these operations.
- ERLDC will now advise Teesta-V to be ready for taking up load. ERLDC will also give necessary clearance to NJP(WB) (through Binaguri) for re-connecting loads.

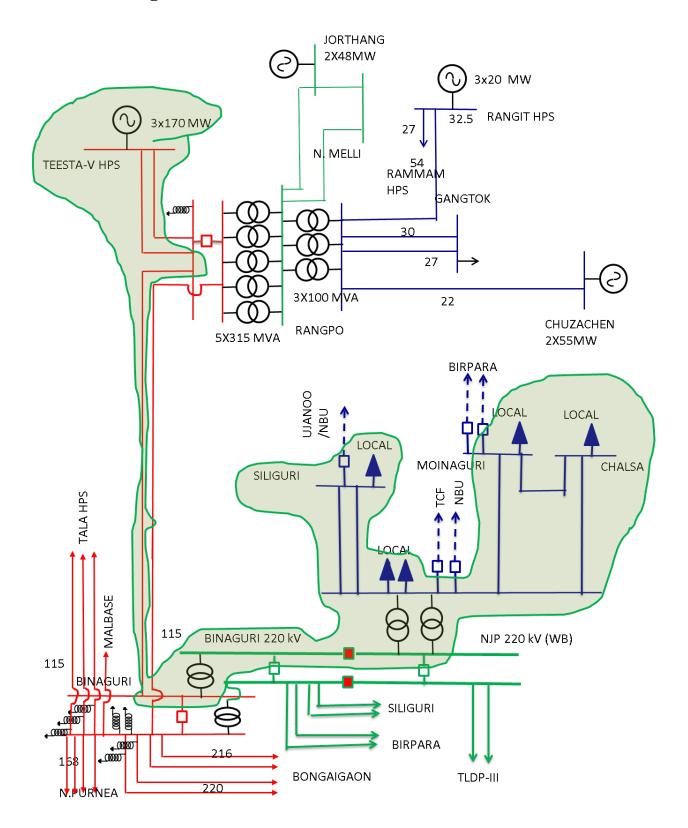
## **B.** At 220 NJP(W) S/S

- On receiving clearance from Binaguri, WBSETCL to charge the 220/132kV ICTs one by one
- NJP(WB) local load, 132kV Siliguri I & II, 132kV Moynaguri&Chalsa to be switched on in steps of 20-25 MW
- After connecting a total load of 60 MW, the rest of the loads in the island are to be added rapidly, say within 3 minutes until the total load attains around 150MW. This is to avoid undesirable vibration of the Teesta-V unit.
- Frequency of the island may be kept close to 50Hz through proper coordination.

The islanded operation may be observed for about 15 minutes. During this period, the nodal personnel at Binaguri and Teesta should be in constant touch with ERLDC. Additionally, Binaguri should also be in touch with Rangpo and NJP(W) so that load increments and switching operations in WBSETCL system are properly coordinated with Teesta generation and action can be taken without delay in case of any exigency at Rangpo.

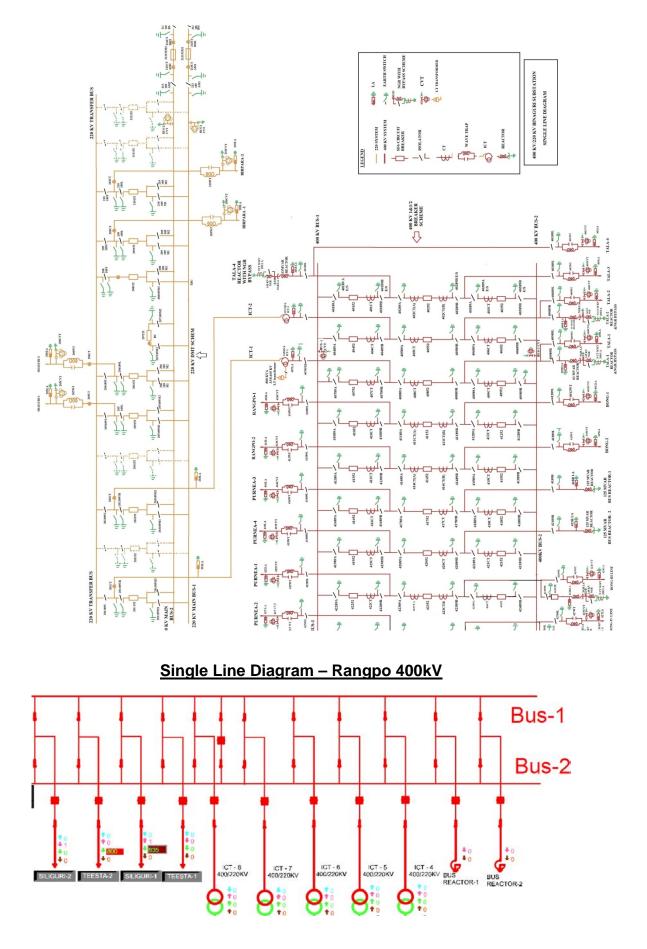
## **Stage-3** – **The Restoration**

- On receipt of clearance from ERLDC, Teesta-V generation to be controlled so as to match the island frequency with the grid frequency.
- At Binaguri, 400kV Bus-I to be synchronised with Bus-II by closing the tie-CB of ICT-I when the voltage and frequency conditions permit. Main and tie CBs of other bays also to be closed. Similarly, the 220kV bus coupler and CB for 220kV NJP(W)-II should also be taken into service.
- At Rangpo, 400kV bus-coupler CB to be closed to ensure that Sikkim-Jorethang-Rangit-Chujachen system remains synchronized through 400kV Rangpo-Binaguri D/C line.
- Teesta unit(s) may be desynchronized after opening of 400kV Teesta-V Binaguri-I.



## Network Diagram for Teesta-V Mock Black start Exercise:

## Switching Diagram of 400/220kV Binaguri S/Stn



# Annexure-33b

SI. No.	CHUZACHEN HEP RESPONSIBILITIES	ERLDC RESPONSIBILITIES	SIKKIM RESPONSIBILITIES	PGCIL RANGPO RESPONSIBILITIES	Result	Remarks
1	CHZ-MLI & CHZ-RGP lines shutdown request to ERLDC to perform Black Start demonstration as agreed.	Grant of shutdown Approval as requested and ensure shutdown of 132 KV Siliguri Melli & 132 KV Rangit Melli feeders as well as 66 KV Kalimpong feeder during demonstration.	Consent & cooperate in the process		ОК / NOT ОК	Note : The
2	<ul> <li>Keep one Chuzachen Unit ready for black start &amp; confirm the switchyard configuration at RGP &amp; MLI end.</li> <li>Switchyard configuration:- <ol> <li>Unit-1: CB open, Bus1 &amp; Bus2 isolators open.</li> <li>Unit-2: CB open, Bus1 isolator closed &amp; Bus 2 isolator open.</li> <li>Bus Coupler: CB open, bus1 &amp; bus2 isolators open.</li> <li>Chuzachen-Melli Line: (a) Chuzachen end - CB closed, Line isolator closed, Earth switch open, Bus1 isolator open, Earth Switch Open</li> <li>Chuzachen-Rangpo Line: (a) Chuzachen end - CB Closed, Line isolator closed, Earth switch open, Bus1 isolator closed &amp; Bus 2 isolator open.</li> <li>Melli End - CB open, Line isolator open, Earth Switch Open</li> <li>Chuzachen-Rangpo Line: (a) Chuzachen end - CB Closed, Line isolator closed, Earth switch open, Bus 1 isolator closed &amp; Bus 2 isolator open.</li> <li>Melli End - CB open, Line isolator open, Line isolator closed &amp; Bus 2 isolator open.</li> <li>Power Transformer : CB open, Bus1 &amp; Bus 2 isolators open.</li> </ol></li></ul>	<ul> <li># Inform Sikkim to be ready to avail power at Melli from Chujachen HPS in islanded mode.</li> <li># Siliguri and Rangit to be informed of shutdown of 132kV Melli-Siliguri and 132kV Melli-Rangit from Melli for this process.</li> <li># ERLDC to ensure remote end Switch yard / feeder configuration.</li> <li>CHZ-MLI : Melli End - CB open, Line isolator open, Earth Switch Open</li> <li>CHZ-RGP : Rangpo end - CB open, Line isolator open, Earth Switch Open.</li> <li>RGT-MLI : Melli End - CB open, Line isolator open, Earth Switch Open</li> <li>Suitch Open</li> <li>Suitch Open</li> <li>SLG-MLI : Melli End - CB open, Line isolator open, Earth Switch Open</li> </ul>	Ensure switchyard / feeder configuration. CHZ-MLI : Melli End - CB open, Line isolator open, Earth Switch Open RGT-MLI : Melli End - CB open, Line isolator open, Earth Switch Open SLG-MLI : Melli End - CB open, Line isolator open, Earth Switch Open	Ensure switchyard / feeder configuration. CHZ-RGP : Rangpo end - CB open, Line isolator open, Earth Switch Open.	OK / NOT OK	nued and normal operat
	# Start Unit identified for Black Start Demonstration Under Black Start Mode. # Build up excitation voltage in a gradual manner in steps of 3 KV so as to idle-charge 132kV CHZ-MLI & CHZ-RGP line ≤ 128 KV together and inform ERLDC after the successful idle-charging.	# Validate the receipt of Chuzachen voltage from both substations. # Advise Sikkim to close the Melli end 132kV line isolator & CB sequentitially & charge Melli Bus under NO LOAD and confirm information to Chuzachen & ERLDC.	Close the Melli end 132kV line isolator & CB sequentitially & charge Melli Bus under NO LOAD and confirm information to Chuzachen & ERLDC.	Voltage & confirm information to	ок / NOT ОК	tion would be restored at completion of the test
5	Inform readiness to ERLDC & Melli for picking up of load in steps of 5 MW	# Advise Sikkim to connect balanced load of Melli in steps of about 5 MW in a gradual manner. # Care should be taken at every step by all concerned to ensure that the island frequency remains as close as possible to 50 Hz. The total load to be connected at Melli should not exceed 20 MW	# Under instruction from ERLDC, connect balanced load of Melli in steps of about 5 MW in a gradual manner and telephonic contact with Chuzachen controlroom not exceeding 20 MW.	No role	ок / NOT ОК	the earliest in case any (
6		Advise Sikkim to maintain existing condition till further instructions.		No role	ОК / NOT ОК	operatior
7		Advise PGCIL Rangpo to synchronise Chuzachen feeder with 132 KV Rangpo bus ( existing Grid connectivity).	Maintain existing condition till further instructions from ERLDC.	Close Chuzachen line isolator & Synchronise 132 KV Chuzachen- Rangpo to 132 KV Rangpo GIS bus.	ОК / NOT ОК	nal exigency
8		Advise Sikkim to synchronise 132 KV Melli-Siliguri feeder with Melli bus.	Synchronise 132 KV Melli-Siliguri feeder with Melli bus.	No role	OK / NOT OK	arises be
9	Withdraw demonstration Unit after successful Black Start demonstration under no continued delivery schedule.	No role	No role	No role	ОК / NOT ОК	efore

#### Activity Flow Chart & Responsibility Matrix for Black Start Demonstration of Chuzachen HEP

### Latest status on non-availability of SCADA data

It was informed by ERLDC that some constituents are not updating single line diagram in SCADA as per actual real time network and same is causing lack of network visibility.

All constituents agreed to update SCADA single line diagram as per real network time to time and will furnished the same to ERLDC also.

The status as updated in the SCADA meeting is as given below:

i) List of additional elements/feeders whose data is not available – station under ULDC project:

SL no	Name of Utility	KV	Name of station	Reason for non reporting	Latest status
1	OPTCL	220	Vedanta (9x135 MW)	No status points are available.	No isolators status are available. MW/ MVAR not available for sterlite 1/2 line, station transformer / Smelter. CBs of Bus coupler not available. Bus-1 KV/ HZ not available. Problem still not resolved

ii) The List of RTU supplied under BSEB ULDC Project but data is faulty/ intermittent:

S/n	Name of RTU locations	Latest status	Remarks
1	Jakkanpur, Khagaul RTU, Dumraon, Karmnasha, Sitamarhi, , Purnea & Koshi	Data is reporting intermittently.	<ol> <li>Data integrated through GPRS will be intermittent till Final communication packages is implemented ( Already awarded to PGCIL for execution ).</li> </ol>
2	Hathidah, Lakhisarai & Darbhanga	Data is reporting intermittently Due to re- conductoring work in Darbhanga- Samastipur T/L, Darbhanga is not reporting temporarily.	<ol> <li>ALL RTU will be report to SLDC patna subject to availability of communication system (</li> </ol>
3	BTPS	RTU dismantled. Renovation/overhauling work is going on. SAS is expected to be operational by the November, 2014.	Already Awarded to PGCIL) 3) New RTU is being
4	220 kV Hajipur	Hajipur is temporarily down, BSPTCL working to restore it.	integrated with OSI systems and this RTU will
5	Jagdishpur, Sipara, Madhepura	RTU has been supplied by PGCIL under Sub-transmission project of Bihar but commissioning is left out. Now, it will be done in ULDC upgradation scheme.	report to ERLDC once ERLDC OSI system is ready.
6	Siwan, Valmikinagar, Gopalganj, Kisanganj and Arrah	RTU along with communication has been included in the scope of work of Powergrid under up gradation/ replacement scheme of ULDC. It was scheduled to be completed by Oct'14. <i>RTU supplied by M/s.</i> <i>Chemtrols except Darbhanga. RTU</i> <i>reached site.</i>	Problem still not resolved

iii) The updated status of telemetry of JSEB Sub-Stations under ULDC project is as given below:

		l -	T
SI. No.	Name of the RTU location	Latest status	Remarks
1	Ramchandrapur	Reporting is interrupted because of problem in PLCC link between Candil & Ramchandrapur. CVT brusted at Ramchandrapur bay and requires replacement. Arrangement in being done for its replacement.	<ol> <li>RTU's CPU Card sent to Bhubaneswar for repairing.</li> <li>All RTU will restored by Mid March 2015.</li> </ol>
2	Jamtara	Jamtara RTU has been shifted in new control room. POWER GRID has been requested to reintegrate the feeders in RTU as integration of additional feeder (new element) in the existing RTU. <i>Powergrid informed that</i> <i>Advance Payment towards new element</i> <i>integration is pending since long. After</i> <i>payment, M/s. ALSTOM will give the schedule</i> <i>of site visit for feeder integration.</i>	Problem still not resolved. None of real time data available since 15/06/15.
3	Deoghar	Both LMU & LMDU rusted at Jamtara. Arrangement inbeing done for its replacement. Deoghar-Jamtara-Maithon link is interrupted also because of snatching of patching cable at Maithon (G) and Maithon (SLDC). This was found during survey of sites with M/s PUNCOM which will be corrected by the agency under AMC. AMC by PUNCOM has been started.	
4	Garawah	Garawah RTU will be restored when it will be connected from Ranchi end through Hatia- Loherdaga-Latehar-Daltonganj –Garwah Transmission lie.	
5	Kendposi	Reporting is interrupted because of shifting of	
6	Goelkera	Chandil bay at Rajkharsawan. PLCC outdoor equipment has been shifted recently to new location of Chandil bay at RKSN. Some work like termination of co-axial cable will be done soon.	
7	Jadugoda	Co-axial cable faulty at Golmuri (Chandil bay)	

iv) The updated status of telemetry of OPTCL Sub-Stations under ULDC project is project as given below:

S/n	Name of RTU Locations	Latest status
1	Nalco	OPTCL informed that RTU is reporting but intermittent since it was not configured properly. The issue was already taken up with Nalco and it will be resolved soon. OPTCL has resolved the issue. Some Unit
		generation polarity will be resolved by Feb 2015. Problem still not resolved

SL No	Name of station/ Utility	Reason for non reporting	Latest status
1	Lalmatia JSEB	MW / MVAR/ OLTC tap of 220/132 KV ICT –II not available	MW/MVAR/OLTC tap of 220/132 KV ICT-II not available. Will be complete during additional feeder integration, no time frame. <b>Problem still not resolved</b>
11	JSPL (Meramundali - 400)	Most of the data not available.	OPTCL informed that they are taking matter with JSPL. Problem still not resolved
IV	DVC		
	Patherdiah,		RTU reached site. commissioned within Feb 2015. (RTU Commissioned but not integrated with SLDC.)
	Kalipahari		RTU reached site. (RTU Commissioned but not integrated with SLDC.)

### v) RTU telemetry provided but data are intermittent / new element not wired.

## vi) Sub - Stations (220 & 132 kV) Telemetry not provided :

SL	Name of station/	Reason for non	Latest status
No	Utility	reporting	
Ι	WBSETCL		
	Krishna Nagar	RTU not provided for	RTU integrated .
	CESC S/s: EM 220	data telemetry	CESC control centre ICCP will be
	kV		integrated with WB's new OSI system by
	CESC : Kasba-132 kV,		April 2015.
	EM-132 kV Jadavpur,		WBSETCL confirmed that same will
	Chakmir, Majerhat and		available TO OSI system by 31 <sup>st</sup> July
	CESC Belur		2015.
11	JSEB		
	Hatia New	RTU not provided for	Hatia SAS to be integrated with SLDC. No
	Manique (Chandil)	data telemetry	time frame.
	Manque (enanan)		By Feb 2015 all RTUs will be supplied. No
			commissioning time frame.
			Problem still not resolved
	Japla		By Feb 2015 all RTUs will be supplied. No
			commissioning time frame.
			Problem still not resolved

#### Unavailability Of Critical Real Time data :

Name of station/ Utility	Not reporting since	ERLDC Remarks
SEL	24/06/15	Status and CBs, SOE point of Old switch yard not available since 01/05/15. <i>Restoration work is in progress.</i>
APNRL	1/5/2015	Work will start soon.
Sasaram (765)	13/05/15	Intermittent.
GMR	Since Generation	None of Unit side data and protection signal available- By November, 2015
Sagardighi (400)	28/04/15	Restoration work is in progress.
Nabinagar (400)	28/12/14	Restoration work is in progress.
Behrampur (400)		SAS hanging

## Annexure- B.34

JUSNL (JSEB):	15/06/15	7 out of 14 RTUs reporting to SLDC
None of data is available		

### ANNEXURE - C.1

Maintenance Schedule of Thermal Generating Units for February, 2016 as per LGBR 2015-16										
System Station Unit Size (MW) period No. of Days Reason										
System	Station	Umt	Size (IVI VV)	From	То	No. of Days	Keason			
DVC	DTPS	3	140	01.02.16	11.02.16	11	Already under shutdown			
WBPDCL	Bakreswar TPS	2	210	24.02.16	29.02.16	6	Boiler Licence Renewal			
WBPDCL	Bandel TPS	4	60	16.02.16	20.02.16	5	Boiler Licence Renewal			
CESC	BUDGE-BUDGE	3	250	24.01.16	31.01.16	7	Statutory Hyd. Test			
CESC	SOUTHERN	2	67.5	04.02.16	07.02.16	4	Statutory Hyd. Test			

## Maintenance Schedule of Thermal Generating Units for February, 2016 as per LGBR 2015-16

#### EASTERN REGIONAL LOAD DESPATCH CENTRE KOLKATA

#### TRANSMISSION ELEMENTS OUTAGE APPROVED IN 117TH 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	400 kV Talcher - I Main Bay at Rengali	23/01/2016	08.30 Hrs.	23/01/2016	18.00 HRS	ODB	ER-II/Odisha	AMP work for CT. CB and Isolators.	
2	220KV BUS-II at Baripada	23/01/2016	09:00	23/01/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
3	Angul line- ICT-I Tie bay (401BAY) at Bolangir	23/01/2016	09:00	23/01/2016	18:00	ODB	ER-II/Odisha	AMP Work	
4	400kV Rengali- Keonjhar line at Rengali	23/01/2016	11.00 Hrs.	23/01/2016	16.00 HRS	ODB	ER-II/Odisha	Retrofitting of Numerical Auto-recloure relay	
5	400kV Rourkela-Ranchi#2 Main Bay (Bay No421) at Rourkela	23/01/2016	09:00 hrs	23/01/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
6	400KV BSF-NPRN-1	23/01/2016	09:00	23/01/2016	17:00	ODB	ER-I	FOR ERECTION OF 50MVAR L/R UNDER BAY SWAPPING WORK	Subject to availability of Farakka - Malda - D/C
7	TIE BAY OF 315MVA ICT-2 AT SSRM	23/01/2016	09:00	23/01/2016	17:00	ODB	ER-I	FOR CSD COMMISSIONING WORK	
								THIS ICT IS ALREADY UNDER S/D FOR REPLACEMENT OF TRANSFORMER (For	
								Shifting of CT of ICT -1 bay towards main bus in transfer bus area as marked in	
								drawing that will avoid GIS building foundation fouling with CT foundation which	
_								has deeper depth	
8	100MVA ICT-1 AT PURNEA	23/01/2016	09:00	17/03/2016	17:00	OCB	ER-I	( THIS ICT IS ALREADY UNDER S/D FOR REPLACEMENT OF TRANSFORMER)	BIHAR
9	220kV Main Bus-I Siliguri	23/01/2016	06.00Hrs	23/01/2016	17.00 Hrs	ODB	ER-II/KOL	Main Bus-I Isolator erection of ICT#1	WBSETCL
10	400KV BUS-II at Baripada	24/01/2016	09:00	24/01/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
11	TIE BAY OF 315MVA ICT-1 AT SSRM	24/01/2016	09:00	24/01/2016	17:00	ODB	ER-I	FOR CSD COMMISSIONING WORK	
12	220kV ICT-I Bay at Rengali 400KV Duburi-Mendhasal (Duburi-Mendhsal portion of Old	24/01/2016	08.30 Hrs.	24/01/2016	00:00	ODB	ER-II/Odisha	AMP work for CT, CB and Isolators. Construction works-Removalof jumpers for shifting of 63MVAR Line Reactor from	
13	Baripada-Mendhasal#2) at Mendhasal	24/01/2016	09:00	24/01/2016	11:00	ODB	ER-II/Odisha	Mendhasal to Pandiabii (Construction)	OPTCL
15	220KV BUS-I at Baripada	24/01/2016	09:00	24/01/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
14	400kV Rourkela-Chaibasa#1 at Rourkela	24/01/2016	09:00 hrs	24/01/2016	17:00 18:00 hrs	ODB	ER-II/Odisha	Retrofitting of REL 670 relay in Main-I DP in place of SEL 321 relay.	OPICL
15	400KV BSF-SSRM-4	24/01/2016	09:00	24/01/2016	17:00	ODB	ER-II/OUISIIA	FOR BAY SWAPPING WORK	
10	4000 851-556101-4	24/01/2010	09.00	24/01/2010	17.00	ODB			
17	400KV PATNA-BALIA-1	24/01/2016	08:00	24/01/2016	17:30	ODB	ER-I	FOR DIAMOND FORMATION OF E/WIRE AT POWER LINE CROSSING NEAR BALIA	NLDC
		, ,							
18	400KV PATNA-BALIA-3 & 4	24/01/2016	09:00	24/01/2016	17:30	ODB	ER-I	FOR DIAMOND FORMATION OF E/WIRE AT POWER LINE CROSSING NEAR BALIA	NLDC
19	220kV Main Bus-II Siliguri	24/01/2016	06.00 Hrs	24/01/2016	17.00 Hrs	ODB	ER-II/KOL	Main Bus-II Isolator erection of ICT#1	WBSETCL
20	132KV D/C Malda-Khejuria line	24/01/2016	07:00	26/01/2016	17:00	ODB	ER-II/KOL	Re-conductoring work of 400KV Farakka-Malda D/c Line	
								-	
21	400KV SSRM-NABINAGAR 1 & 2	24/01/2016	09:00	24/01/2016	18:00	ODB	ER-I	FOR CROSSING OF 765KV GAYA-VARANASI LINE BETWEEM LOC NO 77/0 & 78/0	NTPC/NABINAGAR
22	MAIN BAY OF 315MVA ICT-2 AT SSRM	25/01/2016	09:00	25/01/2016	17:00	ODB	ER-I	FOR CSD COMMISSIONING WORK	
23	220kV ICT-II Bay at Rengali	25/01/2016	08.30 Hrs.	25/01/2016	18.00 HRS	ODB	ER-II/Odisha	AMP work for CT, CB and Isolators.	
24	400 kV Talcher - I Tie Bay at Rengali	25/01/2016	08.30 Hrs.	25/01/2016	18.00 HRS	ODB	ER-II/Odisha	AMP work for CT, CB and Isolators.	
	400KV Duburi-Mendhasal (Duburi-Mendhsal portion of Old							Construction works-Dismantling of bushings, conservators for shifting of 63MVAR	
25	Baripada-Mendhasal#2) at Mendhasal	25/01/2016	09:00	25/01/2016	18:00	ODB	ER-II/Odisha	Line Reactor from Mendhasal to Pandiabii (Construction)	OPTCL
26	400 kV Talcher - II Main Bay at Rengali	25/01/2016	08.30 Hrs.	25/01/2016	18.00 HRS	ODB	ER-II/Odisha	AMP work for CT, CB and Isolators.	
							55 11 (5 11 1	For Commissioning (Online Testing) of CSD	
27	125 Mvar Bus Reactor at Jeypore	25/01/2016	09:00	25/01/2016	17:30	ODB	ER-II/Odisha	Note- Multiple closing & tripping of Reactor is desired	 
28	220kV ICT-I Incomer Bay (Bay No211) at Rourkela 63MVAR L/R OF 400KV PTN-KISHANGANJ-1 ALONGWITH BAYS	25/01/2016	09:00 hrs	25/01/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	l
29	AT PTN(CHARGED AS A B/R)	25/01/2016	10:00	25/01/2016	17:00	ODB	ER-I	FOR TERMINATION OF CONDUCTOR TO LINE & ISOLATORS	
		23/01/2010	10.00	23/01/2010	17.00				
30	400KV PATNA-BALIA-2	25/01/2016	08:00	25/01/2016	17:30	ODB	ER-I	FOR DIAMOND FORMATION OF E/WIRE AT POWER LINE CROSSING NEAR BALIA	NLDC
31	400KV PATNA-BALIA-3 & 4	25/01/2016	09:00	25/01/2016	17:30	ODB	ER-I	FOR DIAMOND FORMATION OF E/WIRE AT POWER LINE CROSSING NEAR BALIA	NLDC
32	315MVA ICT-I AT Maithon	25/01/2016	09:00	25/01/2016	18:00	ODB	ER-II/KOL	AMP Works. And 42389B-RPh isolator alignment	DVC
33	40752 (Bidhan Nagar-1_Main Bay ) Durgapur	25/01/2016	09:00	29/01/2016	18:00	OCB	ER-II/KOL	Hydraulic overhauling of BHEL make 400 KV CB at Durgapur SS	1

				1				1	WBSETCL/There will be no power flow in
									132KV bays.132KV WBSETCL-I & II,160MVA ICT-
									I&II,50MVA ICT-IV to be under S/D during
34	132KV MAIN BUS Malda	25/01/2016	06:00	25/01/2016	07:00	ODB	ER-II/KOL	Main Bus Jumper isolation for Isolator replacement.	above period.
35	Berhampore-Bheramara Ckt-II Main bay	25/01/2016	09.00Hrs	25/01/2016	17.00Hrs	ODB	ER-II/KOL	AMP	NLDC
36	315 MVA ICT - II AT SASARAM	25/01/2016	15:00	02/01/2016	18:00	ODB	ER-I	CSD COMMISSIONING WORK UNDER CONSTRUCTION HEAD	BIHAR/NLDC
37	Jeypore line Main bay (403BAY) at Bolangir	26/01/2016	09:00	26/01/2016	18:00	ODB	ER-II/Odisha	AMP Work	Shiwiiqitebo
-						-			
38	400kV Rourkela-SEL#2 at Rourkela	27/01/2016	08:00 hrs	30/01/2016	18:00 hrs	ODB	ER-II/Odisha	For replacement of disc insulators with polymer insulators at important crossings.	
39	400KV Mendhasal Main Bay (401) at Baripada	27/01/2016	08:00	27/01/2016	17:00	ODB	ER-II/Odisha	TO PROVIDE MANUAL DRAIN VALVE	OPTCL
40	315 MVA ICT-II (at Keonjhar S/S)	27/01/2016	08:00	30/01/2016	17:00	OCB	ER-II/Odisha	For attending OLTC Leakage	
41	ICT-I & 50MVAR B/R Tie Bay (Bay No 423) at Rourkela	27/01/2016	09:00 hrs	27/01/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
42	A/R OF 400KV KAHALGAON - MAITHAN -1 &2	27/01/2016	09:00	29/02/2016	17:00	ODB	ER-I	FOR PID TEST.	
43	MAIN BAY OF 400KV BANKA-KHLG-1 AT BANKA	27/01/2016	11:00	27/01/2016	15:00		ER-I	FOR AMP WORK & CHECKING OF CSD WAVW FORM	
							ER-I		
44 45	400 KV RANCHI (OLD) - NEW RANCHI -1 MAIN BAY OF 400KV GAYA-MAITHON CKT-I	27/01/2016 27/01/2016	10:00	27/01/2016	16:00 17:00	ODB ODB	ER-I	RELACEMENT OF INSULATOR DAMAGED BY MISCREANTS	
45	63MVAR L/R OF 400KV GAYA-MATHON CKT-1 63MVAR L/R OF 400KV PTN-KISHANGANJ-1 ALONGWITH BAYS	27/01/2016	10:00	27/01/2016	17:00	ODB	EK-I	FOR AMP WORK	
		27/04/2016	10.00	27/04/2016	17.00	0.00	50.1		
46	AT PTN(CHARGED AS A B/R)	27/01/2016	10:00	27/01/2016	17:00	ODB	ER-I	FOR TERMINATION OF CONDUCTOR TO LINE & ISOLATORS	
								FOR PERMANET REMOVAL OF TRANSFER BUS IS REQUIRED FOR GIS BUILDING	
1								AND ASSOCIATED CIVIL WORK ( THE 132 KV TRANSFER BUS AND 132 KV TBC BAY	
								WILL BE UNDER PERMANENT S/D FOR CONSTRUCTION WORK OF AIS TO GIS	MAY PLS CONFIRM THYE LOAD ARANGEMENT
47	132 KV TRANSFER BUS AT PURNEA	27/01/2016	09:00			PERMANENT	ER-I	CONVERSION OF ALL LINE AND ICT 132 KV BAYS)	AT PURNEA 132 KV
								ICT-1 BAY AT PRN(PG) UNDER CONSTRUCTION OF GIS BUS DUCT & SF6 TO AIR	
								BUSHING FOUNDATION	
								BOTH THE LINES WILL BE UNDER S/D SIMULTANEOUSLY BUT KISHANGANJ	
								FEEDER WILL BE CHARGED AFTER 2 HOURS.	
48	132 KV PRN-PRN(BSPTCL)-3 LINE	27/01/2016	09:00	27/01/2016	17:00	ODB	ER-I		BIHAR
								FOR DISIVIAINTALING OF TRAINSFER BUS SECTION WHICH IS ABOVE PRIN-PRIN-3 &	
								ICT-1 BAY AT PRN(PG) UNDER CONSTRUCTION OF GIS BUS DUCT & SF6 TO AIR	
								BUSHING FOUNDATION	
								BOTH THE LINES WILL BE UNDER S/D SIMULTANEOUSLY BUT KISHANGANJ	
								FEEDER WILL BE CHARGED AFTER 2 HOURS.	
49	132 KV PRN-KISHANGANJ LINE	27/01/2016	09:00	27/01/2016	11:00	ODB	ER-I		BIHAR/NLDC
50	220 kV NPRN-PRN#1 line	27/01/2016	09:00	27/01/2016	17:00	ODB	ER-I	FOR BAY AMP WORK	Subject to availability of Farakka - Malda - D/C
								FOR CKT BREAKER MECHANISM OVERHAULING WORK(LINE WILL REMAIN	
51	220 kV NPRN-PRN#1 Main bay AT PURNEA	27/01/2016	17:00	30/01/2016	17:00	OCB	ER-I	CHARGED THROUGH TBC)	BIHAR
52	315MVA ICT-II AT Maithon	27/01/2016	09:00	27/01/2016	17:00	ODB	ER-II/KOL	Tan Delta of 220KV R-PH Bushing at variable frequency.	DVC
53	TALA-II LINE New Siliguri	27/01/2016	9.00 hrs	11/02/2016	17.00 hrs		ER-II/KOL	Conductor repairing	
54	132KV Siliguri - MELLI LINE	27/01/2016	09.00 Hrs	29/01/2016	17:00 Hrs	OCB	ER-II/KOL	GIS WORK	SIKKIM
55	160MVA ICT#2 Siliguri	27/01/2016	06.00 Hrs	27/01/2016	16:00 Hrs	ODB	ER-II/KOL	AMP of NSLG	WBSETCL
56	41152 (Farraka line-1_Sagardighi-2 tie Bay) Durgapur	27/01/2016	09:00	27/01/2016	18:00	OCB	ER-II/KOL	Hydraulic overhauling of BHEL make 400 KV CB at Durgapur SS	
									132KV bays.132KV WBSETCL-I & II,160MVA ICT-
57	132KV MAIN BUS Malda	27/01/2016	05:00	27/01/2016	07:00	ODB	ER-II/KOL	Isolator Jumper connection for taking in to service	I&II,50MVA ICT-IV to be under S/D during
57	Berhampore-Jeerat Main bay	27/01/2016	09.00Hrs	27/01/2016	17.00Hrs	ODB	ER-II/KOL		ich, som valier iv to be under syb uttring
58		27/01/2016	09:00Hrs	29/01/2016	17:00Hrs	OCB	ER-II/KOL ER-II/OR		1
	400 KV MAIN BAY JAYPORE - INDRAVATI AT JEYPORE	28/01/2016		29/01/2016			1 -	INTERNAL INSPECTION & OVERHAULING R-POLE 1052CB	OPTCI
60 61	220kV Bus coupler Bay at Rengali		08.30 Hrs.		18.00 HRS	ODB	ER-II/Odisha	AMP work for CT, CB and Isolators.	OPTCL OPTCL
62	400KV Mendhasal Tie Bay (40102) at Baripada	28/01/2016	08:00	28/01/2016	17:00		ER-II/Odisha	TO REPAIR AIR COMPRESSOR	UPICL
62	(220KV line-3) 207 Bay at Bolangir	28/01/2016	09:00	28/01/2016	18:00	ODB	ER-II/Odisha	AMP Work	
63	400/220kV 315MVA ICT-II at Rengali	28/01/2016	08.30 Hrs.	28/01/2016	18.00 HRS	OCB	ER-II/Odisha	Overhauling of 315MVA ICT - II	
64	ICT-I Main Bay (Bay No424) at Rourkela	28/01/2016	09:00 hrs	28/01/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
65	MAIN BAY OF 80MVAR B/R AT BANKA	28/01/2016	11:00	28/01/2016	15:00		ER-I	FOR AMP WORK & CHECKING OF CSD WAVW FORM	
66	400 KV RANCHI (OLD) - NEW RANCHI -2	28/01/2016	10:00	28/01/2016	16:00	ODB	ER-I	RELACEMENT OF INSULATOR DAMAGED BY MISCREANTS	
67	400KV Biharsharif-Koderma-1	28/01/2016	09:00	28/01/2016	18:00	-	ER-I	S/D FOR BUS SPLITING WORK AT BIHARSHARIF	DVC
68	412 MAIN BAY OF 400KV GAYA-MAITHON CKT-II	28/01/2016	10:00	28/01/2016	17:00	ODB	ER-I	FOR AMP WORK	
	63MVAR L/R OF 400KV PTN-KISHANGANJ-2 ALONGWITH BAYS		1				L		
69	AT PTN(CHARGED AS A B/R)	28/01/2016	10:00	29/01/2016	17:00	ODB	ER-I	TIE BAY TESTING & COMMISSIONING	
70	MAIN BAY OF 315MVA ICT-1 AT SSRM	28/01/2016	09:00	28/01/2016	17:00	ODB	ER-I	FOR CSD COMMISSIONING WORK	

72 400K	KV PRN-PRN(BSPTCL)-3 LINE	28/01/2016	09:00	20/04/2046				FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
72 400KV		28/01/2016							
				30/01/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
73 Berha	(V Maithon JSR Tie Bay (414)	28/01/2016	09:00	01/02/2016	17:00	OCB	ER-II/KOL	Overhauling of Operating Mechanism of 400kV BHEL CB	
	ampore-Sagardighi Ckt-I Line	28/01/2016	09.00Hrs	28/01/2016	11.00Hrs	ODB	ER-II/KOL	Rectification of Alignement for Line Isolator	WBSETCL
	(V BRP-CHP-I	28/01/2016	09:00	28/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	NLDC
	(V BRP-CHP-II	28/01/2016	09:00	28/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	NLDC
	KV BUS-II at Birpara	28/01/2016	09:00	30/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	
77 400 K	KV S/C farakka-Durgapur#2	28/01/2016	09:00	29/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	
Ambu the cr	32KV Khejuria-Dhulian line(CKT-II) 2)132KV Khejuria- uuja-Raghunathgang(CKT-II) .( This is a double ckt line at crossing area. So to take up the re-conductoring works,								
		28/01/2016	07:00	30/01/2016	17:00	ODB	ER-II/KOL	Re-conductoring work of 400KV Farakka-Malda D/c Line	
79 315 N	MVA ICT-V Malda	28/01/2016	08:00	28/01/2016	18:00	ODB	ER-II/KOL	R &Y ph CT (400KV side) replacement.	
		28/01/2016	09.00Hrs	28/01/2016	17.00Hrs	ODB	ER-II/KOL	AMP	
81 ICT-II	I Tie Bay (Bay No414) at Rourkela	29/01/2016	09:00 hrs	29/01/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
								For extension of bus bar and various related jumpering work and fixing of	
82 765k\	V Main Bus-1 at Sundargarh	29/01/2016	09:00	30/01/2016	17:00	OCB	ER-II/Odisha	missing Corona/greating rings.	NLDC
83 MAIN	N BAY OF 400KV BANKA-KHLG-2 AT BANKA	29/01/2016	11:00	29/01/2016	15:00	ODB	ER-I	FOR AMP WORK & CHECKING OF CSD WAVW FORM	
84 400K	KV Biharsharif-Koderma-2	29/01/2016	09:00	29/01/2016	18:00	ODB	ER-I	S/D FOR BUS SPLITING WORK AT BIHARSHARIF	DVC
85 315M	MVA ICT-1 AT JSR	29/01/2016	09:30	29/01/2016	17:30	ODB	ER-I	FOR REPLACEMENT OF TAN DELTA TAP ASSEMBLY IN 400KV Y & B PH BUSHING	JHARKHAND
	N BAY OF 400KV RNC-MTN-1 AT RNC	29/01/2016	09:30	29/01/2016	16:30	ODB	ER-I	FOR AMP WORK	
	IVAR B/R AT LAKHISARAI	29/01/2016	16:00	30/01/2016	17:00	ODB	ER-I	CSD COMMISSIONING WORK UNDER CONSTRUCTION HEAD	
	N BAY OF 80MVAR B/R AT LAKHISARAI	29/01/2016	09:00	29/01/2016	17:00	ODB	ER-I	CSD COMMISSIONING WORK UNDER CONSTRUCTION HEAD	
					18:00	OCB	ER-I	REPLACEMENT BY 500MVA ICT	BIHAR/NLDC
		29/01/2016	09:00	29/02/2016					
	MVA ICT-I at Birpara	29/01/2016	09:00	29/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	WBSETCL
	KV BRP-NSLG-I	29/01/2016	09:00	29/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	
	V D/C Bakreswar-Gokarna	29/01/2016	09:00	29/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
93 220 K	KV D/C Bakeswar- Satgachya	29/01/2016	09:00	29/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
94 220K	V D/C Bakeswar- Bidhannagar	29/01/2016	09:00	29/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
95 132KV	V D/C Ukhra-Bidhannagar	29/01/2016	09:00	29/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
0.5		20/04/2045	05.00	20 /04 /204 6					WBSETCL/There will be no power flow in 132KV bays.132KV WBSETCL-I & II,160MVA ICT- I&II,50MVA ICT-IV to be under S/D during
	KV MAIN BUS Malda	29/01/2016	05:00	29/01/2016	07:00	ODB	ER-II/KOL	Main Bus Jumper isolation for Isolator replacement.	above period.
	ampore-Farakka Main bay	29/01/2016	09.00Hrs	29/01/2016	17.00Hrs	ODB	ER-II/KOL	AMP	0070
	KV Balasore Line-2 Bay at Baripada	30/01/2016	09:00	30/01/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
99 ICT-II	I Main Bay (Bay No415) at Rourkela	30/01/2016	09:00 hrs	30/01/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
								Crossing of 765KV Angul-Jharsuguda line(246/0-247/0) to OPTCL lines span (105-	
		30/01/2016	08:00	31/01/2016	17:00	ODB	ER-II/Odisha	106)	OPTCL
	MVA 400/220kV ICT-II AT GAYA	30/01/2016	10:00	30/01/2016	17:00	ODB	ER-I	For Isolator Modification Work	BIHAR
102 TIE BA	3AY OF 80MVAR B/R AT LAKHISARAI	30/01/2016	09:00	30/01/2016	17:00	ODB	ER-I	CSD COMMISSIONING WORK UNDER CONSTRUCTION HEAD	
103 220 k	kV NPRN-PRN#2 line	30/01/2016	09:00	31/01/2016	17:00	ODB	ER-I	FOR BAY AMP WORK	BIHAR
								FOR CKT BREAKER MECHANISM OVERHAULING WORK(LINE WILL REMAIN	
104 220 k	kV NPRN-PRN#2 Main bay AT PURNEA	30/01/2016	17:00	03/02/2016	17:00	OCB	ER-I	CHARGED THROUGH TBC)	BIHAR
	MVA ICT-II Birpara	30/01/2016	09:00	30/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	WBSETCL
	(V BRP-NSLG-II	30/01/2016	09:00	30/01/2016	17:00	ODB	ER-II/KOL	Bus-II Conductor replacement	
	V Siliguri-KURSEONG LINE	30/01/2016	06.00 Hrs	01/02/2016	17.00 Hrs	OCB	ER-II/KOL	GIS WORK	WBSETCL
	KV S/C Durgapur- Jamshedpur	30/01/2016	09:00	07/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	
	KV Bidhannagar-Ukhra	30/01/2010	09:00	30/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	KV Bidhannagar-Okhra KV Bidhannagr- Sainthia	30/01/2016	09:00	30/01/2016	18:00	ODB	ER-II/KOL		WBSETCL
								insulator replacement	
	KV D/C Bidhannagar- Kolaghat	30/01/2016	09:00	30/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	KV Bidhannagar-Ukhra	30/01/2016	09:00	31/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	KV Bidhannagar- Bandel	30/01/2016	09:00	31/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	KV DTPS- Burdwan	30/01/2016	09:00	31/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	KV DTPS- Bishnupur	30/01/2016	09:00	31/01/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	kv Dumka - Pakur T/L	30/01/2016	6.00 hrs	30/01/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
117 132 K	KV KURSEONG - SILIGURI	30/01/2016	09:30	30/01/2016	15:30	ODB	WBSETCL	MAINTANCE WORK	
118 132 K	KV KURSEONG - RANGIT	30/01/2016	09:30	30/01/2016	15:30	ODB	WBSETCL	MAINTANCE WORK	
	KV Indravati-rengali line at Indravati	01/02/2016	09:00	01/02/2016	18:00Hrs	ODB	ER-II/Odisha	Dismantling of bushing & turret Of 50 MVAR Rengali L/R in Overhauling	
120 Sunda	dargarh-II & Ranchi-I Tie Bay (Bay No 429) at Rourkela	01/02/2016	09:00 hrs	01/02/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	

121	TIE BAY OF 400KV BANKA-KHLG-2 & FUTURE AT BANKA	01/02/2016	11:00	01/02/2016	15:00	ODB	ER-I	FOR AMP WORK & CHECKING OF CSD WAVW FORM	
121	TIE BAY OF 400KV RNC-MTN-1 & 315MVA ICT-1 AT RNC	01/02/2016	09:30	01/02/2010	16:30	ODB	ER-I	FOR AMP WORK & CHECKING OF CSD WAYW FORM	
123	220KV GAYA-BODHGAYA CKT-I & II	01/02/2016	10:00	02/02/2016	17:00	ODB	ER-I	For POWER LINE crossing of Gaya-Varanasi Line.	BIHAR
123	500MVA ICT-1 AT NPRN	01/02/2016	10:00	01/02/2016	13:00	ODB	ER-I	FOR CHECKING OF CSD WAVE FORM	BIHAR
124		01/02/2010	10.00	01/02/2010	13.00	000			ONE CKT A/R SHUTDOWN WILL BE ALLOWED
									OUT OF KHG - MTN - II, KHG-BARH-II,BSF-BANKA-
125	A/R OF 400KV KAHALGAON - MAITHAN -2	01/02/2016	07:00	28/02/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	II,BSF-MZF-1)
125	A/R OF 400RV RAHALGAON - MAITTAN -2	01/02/2010	07.00	28/02/2010	19.00	ODB			ONE CKT A/R SHUTDOWN WILL BE ALLOWED
									OUT OF KHG - MTN - II, KHG-BARH-II, BSF-BANKA-
120	A/R OF 400KV KAHALGAON - BARH -2	01/02/2016	07:00	28/02/2016	19:00	ODB	50.1		II,BSF-MZF-1)
126	A/R OF 400KV KAHALGAON - BARH -2	01/02/2016	07:00	28/02/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	ONE CKT A/R SHUTDOWN WILL BE ALLOWED
									OUT OF KHG - MTN - II, KHG-BARH-II, BSF-BANKA-
127		01/02/2010	07:00	20/02/2016	10.00	0.00	50.1		
127	A/R OF 400KV BSF-BANKA -2	01/02/2016	07:00	28/02/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	II,BSF-MZF-1) ONE CKT A/R SHUTDOWN WILL BE ALLOWED
									OUT OF KHG - MTN - II, KHG-BARH-II, BSF-BANKA-
128	A/R OF 400KV MUZ-BSF-1	01/02/2016	07:00	28/02/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	II,BSF-MZF-1)
								FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
129	132 KV PRN-KISHANGANJ(BSPTCL) LINE	01/02/2016	09:00	01/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
130	160 MVA ICT-2 AT PURNEA	01/02/2016	09:00	01/02/2016	17:00	ODB	ER-I		BIHAR
	400KV CIRCUIT BREAKER AND 400KV HDB								
131	ISOLATOR(COMBINE SHUT DOWN) Jeerat S/S	01/02/2016	08:00Hrs	22/02/2016	17:30Hrs	ODB	ER-II/KOL	RETROFIT JOB	
132	220 KV Dalkhola - Malda - I	01/02/2016	09: 00 Hrs	02/02/2016	17:00 Hrs	ODB	ER-II/KOL	Annual maintenance work	
133	132 KV TBC CB at Birpara	01/02/2016	09:00	03/02/2016	17:00	OCB	ER-II/KOL	CB Overhauling	WBSETCL
134	40952 (ICT#1 _ Main Bay ) Durgapur	01/02/2016	09:00	05/02/2016	18:00	OCB	ER-II/KOL	Hydraulic overhauling of BHEL make 400 KV CB at Durgapur SS	
135	409T ICT#1 Durgapur	01/02/2016	09:00	08/02/2016	18:00	OCB	ER-II/KOL	ICT#1 Replacement work	
136	220 KV Santaldi-Howrah	01/02/2016	09:00	01/02/2016	09:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
									WBSETCL/There will be no power flow in
									132KV bays.132KV WBSETCL-I & II,160MVA ICT-
									I&II,50MVA ICT-IV to be under S/D during
137	132KV MAIN BUS Malda	01/02/2016	05:00	01/02/2016	07:00	ODB	ER-II/KOL	Isolator Jumper connection for taking in to service	above period.
									EITHER ANUGUL - BOLANGIR OR BARIPADA -
									KEONJAR - RENGALI OR TALCHER- RKL D/C ONE
138	A/R 400 KV TALCHER - ROURKELA - D/C	01/02/2016	08:00	10/02/2016	17:30	ODB	ER-II/OR	PID SCANNING ON PROCEILIN INSULATOR	SD WILL BE ALLOWED.
139	A/R OF ANUGUL - BOLANGIR - JAYPORE	01/02/2016	08:00	29/02/2016	18:00	ODB	ULDC/PG	OPGW INSTALLATION WORK	
140	A/R OF BARIAPADA - KEONJHAR - RENGALI	01/02/2016	08:00	29/02/2016	18:00	ODB	ULDC/PG	OPGW INSTALLATION WORK	
141	400 KV RANGPO - TEESTA - I	01/02/2016	08:00	29/02/2016	18:00	ODB	ULDC/PG	OPGW INSTALLATION WORK	TEESTA
142	765/400kV 1500MVA ICT-1 at Sundargarh	02/02/2016	09:00	02/02/2016	17:00	ODB	ER-II/Odisha	For attending constructional punch points and fixing of missing Corona/greating	NLDC
142	400kV Bus-1 at Angul	02/02/2010	09:00	02/02/2010	15:00	ODB	ER-II/Odisha	Spacer Fixing in Jack Bus	NEDC
144	160MVA ICT-1 BAY at Baripada	02/02/2016	09:00	02/02/2010	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
144	(220KV ICT-II LV) 208 Bay at Bolangir	02/02/2016	09:00	02/02/2010	18:00	ODB	ER-II/Odisha	AMP Work	OFICE
145		02/02/2010	09.00	02/02/2010	18.00	ODB	LK-II/Ouisila	Fitting of turret & bushing after replacement of gaskets of 50 MVAR L/R of	
146	400 KV/ Indravati rangali lina at Indravati	02/02/2016	09:00	02/02/2016	18:00Hrs	ODB	ER-II/Odisha	Rengali Line	
146	400 KV Indravati-rengali line at Indravati		18:00	02/02/2016	09:00	OCB	ER-II/Odisha	Drying out of 50 MVAR L/R	
	50MVAR L/R in Rengali Line at Indravati ss	02/02/2016			17:30	ODB			
148 149	Gajuwaka-I Main Bay (412) at Jeypore	02/02/2016 02/02/2016	09:00	02/02/2016 02/02/2016	17:30 18:00 hrs	ODB	ER-II/Odisha	For AMP works	
149	220kV ICT-II Incomer Bay (Bay No208) at Rourkela	02/02/2016	09:00 hrs	02/02/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
			1					Construction works Devidebill (1) O line to refer the of down D. S. S. Martin Martin	
450		02/02/2215	00.00	4010010010	10.00	0.00	FD 11/0 11 1	Construction works-Pandiabili LILO line termination of drom Baripada-Mendhasal	
150	400KV Baripada-Mendhasal#1	02/02/2016	09:00	16/02/2016	18:00	OCB	ER-II/Odisha	both circuits Pandiabili (SD of both the circuits required)	OPTCL
	400KV Duburi-Mendhasal (Duburi-Mendhsal portion of Old							Construction works-Pandiabili LILO line termination of drom Baripada-Mendhasal	
151	Baripada-Mendhasal#2) at Mendhasal	02/02/2016	09:00	16/02/2016	18:00	OCB	ER-II/Odisha	both circuits Pandiabili (SD of both the circuits required)	OPTCL
152	3X16.67MVAR Baripada-Keonjhar Line reactor at Baripada	02/02/2016	09:00	16/02/2016	18:00	OCB	ER-II/Odisha	Replacement of Oil in Reactor	
153	400KV DUBURI MAIN BAY (407) at Baripada	02/02/2016	09:00	02/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
154	132KV BANKA-BANKA-1(BSPTCL)	02/02/2016	11:00	02/02/2016	14:00	ODB	ER-I	FOR LINE BAY AMP WORK	BIHAR
								FOR CONSTRUCTION WORK FOR SWAPPING OF NPRN BAYS 1 & 2 WITH SSRM	
155	400KV Biharsharif-Purnea-1 & 2	02/02/2016	09:00	16/02/2016	18:00	OCB	ER-I	BAYS 3 & 4 AT BSF	Subject to availability of Farakka - Malda - D/C
								FOR CONSTRUCTION WORK FOR SWAPPING OF NPRN BAYS 1 & 2 WITH SSRM	
156	400KVBiharsharif-Sasaram-3 & 4	02/02/2016	09:00	16/02/2016	18:00	ОСВ	ER-I	BAYS 3 & 4 AT BSF	Subject to availability of Farakka - Malda - D/C
157	100MVA ICT-1 AT ARA	02/02/2016	09:30	03/02/2016	17:00	OCB	ER-I	FOR OLTC OVERHAULING & AMP WORK BIHAR	
158	MAIN BAY OF 400KV RNC-RTPS AT RNC	02/02/2016	09:30	02/02/2016	16:30	ODB	ER-I		
159	MAIN BAY OF 400KV LAKHISARAI-BSF-1 AT LAKHISARAI	02/02/2016	10:00	02/02/2016	14:00	ODB	ER-I		
160	220KV PTN-SIPARA-1	02/02/2016	10:00	02/02/2016	17:00	ODB	ER-I	AMP OF LINE BAY AT PTN END	BIHAR
161	315MVA ICT-2 AT NPRN	02/02/2010	10:00	02/02/2010	13:00	ODB	ER-I	FOR CSD COMMISSIONING WORK	BIHAR
101		102/02/2010	120.00			1200	1		

		1			1			FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
162	132 KV PRN-KISHANGANJ(BSPTCL) LINE	02/02/2016	09:00	04/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
163	400KV Maithon JSR Main Bay (413)	02/02/2016	09:00	07/02/2016	17:00	OCB	ER-II/KOL	Overhauling of Operating Mechanism of 400kV BHEL CB	binan
164	315MVA ICT-I Subhasgram	02/02/2010	09:00Hrs	02/02/2016	17:30Hrs	ODB	ER-II/KOL	AMP WORK	WBSETCL
165	132KV Siliguri-WBSETCL-1	02/02/2010	06.00 Hrs	04/02/2016	17.00 Hrs	OCB	ER-II/KOL	GIS WORK	WBSETCL
166	400 KV D/C Sagardighi -Durgapur (WBPDCL)	02/02/2016	6.00 hrs	02/02/2016	17:00 ms	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
167	160MVA ICT-I Malda	02/02/2016	09:00	02/02/2016	17:00	ODB	ER-II/KOL		WBSEICL
167									
	132KV Malda-WBSETCL-I	02/02/2016	09:00	02/02/2016	17:00	ODB	ER-II/KOL	89T Isolator replacement.	
169	80 MVAR LR SIPAT - RANCHI - II	02/02/2016	10:00	02/02/2016	13:00	ODB	ER-I	FOR TAKING OIL SAMPLING FROM B-PH BUSHING	NLDC
170	765kV Bus Reactor-1 at Sundargarh	03/02/2016	09:00	03/02/2016	17:00	ODB	ER-II/Odisha	Fire fighting testing/demonstration and attainging punch points.	NLDC
171	400kV Angul-Meramundali-1 at Angul	03/02/2016	08:00	03/02/2016	18:00	ODB	ER-II/Odisha	AMP Works	OPTCL
172	160MVA ICT-2 BAY at Baripada	03/02/2016	09:00	03/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
173	400kV Rourkela-Sundargarh#2 at Rourkela	03/02/2016	09:00 hrs	03/02/2016	18:00 hrs	ODB	ER-II/Odisha	AMP work	
174	132KV BANKA-BANKA-2(BSPTCL)	03/02/2016	11:00	03/02/2016	14:00	ODB	ER-I	FOR LINE BAY AMP WORK	BIHAR
175	400KV BANKA-BSF-2	03/02/2016	10:00	03/02/2016	14:00	ODB	ER-I	FOR BAY SWAPPING WORK	
176	TIE BAY OF 400KV RNC-RTPS & 315MVA ICT-2 AT RNC	03/02/2016	09:30	03/02/2016	16:30	ODB	ER-I	FOR AMP WORK	
177	220KV BUS COUPER BAY AT GAYA	03/02/2016	10:00	03/02/2016	17:00	ODB	ER-I	FOR AMP WORK	
178	765kV Gaya-Ballia Line	03/02/2016	10:00	03/02/2016	17:00	ODB	ER-I	For replacement of DAMAGED insulators(damaged by miscreants)	NLDC
179	220KV PTN-SIPARA-2	03/02/2016	10:00	03/02/2016	17:00	ODB	ER-I	AMP OF LINE BAY AT PTN END	BIHAR
180	400 KV PSL-BSF # IV TIE BAY	03/02/2016	09:30	03/02/2016	17:30	ODB	ER-I	AMP work	
								FOR CKT BREAKER MECHANISM OVERHAULING WORK(ICT WILL REMAIN	
181	220 kV ICT#3 & 4 Main bay AT PURNEA	03/02/2016	09:00	06/02/2016	17:00	ОСВ	ER-I	CHARGED THROUGH TBC)	BIHAR
182	400KV Maithon Right Bank-I Line	03/02/2016	09:00	05/02/2016	18:00	ODB	ER-II/KOL	Insulator Replacement work of various crossing	MPL
		,,					,	Insulator Replacement work of 400 KV M-RB LINE & M-D LINE, CSD re	
183	400KV MTN-KHG-I & II	03/02/2016	09:00	03/02/2016	18:00	ODB	ER-II/KOL	commissioning and Line CT amp	Subject to availability of Farakka - Malda - D/C
105		05/02/2010	05.00	05/02/2010	10.00	000			Subject to uvaliability of Farakka Malad D/C
184	400KV MTN-DURGAPUR-I & II	03/02/2016	12:30	03/02/2016	18:00	ODB	ER-II/KOL	Insulator Replacement work of 400 KV M-RB LINE & M-D LINE	Subject to availability of Farakka - Malda - D/C
104	400KV WITH-DORGAFOR-I & II	03/02/2010	12.50	03/02/2010	18.00	ODB	LK-II/KOL		Subject to availability of Falakka - Ivialua - D/C
4.05	220 KUD-UL-IL MALLE U	02/02/2016	00.00.00	04/02/2016	17.00.00	000		A second s	
185	220 KV Dalkhola - Malda - II	03/02/2016	09: 00 Hrs	04/02/2016	17:00 Hrs	ODB	ER-II/KOL	Annual maintenance work	14/2017 01
186	132 KV Purulia-Jamshedpur	03/02/2016	09:00	03/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
187	220 KV KANIHA - MERAMUNDALI - I	03/02/2016	09:00	05/02/2016	16:00	OCB	NTPC	AMP WORK	OPTCL
188	765kV Bus Reactor-2 at Sundargarh	04/02/2016	09:00	04/02/2016	17:00	ODB	ER-II/Odisha	Fire fighting testing/demonstration and attainging punch points.	NLDC
189	(220KV line -4) 209 Bay at Bolangir	04/02/2016	09:00	04/02/2016	18:00	ODB	ER-II/Odisha	AMP Work	
190	132KV BANKA-SABOUR-1(BSPTCL)	04/02/2016	11:00	04/02/2016	14:00	ODB	ER-I	FOR LINE BAY AMP WORK	BIHAR
191	100MVA ICT-2 AT ARA	04/02/2016	09:30	05/02/2016	17:00	OCB	ER-I	FOR OLTC OVERHAULING & AMP WORK	BIHAR
-									
192	765 KV Gaya-FTP Line	04/02/2016	10:00	04/02/2016	17:00	ODB	ER-I	FOR LINE BAY EXTENSION WORK OF 765KV GAYA-VARANASI	NLDC
-	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA	04/02/2016 04/02/2016	10:00 <i>10:00</i>		17:00 <i>17:00</i>	ODB ODB	ER-I ER-I	FOR LINE BAY EXTENSION WORK OF 765KV GAYA-VARANASI FOR AMP WORK (Power flow will be through Transfer Bus)	
192	765 KV Gaya-FTP Line			04/02/2016					NLDC
192	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA			04/02/2016					NLDC
192 193	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT	04/02/2016	10:00	04/02/2016 04/02/2016	17:00	ODB	ER-I	FOR AMP WORK (Power flow will be through Transfer Bus)	NLDC
192 193 194	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI	04/02/2016	10:00 10:00	04/02/2016 04/02/2016 04/02/2016	17:00 14:00	ODB ODB	ER-I ER-I	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK	NLDC BIHAR
192 193 194 195	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY	04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 10:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00	ODB ODB ODB ODB	ER-I ER-I ER-I	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END	NLDC BIHAR
192 193 194 195 196	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 10:00 09:30 10:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30 18:00	ODB ODB ODB ODB ODB	ER-I ER-I ER-I ER-I ER-I	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK	NLDC BIHAR BIHAR
192 193 194 195 196 197	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSL OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-I &II	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 10:00 09:30	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30	ODB ODB ODB ODB ODB ODB	ER-I ER-I ER-I ER-I	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE	NLDC BIHAR
192 193 194 195 196 197 198	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL-BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 &II 400 KV MPL-RANCHI-1 &II	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 09:30 10:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30 18:00 14:00	ODB ODB ODB ODB ODB	ER-I ER-I ER-I ER-I ER-I ER-II/KOL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE	NLDC BIHAR BIHAR DVC
192 193 194 195 196 197 198 199 200	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-I &II 400 KV MPL-RANCH-I &II 315 MVA ICT-II Subhasgram	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00Hrs	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS	ODB ODB ODB ODB ODB ODB ODB ODB	ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification	NLDC BIHAR BIHAR DVC WPL WBSETCL
192           193           194           195           196           197           198           199           200           201	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-I & III 400 KV MPL-RANCHI-I & III 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB)	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 09:30 10:00 09:00 09:00 09:00Hrs 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00	ODB ODB ODB ODB ODB ODB ODB ODB ODB OCB	ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification CB Overhauling	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL
192           193           194           195           196           197           198           199           200           201           202	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 &II 400 KV MPL-RANCHI-1 &II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 09:30 10:00 09:00 09:00 09:00Hrs 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00	ODB ODB ODB ODB ODB ODB ODB ODB OCB OCB	ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE CB Overhauling insulator replacement	NLDC BIHAR BIHAR DVC WPL WBSETCL
192           193           194           195           196           197           198           199           200           201           202           203	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL-BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCHI-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV M/C Jamshedpur-BTPS         400 KV Kh - Barh -2	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 06/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00 17:30	ODB           OCB           ODB           OCB           ODB           OCB           ODB           OCB           ODB           OCB           ODB	ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL NTPC	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE . AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL
192           193           194           195           196           197           198           199           200           201           202           203           204	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL - BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCH-1 &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV D/C Jamshedpur-BTPS         400 KV Kh- Barh -2 <b>160MVA ICT-II Malda</b>	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 09:30 10:00 09:00 09:00 09:00Hrs 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	17:00 14:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00 17:30 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB LINE . AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC
192           193           194           195           196           197           198           200           201           202           203           204           205	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL - BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCH-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV Kh - Barh -2         160MVA ICT-II Malda         765kV BR I Main Bay (712) at Angul	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:30 17:30 17:30 17:30 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/OL ER-II/OL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL
192           193           194           195           196           197           198           199           200           201           202           203           204           205           206	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 20KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 &II 400 KV MPL-RANCHI-I &II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 <b>160MVA ICT-II Malda</b> 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00 17:30 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COIisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification CB Overhauling Insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC
192           193           194           195           196           197           198           199           200           201           202           203           204           205	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL - BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCH-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV Kh - Barh -2         160MVA ICT-II Malda         765kV BR I Main Bay (712) at Angul	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:30 17:30 17:30 17:30 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/OL ER-II/OL	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC
192           193           194           195           196           197           198           200           201           202           203           204           205           206	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 &II 400 KV MPL-RANCHI-I &II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 160MVA ICT-II Malda 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00 17:30 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COIisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC
192           193           194           195           196           197           198           200           201           202           203           204           205           206	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 &II 400 KV MPL-RANCHI-I &II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 160MVA ICT-II Malda 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00 17:30 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COIisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling Insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC
192           193           194           195           196           197           198           200           201           202           203           204           205           206           207	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 20KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 & II 400 KV MTN-DHANBAD-1 & II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 160MVA ICT-II Malda 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada 63 Mvar Bus Reactor Main Bay (416) at Jeypore	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:30 17:00 17:00 17:00 17:00 17:30	ODB           ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COL ER-II/COL ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE . AMP WORK & Oil seapage rectification CB Overhauling Insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Iharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC
192           193           194           195           196           197           198           200           201           202           203           204           205           206	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 220KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 &II 400 KV MPL-RANCHI-I &II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 160MVA ICT-II Malda 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 18:00 17:30 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COIisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261)	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC
192 193 195 195 196 197 198 200 201 200 201 202 203 204 205 206 207	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 20KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 & II 400 KV MTN-DHANBAD-1 & II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 160MVA ICT-II Malda 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada 63 Mvar Bus Reactor Main Bay (416) at Jeypore	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:30 17:00 17:00 17:00 17:00 17:30	ODB           ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COL ER-II/COL ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-J261) Construction works-Both lines required simultaneously- for crossing of 765KV	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC
192 193 195 195 196 197 198 200 201 200 201 202 203 204 205 206 207	765 KV Gaya-FTP Line 220KV 500MVA ICT-I BAY AT GAYA TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT LAKHISARAI 20KV PTN-FATUHA 400 KV PSL - BSF # IV MAIN BAY TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN 220 KV MTN-DHANBAD-1 & II 400 KV MTN-DHANBAD-1 & II 315 MVA ICT-II Subhasgram 132 KV BRP-WB-I (CB) 220 KV D/C Jamshedpur-BTPS 400 KV Kh - Barh -2 160MVA ICT-II Malda 765kV BR I Main Bay (712) at Angul 220KV SIDE OF 315MVA ICT-1 BAY at Baripada 63 Mvar Bus Reactor Main Bay (416) at Jeypore	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:30 17:00 17:00 17:00 17:00 17:30	ODB           ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COL ER-II/COL ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling Insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC
192 193 195 195 196 197 198 200 201 200 201 202 203 204 205 206 207	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL - BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCHI-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV Kh - Barh -2         100 KV Kh - Barh -2         100 KV Kh - Barh -2         200 KV Kh - Barh -2         100 KV SIDE OF 315MVA ICT-1 BAY at Baripada         63 Mvar Bus Reactor Main Bay (416) at Jeypore         132KV D/C Budhipadar-Tarkera line by Jharsyguda TLC	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 00 00 00 00 00 00 00 00 00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:30 17:00 17:00 17:00 17:30 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COL ER-II/Odisha ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-J261) Construction works-Both lines required simultaneously- for crossing of 765KV	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC NLDC
192 193 195 195 196 197 198 200 201 200 201 202 203 204 205 206 207	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL-BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCHI-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV D/C Jamshedpur-BTPS         400 KV Kh - Barh -2         160MVA ICT-II Malda         765kV BR I Main Bay (712) at Angul         220 KV D/C DF 315MVA ICT-1 BAY at Baripada         63 Mvar Bus Reactor Main Bay (416) at Jeypore         132KV D/C Budhipadar-Tarkera line by Jharsyguda TLC	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00 09:00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:30 17:00 17:00 17:00 17:00 17:30	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COL ER-II/COL ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE. AMP WORK & Oil seapage rectification CB Overhauling Insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC
192           193           195           196           197           198           200           201           202           203           204           205           206           207           208	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL - BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCHI-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV Kh - Barh -2         100 KV Kh - Barh -2         100 KV Kh - Barh -2         200 KV Kh - Barh -2         100 KV SIDE OF 315MVA ICT-1 BAY at Baripada         63 Mvar Bus Reactor Main Bay (416) at Jeypore         132KV D/C Budhipadar-Tarkera line by Jharsyguda TLC	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 00 00 00 00 00 00 00 00 00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016 05/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:30 17:00 17:00 17:00 17:30 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/COL ER-II/Odisha ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE . AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261)	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC NLDC
192           193           194           195           196           197           198           200           201           202           203           204           205           206           207           208           209           210	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL-BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCHI-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV M/C Jamshedpur-BTPS         400 KV Kh - Barh -2 <b>160MVA ICT-II Malda</b> 765kV BR I Main Bay (712) at Angul         220KV D/C Budhipadar-Tarkera line by Jharsyguda TLC         132KV S/C Kuchinda-Rajgangpur line by Jharsyguda TLC	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 00 00 00 00 00 00 00 00 00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016 06/02/2016 06/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:00 17:00 17:00 17:00 17:00 17:30 17:00 17:30	ODB           ODB	ER-I ER-I ER-I ER-I ER-I ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/Odisha ER-II/Odisha ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification CB Overhauling Insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) AMP work	NLDC BIHAR BIHAR DVC WBSETCL WBSETCL DVC OPTCL OPTCL
192           193           194           195           196           197           198           200           201           203           204           205           206           207           208           209           210           211	765 KV Gaya-FTP Line         220KV 500MVA ICT-I BAY AT GAYA         TIE BAY OF 400KV LAKHISARAI-BSF-1 & 200MVA ICT-1 AT         LAKHISARAI         220KV PTN-FATUHA         400 KV PSL-BSF # IV MAIN BAY         TCSC & FSC OF 400KV NPRN-MUZ-1 AT NPRN         220 KV MTN-DHANBAD-1 &II         400 KV MPL-RANCHI-I &II         315 MVA ICT-II Subhasgram         132 KV BRP-WB-I (CB)         220 KV D/C Jamshedpur-BTPS         400 KV Kh - Barh -2         160MVA ICT-II Malda         765kV BR I Main Bay (712) at Angul         220 KV D/C DF 315MVA ICT-1 BAY at Baripada         63 Mvar Bus Reactor Main Bay (416) at Jeypore         132KV D/C Budhipadar-Tarkera line by Jharsyguda TLC	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016	10:00 10:00 10:00 09:30 10:00 09:00 00 00 00 00 00 00 00 00 00	04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 04/02/2016 05/02/2016 05/02/2016 05/02/2016 06/02/2016	17:00 14:00 17:00 17:30 18:00 14:00 15:00 17:30 HRS 17:00 17:00 17:00 17:00 17:00 17:00 17:00	ODB	ER-I ER-I ER-I ER-I ER-I/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/KOL ER-II/Cdisha ER-II/Odisha ER-II/Odisha ER-II/Odisha	FOR AMP WORK (Power flow will be through Transfer Bus) FOR AMP WORK AMP OF LINE BAY AT PTN END AMP work FOR AMP WORK Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE Insulator Replacement work of 400 KV M-RB 1 LINE AMP WORK & Oil seapage rectification CB Overhauling insulator replacement PM works & relay testing AMP AMP Works ANNUAL MAINTENANCE For AMP works Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261) Construction works-Both lines required simultaneously- for crossing of 765KV Angul-Jharsuguda line(222/0-223/0) to OPTCL lines span of 132KV D/C Budhipadar-Tarkera line( at 248-249) & 132KV S/C Kuchinda-Rajgangpur line (at 1260-1261)	NLDC BIHAR BIHAR DVC MPL WBSETCL WBSETCL DVC NLDC NLDC

213	220KV 315MVA ICT-II BAY AT GAYA	05/02/2016	10:00	05/02/2016	17:00	ODB	ER-I	FOR AMP WORK (Power flow will be through Transfer Bus)	BIHAR
213	220KV ARA-KHAGAUL-1	05/02/2010	10:00	05/02/2010	17:00	ODB	ER-I	AMP OF LINE BAY AT KHAGAUL END	BIHAR
215	160 MVA ICT-2 AT PURNEA	05/02/2016	09:00	06/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
215	220KV MTN-DUMKA-I&II	05/02/2016	09:00	05/02/2016	15:00	ODB	ER-II/KOL	Insulator Replacement work of 400 KV M-RB_LINE , S/S AMP WORK	JHARKHAND
210		05/02/2016	09:00 09:00 Hrs	05/02/2016	17:00 Hrs	ODB	ER-II/KOL		JHARKHAND
217	220 KV Dalkhola - Siliguri - I 315MVAR ICT-II (404 Bay) New Siliguri	05/02/2016	9.00 hrs	05/02/2016	17.00 Hrs 17.00 hrs	ODB	ER-II/KOL	Annual maintenance work AMP of NSLG	
218	132KV Siliguri-WBSETCL-2	05/02/2016	06.00 Hrs	07/02/2016	17.00 Hrs	OCB	ER-II/KOL	GIS WORK	WBSETCL
220	220 KV Jamshedpur- PTPS	05/02/2016	09:00	05/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
221	132KV Malda-WBSETCL-II	05/02/2016	09:00	05/02/2016	17:00	ODB	ER-II/KOL	89T Isolator replacement.	
222	765kV Bus Reactor -1 Main Bay (704) at Sundargarh	06/02/2016	09:00	06/02/2016	17:00	ODB	ER-II/Odisha		NLDC
223	(220KV line-1 ) 203 Bay at Bolangir	06/02/2016	09:00	06/02/2016	18:00	ODB	ER-II/Odisha	AMP Work	
224	765 KV Gaya-FTP Line	06/02/2016	10:00	06/02/2016	17:00	ODB	ER-I		NLDC
225	220KV ARA-KHAGAUL-2	06/02/2016	10:00	06/02/2016	17:00	ODB	ER-I	AMP OF LINE BAY AT KHAGAUL END	BIHAR
226	765/400KV, 1500 MVA ICT MAIN BAY(765KV SIDE)	06/02/2016	09:30	06/02/2016	17:30	ODB	ER-I	AMP work(DURING THE S/D 765KV B/R WILL NOT BE IN SERVICE)	NLDC
227	220KV BUS-1 AT NPRN	06/02/2016	10:00	06/02/2016	18:00	ODB	ER-I	FOR RECTIFICATION OF ISOLATOR HEATING PROBLEM	BIHAR
228	400KV Maithon Right Bank-II Line	06/02/2016	09:00	08/02/2016	18:00	ODB	ER-II/KOL	Insulator Replacement work of various crossing, Line Bay AMP	MPL
								Insulator Replacement work of 400 KV M-RB LINE & M-D LINE, CSD re	
229	400KV MTN-KHG-I & II WITH LR	06/02/2016	09:00	06/02/2016	18:00	ODB	ER-II/KOL	commissioning and Line CT amp	Subject to availability of Farakka - Malda - D/C
230	400KV MTN-DURGAPUR-I & II	06/02/2016	12:30	06/02/2016	18:00	ODB	ER-II/KOL	Insulator Replacement work of 400 KV M-RB LINE & M-D LINE	Subject to availability of Farakka - Malda - D/C
231	315 MVA ICT-IV Subhasgram	06/02/2016	09:00Hrs	06/02/2016	17:30Hrs	ODB	ER-II/KOL	AMP WORK	WBSETCL
232	220 KV Dalkhola - Siliguri - II	06/02/2016	09: 00 Hrs	06/02/2016	17:00 Hrs	ODB	ER-II/KOL	Annual maintenance work	
233	TALA-I MAIN BAY (409) New Siliguri	06/02/2016	9.00 hrs	06/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
234	132 KV Jamshedpur- Chandil	06/02/2016	09:00	06/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	JHARKHAND
235	132 KV Jamshedpur- TGS	06/02/2016	09:00	06/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	JHARKHAND
236	132 KV Chandil- Gamaria	06/02/2016	09:00	06/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	JHARKHAND
237	220 KV MTN-DHANBAD-I &II	07/02/2016	09:00	07/02/2016	14:00	ODB	ER-II/KOL	Insulator Replacement work of 400 KV M-RB 2 LINE , S/S AMP WORK	DVC
238	400 KV MPL-RANCHI-I &II	07/02/2016	09:00	07/02/2016	15:00	ODB	ER-II/KOL	Insulator Replacement work of 400 KV M-RB LINE .	MPL
239	132 KV AAPL-Ramchandrapur	07/02/2016	09:00	07/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	JHARKHAND
240	765kV B/R#2 - ICT#2 Tie Bay (705) at Sundargarh	08/02/2016	09:00	08/02/2016	17:00	ODB	ER-II/Odisha	AMP Work	NLDC
241	315MVA ICT-2 AT RNC	08/02/2016	09:30	08/02/2016	16:30	ODB	ER-I	FOR AMP WORK	JHARKHAND
242	TIE BAY OF 765KV B/R-2 AT NRNC	08/02/2016	08:00	08/02/2016	18:00	ODB	ER-I	FOR AMP WORK	NLDC
243	315MVA ICT-2 AT PTN	08/02/2016	09:00	08/02/2016	13:00	ODB	ER-I	BALANCE AMP WORK	BIHAR
								AMP work(DURING THE S/D THERE WILL BE NOT ANY POWER FLOW IN 765KV	
244	TIE BAY OF 765/400KV 1500 MVA ICT (765KV SIDE)	08/02/2016	09:30	08/02/2016	17:30	ODB	ER-I	SSRM-FATEHPUR LINE)	NLDC
								FOR TESTING & INTEGRATION OF HVDC CONTROLLER(CCP) IN UPGRADED SCADA	NLDC/ WHETHER AC BYPASS WILL REMAIN IN
245	HVDC SYSTEM,SSRM	08/02/2016	09:00	15/02/2016	21:00	ODB	ER-I	SYSTEM	SERVICE?
246	220KV BUS-2 AT NPRN	08/02/2016	10:00	08/02/2016	18:00	ODB	ER-I	FOR RECTIFICATION OF ISOLATOR HEATING PROBLEM	BIHAR
247	160 MVA ICT-2 AT PURNEA	08/02/2016	09:00	08/02/2016	17:00	ODB	ER-I	FOR RECTIFICATION OF ISOLATOR HEATING PROBLEM	BIHAR
248	220KV MTN-DUMKA-I&II	08/02/2016	09:00	08/02/2016	15:00	ODB	ER-II/KOL	Insulator Replacement work of 400 KV M-RB LINE .	JHARKHAND
								Removal of pipe bus required for commencing the retrofitting of 41752 BHEL CB	
249	400KV Maithon Gaya-I line	08/02/2016	09:00	08/02/2016	18:00	ODB	ER-II/KOL	with Alstom CB	
250	220 KV SUBHASGRAM- CESC CKT-1	08/02/2016	09:00Hrs	08/02/2016	17:30Hrs	ODB	ER-II/KOL	AMP WORK	WBSETCL
251	220 KV BC DALKHOLA	08/02/2016	09: 00 Hrs	08/02/2016	17:00 Hrs	ODB	ER-II/KOL	Annual maintenance work	
252	132 KV BRP-WB-II (CB)	08/02/2016	09:00	10/02/2016	17:00	OCB	ER-II/KOL	CB Overhauling	WBSETCL
253	RANGPO -II(413 BAY) New Siliguri	08/02/2016	9.00 hrs	08/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
254	50MVA ICT-IV Malda	08/02/2016	09:00	08/02/2016	17:00	ODB	ER-II/KOL	AMP	
255	220KV ARA-SSRM-1	08/02/2016	10:00	08/02/2016	14:00	ODB	ER-I	FOR AMP WORK	BIHAR
256	765kV LR I Main Bay (706R) at Angul	09/02/2016	09:00	09/02/2016	17:00	ODB	ER-II/Odisha	AMP Works	NLDC
257	220KV SIDE OF 315MVA ICT-2 BAY at Baripada	09/02/2016	09:00	09/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	
258	400 KV Indravati-rengali line at Indravati	09/02/2016	09:00	09/02/2016	18:00Hrs	ODB	ER-II/Odisha	Testing of 50MVAR L/R in Rengali Line before charging.	
259	400KV MAIN BUS-1 AT BANKA	09/02/2016	10:00	09/02/2016	17:00	ODB	ER-I	FOR LINE BAY AMP WORK	
								FOR AMP WORK OF 220KV BAY AND REPLACEMENT OF 220KV BUS-2 ISOLATOR	
260	315MVA ICT-3 AT BSF	09/02/2016	08:00	09/02/2016	18:00	ODB	ER-I	ARM	BIHAR
261	400KV BUS-1 AT JSR	09/02/2016	09:30	09/02/2016	17:30	ODB	ER-I	FOR AMP WORK	
262	TIE BAY OF 80MVAR B/R-1 & FUTURE AT RNC	09/02/2016	09:30	09/02/2016	16:30	ODB	ER-I	FOR AMP WORK	
263	MAIN BAY OF 765KV NRNC-DHARAMJAIGARH-2 AT NRNC	09/02/2016	08:00	09/02/2016	18:00	ODB	ER-I	FOR AMP WORK	
264	MAIN BAY OF 200MVA ICT-1 AT LAKHISARAI	09/02/2016	10:00	09/02/2016	14:00	ODB	ER-I	FOR AMP WORK	
265	315MVA ICT-1 AT PTN	09/02/2016	09:00	09/02/2016	13:00	ODB	ER-I	BALANCE AMP WORK	BIHAR
266	MAIN BAY OF 765 KV SSRM - FTP LINE	09/02/2016	09:30	09/02/2016	17:30	ODB	ER-I	AMP work	
267	125MVAR B/R-2 AT NPRN	09/02/2016	10:00	09/02/2016	18:00	ODB	ER-I	REPLACEMENT OF LA WITH 390KA LA	
	· · ·	, . ,====		, . ,====					

			1	1				For Dismantling of Transfer Bus which is above TBC & BSEB- 2 bay	
268	132 KV PRN-PRN(BSPTCL)#2 LINE	09/02/2016	09:00	09/02/2016	17:00	ODB	ER-I		BIHAR
269	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	09/02/2016	09:00	09/02/2016	11:00	ODB	ER-I		BIHAR
270	PURNEA-3 MAIN BAY (416 BAY) New Siliguri	09/02/2016	9.00 hrs	09/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
271	40452 (Bidhan Nagar-2 Main Bay ) Durgapur	09/02/2016	09:00	09/02/2016	18:00	ODB	ER-II/KOL	AMP works	
272	400 KV D/C Andal - Jamshedpur	09/02/2016	09:00	13/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
273	220 KV MTPS- DTPS	09/02/2016	09:00	09/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
274	220 KV MTPS- DTPS	09/02/2016	09:00	09/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
275	400 KV D/C Andal- Raghunathpur	09/02/2016	09:00	09/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
276	220 KV MTPS- Kalhaneswari	09/02/2016	09:00	09/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
277	400KV BUS reactor 80 Mvar	09/02/2016	09:30	09/02/2016	17:00	OCB	NTPC	PM Job of Bus Reactor, CTs, LAs, Isolator, CB of Main & Tie Bay	
278	220KV ARA-PUSAULI(BSPTCL)	09/02/2016	10:00	09/02/2016	14:00	ODB	ER-I	FOR AMP WORK	BIHAR
279	765kV ICT -2 Main Bay (706) at Sundargarh	10/02/2016	09:00	10/03/2016	17:00	ODB	ER-II/Odisha	AMP Work	NLDC
280	765kV Bus-I at Angul	10/02/2016	09:00	10/02/2016	18:00	ODB	ER-II/Odisha	AMP Works	NLDC
281	220KV TBC BAY at Baripada	10/02/2016	09:00	10/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	
282	63 Mvar Bus Reactor-ICT II Tie Bay (417) at Jeypore	10/02/2016	09:00	10/02/2016	17:30	ODB	ER-II/Odisha	For AMP works	
								Removal of PIR in Main Bay CB (41652). The shutdown required due clearance	
283	400kV Rourkela-Chaibasa#1 at Rourkela	10/02/2016	09:00 hrs	12/02/2016	18:00 hrs	ODB	ER-II/Odisha	issue.	
284	400KV MAIN BUS-2 AT BANKA	10/02/2016	10:00	10/02/2016	17:00	ODB	ER-I	FOR LINE BAY AMP WORK	
285	MAIN BAY OF 80MVAR B/R-1 AT RNC	10/02/2016	09:30	10/02/2016	16:30	ODB	ER-I	FOR AMP WORK	
286	MAIN BAY OF 765KV B/R-2 AT NRNC	10/02/2016	08:00	10/02/2016	18:00	ODB	ER-I	FOR AMP WORK	NU. D.C.
287	765 KV 330 MVAR BUS REACTOR AT SSRM	10/02/2016	09:30	10/02/2016	17:30	ODB	ER-I	BAY AMP work	NLDC
288	MAIN BAY OF 400KV NPRN-MALDA-1 AT NPRN	10/02/2016	10:00	10/02/2016	18:00	ODB	ER-I	FOR BAY AMP WORK	
200		10/02/2016	00.00	12/02/2016	47.00	0.00	50.1	FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	2000
289	132 KV PRN-PRN(BSPTCL)#2 LINE	10/02/2016	09:00	12/02/2016	17:00	ODB	ER-I	FOUNDATIONS AMP WORK	BIHAR
290 291	220 KV SUBHASGRAM- KLC Line 400 KV Malda-Purnea -II	10/02/2016 10/02/2016	09:00Hrs 09: 00 Hrs	10/02/2016 10/02/2016	17:30Hrs 17:00 Hrs	ODB ODB	ER-II/KOL ER-II/KOL		WBSETCL
291	400 KV Malua-Pulliea -II	10/02/2010	09. 00 HIS	10/02/2010	17.00 HIS	UDB	ER-II/KUL	Insulator replacement work of Line	
292	40552 (Bidhan Nagar Line-2 Bus Reactor Tie Bay ) Durgapur	10/02/2016	09:00	10/02/2016	18:00	ODB	ER-II/KOL	AMP works	
292	220 KV MPTS- CTPS	10/02/2016	09:00	10/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	DVC
293	220 KV MIPIS-CIPS 220 KV DTPS- Bishnupur	10/02/2016	09:00	10/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
294	132 KV Santaldi- Bishnupur	10/02/2016	09:00	10/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
296	220 KV KANIHA - MERAMUNDALI - I	10/02/2016	09:00	12/02/2016	16:00	OCB	NTPC	AMP WORK	OPTCL
250		10/02/2010	05.00	12/02/2010	10.00	000	NH C		
297	132 KV D/C Satgachia - Kalna T/L of WBSETCL (T.No. 68-69)	10/02/2016	6.00 hrs	10/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
298	400kV D/C Farakka - Kahalgaon T/L Ckt-I&II and III&IV	10/02/2016	6.00 hrs	10/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	Subject to availability of Farakka - Malda - D/C
299	220KV MLD DLK-I	10/02/2016	09:00	10/02/2016	17:00	ODB	ER-II/KOL	AMP	
300	765kV Bus-II at Angul	11/02/2016	09:00	11/02/2016	18:00	ODB	ER-II/Odisha	AMP Works	NLDC
301	MAIN BAY OF 400KV LAKHISARAI-KHLG-2 AT LAKHISARAI	11/02/2016	10:00	11/02/2016	14:00	ODB	ER-I	FOR AMP WORK	
302	220KV PTN-KHAGAUL	11/02/2016	09:00	11/02/2016	17:00	ODB	ER-I	AMP WORK OF LINE BAY	BIHAR
	TIE BAY OF 400KV NPRN-MALDA-1 & 125MVAR B/R-2 AT								
303	MALDA	11/02/2016	10:00	11/02/2016	18:00	ODB	ER-I	FOR BAY AMP WORK	
304	400KV Malda-Purnea-I	11/02/2016	09: 00 Hrs	11/02/2016	17:00 Hrs	ODB	ER-II/KOL	Insulator replacement work of Line	
305	132 KV BRP-WB-II	11/02/2016	09:00	11/02/2016	17:00	ODB	ER-II/KOL	AMP and base insulator of LA to be replaced	WBSETCL
306	TIE BAY OF PURNEA-3 AND BR-I (417 BAY) New Siliguri	11/02/2016	9.00 hrs	11/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
307	41952 (Maithon Line-2_ Main Bay ) Durgapur	11/02/2016	09:00	11/02/2016	18:00	ODB	ER-II/KOL	AMP works	
308	220 KV Arambag- Santaldi	11/02/2016	09:00	11/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
309	220 KV Santaldi- Bishnupur	11/02/2016	09:00	11/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
310	400 KV PPSP- Arambag	11/02/2016	09:00	11/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
311	400 KV Kh-Lakhisarai-1	11/02/2016	09:00	11/02/2016	19:30	ODB	NTPC	PM works & relay testing	
312	400KV/220KV Auto Transformer	11/02/2016	09:00	11/02/2016	17:30	ODB	NTPC	Relay & Bay CT testing	<u> </u>
242		11/02/2015	6 00 1	44/02/0010	17.00	000	50 11/1/6		
313	400kV D/C Farakka - Kahalgaon T/L Ckt-I&II and III&IV	11/02/2016	6.00 hrs	11/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	Subject to availability of Farakka - Malda - D/C
314	765kV Dharamjaygarh Line-1 Tie Bay (714) at Sundargarh	12/02/2016	09:00	12/02/2016	17:00	ODB	ER-II/Odisha	AMP Work	NLDC
315	765kV ICT-4 at Angul	12/02/2016	09:00	12/02/2016	15:00	ODB	ER-II/Odisha	AMP Works	NLDC
316	132KV SIDE OF 160MVA ICT-1 at Baripada	12/02/2016	09:00	12/02/2016	17:00	ODB	ER-II/Odisha		OPTCL
317	MAIN BAY OF 125MVAR B/R-2 AT RNC	12/02/2016	09:30	12/02/2016	16:30	ODB ODB	ER-I	FOR AMP WORK	
318	MAIN BAY OF 400KV NPRN-MALDA-2 AT NPRN	12/02/2016	10:00 09:00	12/02/2016	18:00 17:00	ODB	ER-I	FOR BAY AMP WORK	DVC
319	220 KV MTN-DHANBAD-I	12/02/2016	09:00 09:00Hrs	12/02/2016	17:00 17:30Hrs	ODB ODB	ER-II/KOL ER-II/KOL	AMP Works.	DVC
320 321	400 KV SUBHASGRAM Bus -1 B/R-II MAI BAY (421 BAY) New Siliguri	12/02/2016 12/02/2016	9.00 hrs	12/02/2016 12/02/2016	17:30Hrs 17.00 hrs	ODB	ER-II/KOL	AMP WORK AMP of NSLG	WBSETCL
									+
322	TALA-III LINE New Siliguri	12/02/2016	9.00 hrs	12/02/2016	17.00 hrs	OCB	ER-II/KOL	Conductor repairing	

			1					1	
323	42052 (Maithon Line-2_ Future bay-1 Tie Bay ) Durgapur	12/02/2016	09:00	12/02/2016	18:00	ODB	ER-II/KOL	AMP works	
324	220 KV Bankura- Jamshedpur	12/02/2016	09:00	12/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	WBSETCL
	132 KV Chandil- Jamshedpur	12/02/2016	09:00	12/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	JHARKHAND
326	220KV MLD DLK-II	12/02/2016	09:00	12/02/2016	17:00	ODB	ER-II/KOL	AMP	
								Construction works- Crossing of 765KV Angul-Jharsuguda line(225/0-226/0) to	
327	220KV D/C Budhipadar- Tarkera line by Jharsyguda TLC	13/02/2016	08:00	13/02/2016	17:00	ODB	ER-II/Odisha	OPTCL lines span (82-83)	OPTCL
	TIE BAY OF 400KV NPRN-MALDA-2 & 125MVAR B/R-1 AT								
328	NPRN	13/02/2016	10:00	13/02/2016	18:00	ODB	ER-I	FOR BAY AMP WORK	
								FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
329	132 KV PRN-PRN(BSPTCL)#1 LINE	13/02/2016	09:00	13/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
						-		FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
330	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	13/02/2016	09:00	13/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
	220 KV MTN-DHANBAD-II	13/02/2016	09:00	13/02/2016	17:00	ODB	ER-II/KOL	AMP Works.	DVC
332	PURNEA - I MAIN BAY (422 BAY) New Siliguri	13/02/2016	9.00 hrs	13/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	510
	42152 (Future bay-1 Main Bay ) Durgapur	13/02/2016	09:00	13/02/2016	18:00	ODB	ER-II/KOL	AMP works	
	132 KV Chandil- Jamshedpur	13/02/2010	09:00	13/02/2010	18:00	ODB	ER-II/KOL	insulator replacement	JHARKHAND
	132 KV Chandil- Janisheupur 132 KV Chandil- TGS	13/02/2016	09:00	13/02/2016	18:00	ODB	ER-II/KOL		JHARKHAND
					18:00	ODB		insulator replacement	
	132Kv Chandil- Gamaria	13/02/2016	09:00	13/02/2016		-	ER-II/KOL	insulator replacement	JHARKHAND
	400 KV Jamshedpur- Rourkela	13/02/2016	09:00	13/02/2016	18:00	ODB	ER-II/KOL	insulator replacement	
	132kv BIRP-BIRP(PG)#1	14/02/2016	05:00	14/02/2016	15:00	ODB	WBSETCL	WINTER MAINTENANCE WORK	
339	400kv DGP:315MVA TR#1	14/02/2016	05:00	14/02/2016	15:00	ODB	WBSETCL	WINTER MAINTENANCE WORK	WIDEFTCI (Completed name intermedian For
									WBSETCL/Completed power interruprion. For
									replacement of Main Bus Isolator of BRP-WB-I.
									After normalization subject feeder will be
	132 KV MAIN BUS BIRPARA	14/02/2016	07:00	14/02/2016	09:00	ODB	ER-II/KOL	For opening Bus isolator jumper of 132 KV BRP-WB-I	charged throu TBC.
341	400kV Rourkela-Talcher#1 at Rourkela	15/02/2016	09:00 hrs	15/02/2016	17:30 hrs	ODB	ER-II/Odisha	Replacement of broken disc insulators in Location No 322.	
								Stringing of OPGW on 400 kV S/C Bolangir - Jaypore line at Indravati section &	
	Non-Auto mode of Auto-Reclose Relay of 400KV S/C Bolangir-							Bhawani patna section(Replacement of the existing GI Earth wire-7/3.66 with	
342	Jeypore Transmission Line	15/02/2016	09:00	29/02/2016	17:00	ODB	ER-II/Odisha	new OPGW)	
343	765kV Dharamjaygarh Line-1 Main Bay (715) at Sundargarh	15/02/2016	09:00	15/02/2016	17:00	ODB	ER-II/Odisha	AMP Work	NLDC
344	Main Bay(401) of Indravati-Jeypore Line at Indravati	15/02/2016	08:00	15/02/2016	18:00Hrs	ODB	ER-II/Odisha	AMP ACTIVITY	
								For changing ICT-I combination form Unit-I, II, III to Unit-I, II and IV for oil	
345	ICT-I (3x 105 MVA) at Jeypore	15/02/2016	10:30	15/02/2016	11:30	ODB	ER-II/Odisha	replacement works at Unit-III	OPTCL
346	125MVAR B/R-2 AT RNC	15/02/2016	09:30	15/02/2016	16:30	ODB	ER-I	FOR AMP WORK	
347	500MVA 400KV ICT-I AT GAYA	15/02/2016	10:00	15/02/2016	17:00	ODB	ER-I	FOR INSTALLATION OF OTI (NTAMC) & AMP WORK	BIHAR
348	765 KV BUS - II AT SSRM	15/02/2016	09:30	15/02/2016	17:30	ODB	ER-I	AMP work	NLDC
								FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
349	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	15/02/2016	09:00	17/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
350	220KV Maithon - Kalyaneshwari-1 line	15/02/2016	09:00	15/02/2016	17:00	ODB	ER-II/KOL	Alignment adjustment of line isolator	DVC
	TIE BAY OF PURNEA-I & BNG-3 (423 BAY) New Siliguri	15/02/2016	9.00 hrs	15/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
	42153 (Future bay-2 Tie Bay ) Durgapur	15/02/2016	09:00	15/02/2016	18:00	ODB	ER-II/KOL	AMP works	
	132 ky Jeerat - Kasba Tr line of WBSETCL	15/02/2016	6.00 hrs	15/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
	132 kV Jeerat - Kasba Tr line of WBSETCL	15/02/2016	6.00 hrs	15/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
	220 kV D/C Farakka - Lalmatia T/L	15/02/2016	6.00 hrs	15/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	JHARKHAND
555		10/02/2010	5.00 113	10/02/2010	11.00113	500			
356	400 KV D/C FKK KAHALGAON T/L CKT-I&II	15/02/2016	6.00 hrs	15/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	Subject to availability of Farakka - Malda - D/C
350	132 kv Lalmatia - Sahebganj T/L	15/02/2016	6.00 hrs	15/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	JHARKHAND
	220 KV JODA - RAMACHANDRAOUR				17:00hrs		PKTCL	400 KV KHARAGPUR - CHAIBASA D/C LINE STRINGING	OPTCL/JHARKHANDA
358 359	400kV Angul-Meramundali-2 at Angul	15/02/2016 16/02/2016	08:00 09:00	15/02/2016 16/02/2016	17:00	ODB ODB	ER-II/Odisha	AMP Works	OPTCL/JHARKHANDA
360	132KV SIDE OF 160MVA ICT-2 at Baripada	16/02/2016	09:00	16/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
361	Gajuwaka-I FSC at Jeypore	16/02/2016	09:00	16/02/2016	17:00	ODB	ER-II/Odisha	For AMP works	
			1			1			
							L	FOR SHIFTING OF 400KV KAHALGAON- BANKA LINE FROM STAGE -1 TO STAGE -2	
362	400 KV FARAKKA - KAHALGAON-1 & 2	16/02/2016	09:00	19/02/2016	18:00	OCB	ER-I	SIDE UNDER BUS SPLIT SCHEME AT NTPC, KAHALGAON END.	Subject to availability of Farakka - Malda - D/C
								S/D FOR BUS SPLITTING WORK.HALF BUS -1(TOWARDS CVT) WILL BE CHARGED	
								ON 16.02.1 6AT 18:00 HRS. AGAIN CHARGED HALF BUS -1 WILL BE TAKEN	
			1			1		UNDER S/D ON 25.02.16 FROM 09:00 HRS. TO 18:00 HRS. FOR	
	400KV MAIN BUS-1 AT BSF	16/02/2016	08:00	25/02/2016	18:00	OCB	ER-I	INTERCONNECTION OF SPLITED AND CRATED BUS -3.	
	400KV BUS-2 AT JSR	16/02/2016	09:30	16/02/2016	17:30	ODB	ER-I	FOR AMP WORK	
365	220KV BUS-I AT GAYA S/S	16/02/2016	10:00	16/02/2016	17:00	ODB	ER-I	For Isolator Modification Work	BIHAR
	TIE BAY OF 400KV LAKHISARAI-KHLG-2 & 80MVAR B/R AT								
366	LAKHISARAI	16/02/2016	10:00	16/02/2016	14:00	ODB	ER-I	FOR AMP WORK	
367	220KV Maithon - Kalyaneshwari-2 line	16/02/2016	09:00	16/02/2016	17:00	ODB	ER-II/KOL	Alignment adjustment of line isolatorand Insulator replacement	DVC
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368	42252( Future bay-2 Main Bay) Durgapur	16/02/2016	09:00	16/02/2016	18:00	ODB	ER-II/KOL	AMP works	
500	132 KV D/C Satgachia - Dhatrigaram T/L of WBSETCL (T.No. 48-	10/02/2010	09.00	10/02/2010	18.00	UDB	ER-II/KUL	AMP WORS	
369	49)	16/02/2016	6.00 hrs	17/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
505		10/02/2010	0.00	17/02/2010	17.001115	000	211 11/1102		
370	400 KV D/C FKK KAHALGAON T/L CKT-III & IV	16/02/2016	6.00 hrs	16/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	Subject to availability of Farakka - Malda - D/C
371	400kV Angul-Talcher at Angul	17/02/2016	09:00	17/02/2016	15:00	ODB	ER-II/Odisha	AMP Works	
372	315MVA ICT#1 MAIN BAY (403) at Baripada	17/02/2016	09:00	17/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	
373	315 MVA ICT-2 at Baripada	17/02/2016	09:00	18/02/2016	18:00	ODB	ER-II/Odisha	Construction work- HV Test of GIS Main Bus-I	OPTCL
374	220KV BUS-II AT GAYA S/S	17/02/2016	10:00	17/02/2016	17:00	ODB	ER-I	For Isolator Modification Work	BIHAR
375	42353( Future bay-2 Tie Bay) Durgapur	17/02/2016	09:00	17/02/2016	18:00	ODB	ER-II/KOL	AMP works	
376	220 KV KANIHA - TTPS	17/02/2016	09:00	19/02/2016	16:00	OCB	NTPC	AMP WORK	OPTCL
377	66 KV S/C Ranaghat - Bagula T/L of WBSETCL	17/02/2016	6.00 hrs	17/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
378	765kV Main Bus-2 at Sundargarh	18/02/2016	09:00	19/02/2016	17:00	OCB	ER-II/Odisha	For extension of bus bar and various related jumpering work.	NLDC
379	315MVA ICT#1 MAIN BAY (406) at Baripada	18/02/2016	09:00	18/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	
380	MAIN BAY OF 80MVA B/R AT LAKHISARAI	18/02/2016	10:00	18/02/2016	14:00	ODB	ER-I	FOR AMP WORK	
								FOR CONSTRUCTION WORK OF GIS BUS DUCT AND SF6 TO AIR BUSHING	
381	132 KV PRN-PRN(BSPTCL)#1 LINE	18/02/2016	09:00	20/02/2016	17:00	ODB	ER-I	FOUNDATIONS	BIHAR
382	WBSETCL BUS SECTION - I (213-MI) New Siliguri	18/02/2016	9.00 hrs	18/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	WBSETCL
383	41252( Farraka-1 Main Bay) Durgapur	18/02/2016	09:00	18/02/2016	18:00	ODB	ER-II/KOL	AMP works	
384	400 KV KH-Farakka-4	18/02/2016	09:00	18/02/2016	19:00	ODB	NTPC	PM works & relay testing	
385	400KV Farakka Sagardighi	18/02/2016	09:00	18/02/2016	17:30	ODB	NTPC	Relay & Bay CT testing	
	132kV D/C Dharampur - Ranaghat Tr line of WBSETCL ( T No.								
386	83-84)	18/02/2016	6.00 hrs	18/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
387	220 KV JINDAL - JSR	18/02/2016	08:00	18/02/2016	17:00	ODB	PKTCL	400 KV KHARAGPUR - CHAIBASA D/C LINE STRINGING	OPTCL/DVC
388	400KV MENDHASAL MAIN BAY (410) at Baripada	19/02/2016	09:00	19/02/2016	17:00	ODB	ER-II/Odisha	ANNUAL MAINTENANCE	OPTCL
389	Gajuwaka-II FSC at Jeypore	19/02/2016	09:00	19/02/2016	17:00	ODB	ER-II/Odisha	For AMP works	
								Construction works-Crossing of 765KV Angul-Jharsuguda line(253/0-254/0) to	
390	400KV Rourkela-Sundargarh#1 & Sundargarh-Raigarh(Indbhara	19/02/2016	08:00	20/02/2016	17:00	OCB	ER-II/Odisha	POWERGRID lines span (03-04)	
391	400KV MAIN BUS-II at Baripada	19/02/2016	09:00	20/03/2016	18:00	ODB	ER-II/Odisha	Construction work- HV Test of GIS Main Bus-II	OPTCL
392	400KV BUS-I AT GAYA S/S	19/02/2016	10:00	19/02/2016	17:00	ODB	ER-I	For Isolator Modification Work	
393	200MVA ICT-1 AT LAKHISARAI	19/02/2016	09:30	19/02/2016	17:30	ODB	ER-I	FOR AMP WORK	BIHAR
394	WBSETCL BUS SECTION - II (213-MII) New Siliguri	19/02/2016	9.00 hrs	19/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	WBSETCL
395	400 kv Subhashgram - Jeerat tr. Line	19/02/2016	6.00 hrs	19/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
396	400KV BUS-II AT GAYA S/S	20/02/2016	10:00	20/02/2016	17:00	ODB	ER-I	For Isolator Modification Work	
397	TALAII L/R (406R) New Siliguri	20/02/2016	9.00 hrs	20/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
	400KV Rourkela-Sundargarh#2 & Sundargarh-Raigarh#2 by							Construction works-Crossing of 765KV Angul-Jharsuguda line(254/0-255/0) to	
398	Jharsyguda TLC	21/02/2016	08:00	22/02/2016	17:00	OCB	ER-II/Odisha	POWERGRID lines span (03-04)	
399	132kv BIRP-BIRP(PG)#2	21/02/2016	05:00	21/02/2016	15:00	ODB	WBSETCL	WINTER MAINTENANCE WORK	
									WBSETCL/Completed power interruprion. For replacement of Main Bus Isolator of BRP-WB-I.
									After normalization subject feeder will be
400	132 KV MAIN BUS BIRPARA	21/02/2016	07:00	21/02/2016	09:00	ODB	ER-II/KOL	For opening Bus isolator jumper of 132 KV BRP-WB-I	charged throu TBC.
401	765KV BUS-I AT GAYA S/S	22/02/2016	10:00	22/02/2016	17:00	ODB	ER-I	FOR TIE BAY EXTENSION WORK OF 765KV GAYA-VARANASI	NLDC
						-			
402	400KV GAYA-MTN CKT-I	22/02/2016	10:00	23/02/2016	17:00	ODB	ER-I	FOR REPLACEMENT OF DAMAGED INSULATOR(DAMAGED BY MISCREANTS)	
403	400KV GAYA-KODERMA CKT-II	22/02/2016	10:00	23/02/2016	17:00	ODB	ER-I	FOR REPLACEMENT OF DAMAGED INSULATOR(DAMAGED BY MISCREANTS)	DVC
404	BIRPARA-I(209 BAY) New Siliguri	22/02/2016	9.00 hrs	22/02/2016	17.00 hrs	ODB	ER-II/KOL	AMP of NSLG	
405	132 kV Gokarna - Kuli - Sainthia TL	22/02/2016	6.00 hrs	23/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
406	132 KV CHAIBASA - CHELIAMA	22/02/2016	08:00	22/02/2016	17:00	ODB	PKTCL	400 KV KHARAGPUR - CHAIBASA D/C LINE STRINGING	JHARKHAND
								FOR SHIFTING OF 400KV KAHALGAON- BANKA LINE FROM STAGE -1 TO STAGE -2	
407	400 KV MAITHAN - KAHALGAON-1 & 2	23/02/2016	09:00	25/02/2016	18:00	ОСВ	ER-I	SIDE UNDER BUS SPLIT SCHEME AT NTPC, KAHALGAON END.	Subject to availability of Farakka - Malda - D/C
408	765KV BUS-II AT GAYA S/S	23/02/2016	10:00	23/02/2016	17:00	ODB	ER-I	FOR TIE BAY EXTENSION WORK OF 765KV GAYA-VARANASI	NLDC
			1		1		1		
409	400KV Maithon Gaya-I line	23/02/2016	09:00	23/02/2016	18:00	ODB	ER-II/KOL	Fixing of earlier removed pipe bus for taking the newly installed CB into service	
410	220 KV Satgachia – Krishnanagar T/L of WBSETCL	23/02/2016	6.00 hrs	23/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
411	315 MVA ICT-2 at Baripada	24/02/2016	09:00	25/02/2016	18:00	ODB	ER-II/Odisha	Construction work- Erection of GIB & Bushing of GIS Main Bus-I	OPTCL
	· · · · p····		T		1		1	Construction works-To complete the stringing of 765KV D/C Angul - Srikakulam	
412	400KV D/C JITPL- ANGUL by Nayagarh TLC	24/02/2016	08:00	28/02/2016	17:00	ODB	ER-II/Odisha	Transmission line. Between location 3A/0-4/0.	JITPL
							,		
413	400KV GAYA-MTN CKT-II	24/02/2016	10:00	25/02/2016	17:00	ODB	ER-I	FOR REPLACEMENT OF DAMAGED INSULATOR(DAMAGED BY MISCREANTS)	
414	400KV GAYA-KODERMA CKT-I	24/02/2016	10:00	25/02/2016	17:00	ODB	ER-I	FOR REPLACEMENT OF DAMAGED INSULATOR(DAMAGED BY MISCREANTS)	DVC
414									

416 400		24/02/2016							
416 400			10:00	27/02/2016	17:00	ODB	ER-I	FOR RECONNECTION OF ICT-1 BAY 220 KV MAIN BUS-1 NEW ISOLATORS BY BHEL	BIHAR
	0KV Maithon Mejia-II Line	24/02/2016	09:00	26/02/2016	14:00	ODB		Line CT AMP Test	DVC
417 220	, ,		09:00	26/02/2016	16:00	OCB	NTPC		OPTCL
		24/02/2010	05.00	20/02/2010	10.00	UCD	MITC		OFFEL
418 220	0kV D/C Jeerat - Kasba Tr line of WBSETCL (T No. 110 - 111)	24/02/2016	6.00 hrs	24/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
		24/02/2016	6.00 hrs	24/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
110 120		2 1/ 02/ 2010	0.00	21/02/2010	171001115	000	211 11/102		
420 220	OKV BUS-2 AT PURNEA	25/02/2016	10:00	28/02/2016	17:00	ODB	ER-I	FOR RECONNECTION OF ICT-1 BAY 220 KV MAIN BUS- 2 NEW ISOLATORS BY BHEL	BIHAR
		25/02/2016	08:00 HRS	25/02/2016		ODB		RETROFIT JOB	Shirt
121 1001		20,02,2010	00.00 1.110	23/02/2010	171001110	000	211 11/102		
422 400	0 KV PURNEA - MUZAFFARPUR - II	25/02/2016	09:00	15/03/2016	17:00	ODB	POWERLINK	insulator replacement	Subject to availability of Farakka - Malda - D/C
		25/02/2016	09:00	25/02/2016	17:30	ODB	NTPC	Relay & Bay CT testing	···· , ···· , · · · · · · · · · · · · ·
424 220	0 kV Bakereshwar – Gokarna TL	25/02/2016	6.00 hrs	25/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
425 220	0kV D/C Gokarna - Sagardighi T/L (under construction)	25/02/2016	6.00 hrs	25/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
	, , , , , , , , , , , , , , , , , , , ,								WBSETCL/Completed power interruprion. For
									replacement of Main Bus Isolator of BRP-WB-I.
									After normalization subject feeder will be
426 <b>132</b>	2 KV MAIN BUS BIRPARA	25/02/2016	07:00	25/02/2016	09:00	ODB	ER-II/KOL	For opening Bus isolator jumper of 132 KV BRP-WB-II.	charged throu TBC.
427 400	0 KV KHARAGPUR - KOLAGHAT	25/02/2016	08:00	25/02/2016	17:00	ODB	PKTCL	400 KV KHARAGPUR - CHAIBASA D/C LINE STRINGING	WBSETCL
428 315	5 MVA ICT-2 at Baripada	26/02/2016	09:00	27/02/2016	18:00	ODB			OPTCL
								S/D FOR BUS SPLITTING WORK.HALF BUS -2(TOWARDS CVT) WILL BE CHARGED	
								ON 26.02.16 AT 18:00 HRS. AGAIN CHARGED HALF BUS -2 WILL BE TAKEN	
								UNDER S/D ON 06.03.16 FROM 09:00 HRS. TO 18:00 HRS. FOR	
429 400	OKV MAIN BUS-2 AT BSF	26/02/2016	08:00	06/03/2016	18:00	OCB	ER-I	INTERCONNECTION OF SPLITED AND CRATED BUS -4.	
430 400	OKV Pentograph Isolator(Main Bus-I) Jeerat S/S	26/02/2016	8:00Hrs	26/02/2016	17:30Hrs	ODB	ER-II/KOL	RETROFIT JOB	
431 132	2 kV Gokarna - Kuli - LILO TL	26/02/2016	6.00 hrs	26/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
432 132	2kV D/C Gokarna - Lalgola T/L - 2	26/02/2016	6.00 hrs	26/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
433 132	2kV D/C Gokarna - Lalgola T/L - 1	26/02/2016	6.00 hrs	26/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
434 132	2 KV BRP-WB-I	26/02/2016	07:00	29/02/2016	16:00	ODB	ER-II/KOL	For replacement of 89 T isolator of 132 KV BRP-WB-I	
435 400	0 KV MAIN BUS-I at Baripada	28/02/2016	09:00	28/02/2016	18:00	ODB	ER-II/Odisha	Construction work- Erection of GIB Main Bus-II	
436 220	0kV D/C Satgachia - Jeerat T/L of WBSETCL	28/02/2016	6.00 hrs	28/02/2016	17:00hrs	ODB		For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
437 220	20KV S/C FKK - LALMATIA T/L	28/02/2016	6.00 hrs	28/02/2016	17:00hrs	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line	WBSETCL
			07:00	03/03/2016	16:00	ODB	ER-II/KOL	For replacement of 89 T isolator of 132 KV BRP-WB-II	
439 315	5 MVA ICT-1 at Baripada	03/03/2016	09:00	04/03/2016	18:00	ODB	ER-II/Odisha	Construction work- Erection of GIB Main Bus-II	OPTCL
		04/03/2016	08:00 HRS	04/03/2016	17:00Hrs	ODB	ER-II/KOL	RETROFIT JOB	
			07:00	04/03/2016	08:00	ODB		For opening Bus isolator jumper of 132 KV TBC.	WBSETCL/Complete power interruption.
		05/03/2016		05/03/2016	17:00Hrs	ODB		RETROFIT JOB	
443 400	OKV Pentograph Isolator(Main Bus-I) Jeerat S/S	06/03/2016	08:00 HRS	06/03/2016	17:00Hrs	ODB	ER-II/KOL	RETROFIT JOB	
444 <b>132</b>	2 KV MAIN BUS BIRPARA	07/03/2016	07:00	07/03/2016	09:00	ODB			WBSETCL/Complete power interruption.
445 400	OKV MAIN BUS-II at Baripada	09/03/2016	09:00	10/03/2016	18:00	ODB	ER-II/Odisha	Construction work- Erection of GIB & Bushing of GIS Main Bus-II	OPTCL

		Name of			From	Т	o 11			
SI No	outages proposed in	Requesting Agency	Name of Elements	Date	Time	Date	Time	Basis	Reason	Remarks (If Any)
1	SRPC	POWERGRID	HVDC Kolar	1/Feb/16	9:00	1-Feb-16	18:00	D	Replacement of DGA violated CTs in main bay (20C07.C) -3no's	
2	NRPC	POWERGRID	400 kV Patna-Balia-3 & 4	5/Feb/16	10:00	6/Feb/16	18:00	D	Due to heavy induction and clearance problem in casting of fire wall between two reactors	
3	NRPC	POWERGRID	400 kV Patna-Balia-1	1/Feb/16	10:00	1/Feb/16	14:00	D	Final commissning of new Line Reactor at Balia	
4	NRPC	POWERGRID	400 kV Patna-Balia-2	1/Feb/16	10:00	1/Feb/16	14:00	D	Final commissning of new Line Reactor at Balia	
5	NRPC	POWERGRID	400 kV Allahabad-Sasaram	21-Jan-16	8:00	22-Jan-16	18:00	D	Stringing of 765kv D/C Varanasi-Kanpur line and jumpering of LILO of Allahabad-Sarnath line at Varanasi GIS.	
6	WRPC	POWERGRID	220KV KORBA- BUDHIPADAR CKT-III	2-Feb-16	08:00	4-Feb-16	18:00	Continuous	PLCC end to end checking, CB over hauling	
7	WRPC	POWERGRID	765kV Jharsuguda (Sundergarh) - Korba(Dharamjaygarh) Ckt-02 TL	9-Feb-16	08:00	13-Feb-16	18:00	Continuous	Line reactor bay modified from non switching to switchable. CB erection & commissioning works.	
8	WRPC	POWERGRID	765kV Jharsuguda (Sundergarh) - Korba(Dharamjaygarh) Ckt-01 TL	18-Feb-16	08:00	19-Feb-16	18:00	Continuous	NGR Bypassing work	
9	WRPC	POWERGRID	400kV D/C Raigarh-Sterlite and Raigarh-Rourkela Ckts	20-Jan-16	8:00	20-Jan-16	17:00	Continuous	Stringing of 400kV, D/C Lara STPS-1-Raigarh (Kotra) TL between Loc 3/0(DD+25)-4/0 (DD+25)	
10	WRPC	NTPC	Sipat-Ranchi-2 line	21-Jan-16	7:30	22-Jan-16	19:00	Continous	Annual Preventive maintenance (Line S/D)	
11	WRPC	POWERGRID	400kV D/C Raigarh- Jharsuguda-Ckt-III&IV	23-Jan-16	8:00	23-Jan-16	17:00	Continuous	Stringing of 400kV, D/C Lara STPS-1-Raigarh (Kotra) TL between Loc 5/0(DD+25)-6/0 (DD+25)	

Outages proposed in other RPCs requiring ERPC approval

#### Annexure-C.2

# Anticipated Power Supply Position for the month of Feb-16

SL.N	10	P A R T I C U LA R S	PEAK DEMAND MW	ENERGY MU
1		BIHAR	10100	WO
	i)	NET MAX DEMAND	3200	1512
	ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	675	150
	,	- Central Sector	2248	1312
	iii)	SURPLUS(+)/DEFICIT(-)	-277	-50
	111)	SURPLUS(+)/ DEFICIT(-)	-211	-00-
2		JHARKHAND		
	i)	NET MAX DEMAND	1150	755
	ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	519	270
	,	- Central Sector	483	266
1	iii)	SURPLUS(+)/DEFICIT(-)	-149	-219
	-			
3			0710	4570
	i)	NET MAX DEMAND (OWN)	2710	1572
	ii)	NET POWER AVAILABILITY- Own Source	4761	2386
		- Central Sector	432	261
		Long term Bi-lateral (Export)	1250	870
i	iii)	SURPLUS(+)/DEFICIT(-)	1232	206
4		ODISHA		
	i)	NET MAX DEMAND	3900	2031
	i) III)			
	ii)	NET POWER AVAILABILITY- Own Source	2918	1508
	iii)	- Central Sector SURPLUS(+)/DEFICIT(-)	1062 80	621 97
	,		00	
5		WEST BENGAL		
5.1		WBSEDCL		
	i)	NET MAX DEMAND (OWN)	5187	2704
	ii)	CESC's DRAWAL	110	2
i	iii)	TOTAL WBSEDCL'S DEMAND	5297	2706
	iv)	NET POWER AVAILABILITY- Own Source	4108	2131
	,	- Import from DPL	313	45
		- Central Sector	1498	828
	v)	SURPLUS(+)/DEFICIT(-)	622	298
	,			
5.2		DPL		
	i)	NET MAX DEMAND	250	208
	ii)	NET POWER AVAILABILITY	400	253
i	iii)	SURPLUS(+)/DEFICIT(-)	150	45
5.2		CESC		
5.3	i)	NET MAX DEMAND	1550	592
	ii)	NET POWER AVAILABILITY - OWN SOURCE	710	400
		FROM HEL	520	190
		FROM CPL/PCBL	45	0
		Import Requirement	275	2
	iii)	TOTAL AVAILABILITY	1550	592
I	iv)	SURPLUS(+)/DEFICIT(-)	0	0
6		WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
	i)		4007	2504
	i)	NET MAX DEMAND	6987	3504
	ii)	NET POWER AVAILABILITY- Own Source	5218	2784
	iii)	- Central Sector SURPLUS(+)/DEFICIT(-)	2018 249	1018 298
	,		277	270
7		SIKKIM		
	i)	NET MAX DEMAND	90	38
	ii)	NET POWER AVAILABILITY- Own Source	16	3
		- Central Sector	107	52
1	iii)	SURPLUS(+)/DEFICIT(-)	33	17
8		EASTERN REGION		
		At 1.03 AS DIVERSITY FACTOR		1
	i)	NET MAX DEMAND	17512	9412
		Long term Bi-lateral	1250	870
	ii)	NET TOTAL POWER AVAILABILITY OF ER	20455	10632
1		(INCLUDING C/S ALLOCATION)		
	iii)	PEAK SURPLUS(+)/DEFICIT(-) OF ER	1693	349
1	-	(ii)-(i)		

SI.	Line Name	Voltage	Length	Action	Remarks
No.		Level	(in km)	requested	
1	Ramgarh- Patratu	132	12	To be included	This line was under proposed 245km OPGW laying which was communicated to PGCIL in
					2012 but somehow has been dropped from the list.
2	DTPS – Jamuria	132	30	To be included	-do-
3	LILO of Kalya – CTPS at Dhanbad	220	1	To be included	-do-
4	Ramgarh 220—Ramgarh 132	UGFO	2	To be dropped	Already completed
5	Giridih 220—Giridih 132	UGFO	2	To be dropped	Not required as 220 & 132kV Control rooms operate from same control room.
6	Durgapur (DVC) – Mejia	220	20	To be included	New addition, required for creation of ring network.
7	Dhanbad – Giridih	220	46	To be included	-do-
8	DTPS – Kalipahari	132	28	To be included	-do-

Total addition required = 137km Total deletion required = 4 km Awarded for = 901 km Net Change = 133km (14.76%)