

**Eastern Regional Power Committee**  
**Kolkata-33**

**Salient Decisions taken in 98<sup>th</sup> OCC meeting held on 20.06.14**

1. OCC advised all constituents to re-submit their DPRs to NLDC i.e. Nodal Agency with a copy to GM Division, CEA.
2. OCC agreed to raise the technical minimum load of TSTPS Stage-I (2x500MW) from 350 MW to 377 MW (Ex-bus) for the monsoon period (w.e.f. 21.06.14 to till monsoon ends), pending further reviewing by highest authority.
3. For implementation of Farakka islanding scheme OCC recommended the following:
  - Procurement of new PLCC panels for Lalmatia, Dumka and Farakka S/s
  - Procurement of two sets of 300 AH battery banks along with battery charger for Dumka and Lalmatia S/s as decided in 94th OCC.
4. In restoration of SCADA, OCC found that in number of the cases CTU involvement is there. OCC advised CTU/Powergrid to do the needful for restoration of SCADA data latest by 30th June, 2014 and submit the detail report on action taken by them in next OCC.
5. OCC decided to continue the existing SPS for Chuzachen with one unit tripping for the monsoon period and based on the experience of that period the same will be reviewed.

# **Eastern Regional Power Committee**

## **Minutes of 98<sup>th</sup> OCC Meeting held on 20<sup>th</sup> June, 2014 at ERPC, Kolkata**

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

### **Item no. A.1: Confirmation of minutes of 97<sup>th</sup> OCC meeting of ERPC held on 15.05.2014**

The minutes were uploaded in ERPC website and circulated vide letter dated 22.05.14 to all the constituents. No comments were received till date.

Members may confirm the minutes.

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

*Members confirmed the minutes of 97<sup>th</sup> OCC meeting.*

## **PART B**

### **Item no. B.1: Preparedness of the Power Sector for the Monsoon season**

A meeting was taken by Secretary, Ministry of Power on 6<sup>th</sup> May, 2014 wherein measures in general to mitigate the shortages due to poor monsoon were chalked out. Accordingly, an urgent meeting was convened on 13<sup>th</sup> June, 2014 at ERPC conference room to assess the situation in Eastern Region. Minutes of the meeting are circulated in the meeting.

Members may discuss.

OPTCL may submit the contingency Plan as advised in the meeting on 13.06.14 and the plan for commencing power flow through Balimela Upper-Sileru line.

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

*The update on the issue was enclosed at **Annexure-B.1**.*

*OHPC informed that they can keep water in the reservoirs of Balimela, Upper Kolab & Upper Indravati above MDDL because they are carry-over reservoirs. But for Rengali & Hirakund reservoirs the available water needs to be depleted to MDDL. The detailed plan of OHPC is given at **Annexure- B.1a**.*

*OCC advised OPTCL to explore for utilization of Balimela Upper-Sileru line for power transfer as its lying idle.*

### **Item no. B.2: Submission of DPR for R&U of protection and control system for funding from PSDF**

- As per the recommendation of the enquiry committee report under chairmanship of Chairperson, CEA after the grid disturbances of July 2012 and based on the protection audit, the states are required to rectify the deficiencies in protection and control system of

all the sub-station of intra-state network at 220 kV Level (132 kV level and above in NER).

- Accordingly, the states were requested to submit the DPR for Renovation and Upgradation (R&U) of protection and control systems (R&U) as above for funding from the PSDF. Based on the information from all the states consolidated DPR was prepared by CEA and submitted to MoP for approval.
- MoP vide its letter dated 10th January 2014 has circulated the scheme for operationalization of PSDF. Based on this Appraisal Committee under chairmanship of Chairperson, CEA and Monitoring Committee headed by Secretary, MoP have been constituted. NLDC has been designated as Nodal agency for PSDF.
- Appraisal Committee has prepared the procedures and formats for submission of DPR which are under approval of MoP (Which were made available in ERPC website).
- Chairperson, CEA has directed that all states may be advised to prepare their DPR for R&U as above in the formats attached and resubmit the same to NLDC i.e. Nodal Agency with a copy to GM Div., CEA; this is also in line with the discussion at the 3rd Special meeting of NPC held on 14th February, 2014 at CEA, New Delhi.

ERPC secretariat had already communicated the same to TCC members vide mail dated 13<sup>th</sup> June, 2014.

Members may note and submit the DPR.

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

*OCC advised all constituents to re-submit their DPRs to NLDC i.e. Nodal Agency with a copy to GM Division, CEA in the desired/ new formats as given by Appraisal Committee of PSDF (which is available at ERPC website) by 15<sup>th</sup> July, 2014.*

*All constituents agreed.*

#### **Item no. B.3: INJECTION OF INFIRM POWER FROM BARH STPP UNIT-IV (660 MW) BEYOND SIX MONTH FROM THE DATE OF INITIAL SYNCHRONIZATION (22.11.2013)--- NTPC**

NTPC vide letter dated 14.06.14 informed that:

- i. Clause (7) of Regulation 8 of the Central Electricity Regulatory Commission (Grant of Connectivity. Long term access and Medium term open access in inter-state transmission and related matters) Regulations, 2009 as amended vide notification dated 21.03.2012 provides:
  - ***Unit shall be allowed to inject infirm power into the grid not exceeding six months from date of first synchronisation.***
  - ***Commission may allow extension in exceptional circumstances on an application made by the generating company at least two months in advance of completion of six month period.***
- ii. Barh Stage-II Unit- IV was initially synchronized to grid on 22.11.2013 and six months for injection of infirm power falls on 22.05.2013.
- iii. A number of attempts were made to declare COD of the Unit at Barh from end of March,14 but COD couldn't be achieved by 22.05.2014 as stable operation and unit trial run could not be successfully established due to repeated failure of T23 tube weld joints (specially in the roof panels).

- iv. NTPC filed a petition (being no. 87/MP/2014) on 12.05.2014 seeking permission for injecting infirm power beyond 22.05.2014 and upto 22.08.2014 (03 months) depending upon the status of pending works.
- v. The said petition was heard on 29.05.2014 and NTPC prayed the Hon'ble Commission to grant permission of injection of infirm power up to September, 2014 envisaging the status of works.
- vi. During the hearing NLDC, the respondent, has submitted that it had no objection if the permission is granted as prayed. However, requested that two units should not run simultaneously till COD of Unit#4. Hon'ble Commission during the hearing indicated that it would agree to grant the sought extension and asked that the Hon'ble Commission be kept updated through monthly reports.
- vii. Order in the matter is expeditiously prayed.
- viii. Barh Unit# 4 is expected to be synchronised with the grid on 16.06.2014 (00:00 Hrs.).

Members may note/discuss.

### **Deliberation in the meeting**

*Members noted.*

### **Item no. B.4: Low Voltage in North Bihar & South Bihar area--BSPTCL**

BSPTCL vide letter dated 14.05.2014 has placed the issue of low voltage in North Bihar & South Bihar area. The details of the issue are as given below:

- a) SLDC, Patna is facing low voltage problem in North Bihar at 220kV & 132kV voltage level during peak load hours which compel SLDC to resort to load shedding in the North Bihar despite availability of adequate power. This has been a regular phenomenon which not only causes bottleneck in evacuation of supply of power in the North Bihar area as well as it also result in more transmission loss and thereby financial loss to the BSPTCL & NBPDC.

KBUNL also requested in the evening of 21.04.2014 for improving the voltage at 220kV to prevent tripping of unit no.1 at low voltage. ERLDC time and again has been requested by SLDC, Patna for taking corrective measures and direction to PGCIL for improving the voltage in North Bihar.

It is relevant to mention that low voltage problem actually initiate from 400kV Grid S/s at Kafan, Muzaffarpur, which also requires controlling & monitoring by PGCIL at Kafan in consultation with ERLDC, Kolkata. It is also imperative to mention that merely activating the Capacitor Bank during low voltage conditions may not be adequate to improve the Voltage profile which sometime goes down to 201kV & 122kV on 220kV & 132kV at Gopalganj Grid S/s on 16.04.2014 at 19:00 Hrs and 106 kV on 132kV at Grid S/s Motihari on 18.04.2014 at 19:00 Hrs.

- b) Further, it has also been observed that in case power is drawn from Arrah Grid S/s of PGCIL, the drop in voltage is considerable. Since, Buxar & Dumraon Grid S/s of BSPTCL, is also connected with Arrah Grid S/s (PG) also causes low voltage in these Grid S/s of BSPTCL.

In view of the above necessary support from PGCIL is required to improve the voltage position in North Bihar (at Muzaffarpur, Motihari & Gopalganj) and South Bihar ( at Patna, Arrah & Dumraon) along with switching in the Capacitor Bank to improve the voltage profile in North Bihar & South Bihar area mentioned above to ensure adequate supply of power.

Subsequently, ERPC vide letter dated 23.05.2014 requested ERLDC to study the issue of low voltage problem in North Bihar & South Bihar area and advise action plan to resolve the issue.

BSPTCL/ERLDC may update.

### **Deliberation in the meeting**

The following were deliberated:

- *400kV & 220kV bus voltages at Muzaffarpur(PG) S/Stn of ISTS is to be maintained within the limits allowed by IEGC, as being done at present.*
- *For this purpose, ERLDC constantly monitors the voltages in real time and advises ERTS-I to switch-off / switch-on the 63 MVAR bus reactors at Muzaffarpur. This will continue.*
- *In addition, corrective actions like changing of the tap of 2X315 MVA 400/220kV ICT at Muzaffarpur will be taken when required as were done in past on several occasions in order to ensure acceptable voltage on 220kV side of the ICTs. .*
- *BSPTCL has to assess the reactive power requirements at their S/Stns such as Hajipur, Motihari, Gopalganj, Darbhanga etc. that are supplied from Muzaffarpur, and provide adequate switchable reactive compensation locally.*
- *During restoration of distribution system in Bihar, following a load crash caused by weather disturbance, concerned DISCOM(s) should strike a proper balance of reactive power generated by lines and that consumed by loads instead of keeping too many 132kV lines idle charged, without connecting customer load.*
- *BSPTCL should also explore scope for adjustment of its own 220/132kV transformers at Hajipur, Gopalganj, Darbhanga etc. so that reasonable voltage can be maintained at 132kV and below within Bihar system. Representative from BSPHCL was requested to provide the present setting of the taps of its 220/132kV ATRs along with complete range of tap with voltage ratio corresponding to each tap.*
- *2X315 MVA 400/220 kV Sasaram ICTs are already heavily loaded due to supply of active and reactive power to Arrah, Khagaul, Dehri, Sahupuri etc. Thus supplying Khagaul load radially from Sasaram would cause deterioration of voltage at Khagaul and down stream S/Stns of BSPTCL. BSPTCL should therefore endeavour to meet Khagaul, Sipara etc. loads from Patna and Fatuah by keeping 220kV Patna-Khagaul S/C, Patna-Sipara D/C and Fatuah-Sipara S/C lines in service.*
- *Reactive demand should be compensated locally as far as possible and efforts should also be made to adjust 220/132kV ATR taps within BSPTCL, such that satisfactory voltage can be maintained at 132kV system of BSPTCL.*

### **Item no. B.5: High voltage problem at OPTCL Substation—OPTCL**

OPTCL vide letter dated 11<sup>th</sup> June, 2014 informed that, the 220kV voltage at Jeypore (PG) is remaining very high which is in the range of 247 kV or more. This has been discussed in OCC meetings at ERPC, Kolkata time and again.

Members may discuss.

### **Deliberation in the meeting**

OCC advised Powergrid to change the tap of Jeypore (PG) ICT from tap position 16 to 14 to mitigate the high voltage problem at Jeypore. Powergrid agreed.

#### **Item no. B.6: Backward revision of ISGS schedule by ERLDC-- OPTCL**

OPTCL vide letter dated 11<sup>th</sup> June, 2014 intimated that-

QUOTE:

"..... in Rev-II, net ISGS Schedule of GRIDCO for 10.06.2014 was 790MW from 00:00 Hrs to 12:00 Hrs. Accordingly, SLDC, Odisha was under drawing around 40MW from the Grid. The system frequency was 49.60Hz. At 00:50 Hrs, ERLDC, Kolkata revised the net ISGS Schedule of GRIDCO from 790 to 630 MW retrospectively from 00:00 Hrs to 12:00 Hrs. By this backward revision by ERLDC, 40MW under drawal of GRIDCO has changed to 120MW over drawal at 49.6Hz which will earn heavy penalty due to deviation settlement mechanism. It is not understood, how can ERLDC revise the schedule for past blocks in real time system operation? This has not happened for the first time. Earlier also, ERLDC had done backward revision of the GRIDCO Schedule. For no fault, GRIDCO has to pay the penalty due to backward revision by ERLDC, Kolkata.

Therefore, it is requested to keep the GRIDCO schedule as 790MW for the period 00:00 Hrs to 01:00 Hrs of 10.06.2014 and also see that, this type of backward revision of ISGS schedule should not be done in future, which involves financial issues due to implication of deviation settlement mechanism"

UNQUOTE

Members may deliberate.

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

*ERLDC submitted that this type of issues should be brought in the notice as soon as it occurred for immediate follow up and revision/necessary correction.*

*However, in the instant case since the power was scheduled to SR so the nodal RLDC was SRLDC. The information from SRLDC for revised schedule (from 00:00 Hrs to 01:00 Hrs) was received at 00:45 Hrs, subsequently, ERLDC has also to revise the schedule from 00:00 Hrs to match the inter-regional schedule. So, there was delay in SR part.*

*After detail deliberation it was decided that for the instant case ERLDC will write a letter to SRLDC to avoid such type of retrospective revision. Further, OCC requested OPTCL to bear with the situation for the time being.*

*It was also decided that if there is any discrepancy in schedule, it should be immediately taken up with ERLDC for revision and should not be brought in a later stage for any settlement when all accounts have been settled.*

*OPTCL expressed that it has a huge commercial implication which needs to be settled.*

#### **Item no. B.7: Restriction of schedule for MPL – Item B.13 of 96<sup>th</sup> OCC**

In 96<sup>th</sup> OCC, ERPC clarified that RTA on MPL is being issued on a quantum of 983 MW as provided by CTU/Powergrid duly vetted by NLDC.

However ERLDC informed that as per available document with it the connectivity quantum of MPL is 971 MW and therefore, under compulsion MPL's ex-bus schedule was restricted to 971 MW. w.e.f. 10th April 2014-a change of 12 MW from previous quantum of 983MW.

MPL clarified that they had already signed a revised TSA for 983 MW connectivity quantum with CTU and the same would be forwarded to ERLDC.

OCC felt that before resorting to change from 983MW to 971MW unilaterally, ERLDC should raise this issue in ERPC forum for further clarification.

However after a detailed deliberation OCC advised MPL to get revised LTA/connectivity quantum from CTU and submit to ERLDC.

Subsequently, MPL vide letter dated 31.05.14 has informed that as per the decision of 96<sup>th</sup> OCC, MPL had already sent a letter to CTU, PGCIL vide letter dated 30.04.14 for clarifying the position to ERLDC on the total power evacuation from MPL with a copy to ERLDC. But till date nothing has happened.

ERLDC/CTU may update.

### **Deliberation in the meeting**

*It was informed that the revised TSA for 989.6 MW connectivity quantum was implemented w.e.f. 06.06.2014.*

### **Item no. B.8: Technical minimum load for Talcher Stage-I units — NTPC**

The declared technical minimum gross generation for TSTPS Stage-I (2x500MW) is 350 MW (Ex- bus 327MW), i.e. when the unit can be run without oil support. However, due to wet coal, generation level below the level of 400 MW is causing flame instability and causing unit tripping of the units on flame failure protection". This is due to peculiarity in design of Talcher Stage-I units –drum less tower type boiler supplied by Stein Industries, France with a boiler height of 92 meters. The fuel firing is achieved through double ended tube mills, wherein the grinding takes place through centrifugal force of the grinding balls. During monsoon period, when the moisture content in coal is more, at lower load, the desired mill performance is not achieved, at times causing non-uniform pulverized coal flow into the boiler. Flame inside the boiler, which is already at a lesser intensity due to low load, further gets deteriorated due to this non uniform coal flow. This causes flame out in the boiler at times.

Any dislodgement of the loose ash from the top elevations of the boiler causes a flame disturbance. At lower load operation, when the flame stability is already poor, any such dislodgement of ash further aggravates and at time causes flame out in the boiler.

Manufacture recommends for 2 cycle soot blowing operation per day to avoid such phenomena. For carrying out one cycle of soot blowing, around 8 hours is required, i.e. 16 hrs a day. For soot blowing, it is also recommended that more than 80% load is required to be maintained to eliminate the chances of the flame failure. Flame stability at lower generation level is maintained either with oil support or we are constrained to generate at a load beyond 400MW for the purpose of carrying out soot blowing, even at times in excess of the schedule given to the station. This was discussed in the 86th OCC of ERPC held on 21.06.2013 at Kolkata, and subsequent OCC meetings of ERPC.

Generation in excess of the schedule is in violation of the present grid code and needs to be avoided for stability of the grid. With the implementation of the new CERC norms for the tariff period 2014-19, running the units with continuous oil support is not feasible as it severely affects the normative parameters.

In view of the above, it is proposed to raise the technical minimum load upto 377 MW (Ex-bus) for the monsoon period. Otherwise NTPC will be constrained to keep the units in reserve shut down in case of prolonged low schedule for more than 8 blocks.

Members may discuss.

### **Deliberation in the meeting**

*NTPC requested the house to consider the above proposal as the situation gets aggravated during monsoon period.*

*OPTCL expressed that as per the 86<sup>th</sup> OCC deliberation, NTPC should submit their machine's design detail and their proposal will be accepted after studying the design detail subject to the higher authority's decision.*

*After detail deliberation OCC agreed to raise the technical minimum load of TSTPS Stage-I (2x500MW) from 350 MW to 377 MW (Ex-bus) for the monsoon period (w.e.f. 21.06.14 to till monsoon ends), pending further reviewing by highest authority.*

*NTPC was also requested to have a permanent solution to the problem from the Manufacturer.*

### **Item no. B.9: Extension of Talcher-Kolar pole trip signal to JITPL for generation reduction –ERLDC**

On synchronization of SR and NEW grid in a special meeting in ERPC it was decided that, Sterlite, GMR and JITPL would share 600 MW generation relief through SPS in case of single/both pole tripping of HVDC Talcher-Kolar. In subsequent SPS meeting held on 08.05.14 then it was agreed that, the 600MW generation relief would be shared as given below when JITPL come into bar:

Sterlite- 350 MW, GMR- 150 MW and JITPL- 100 MW.

It was also decided that Powergrid will extend the digital signal to JITPL switchyard for implementation of the scheme.

JITPL first unit has been declared COD.

JITPL, Powergrid and ERLDC may update.

### **Deliberation in the meeting**

*It was informed that the JITPL unit was declared COD w.e.f. 06.06.2014.*

*Powergrid informed that at present there is no direct connectivity to JITPL for extending the signal. The connectivity will be established via Talcher-Angul-JITPL. It was informed that, they are already in process to establish the connectivity and extend the trip signal to JITPL and the work will be completed by June, 2014.*

### **Item no. B.10: Status of construction of 400 kV Sterlite-Jharsuguda D/C sections**

In 27<sup>th</sup> ERPC, It was informed that LILO of 400 kV Rourkela-Raigarh line was done in 2009 and till date there is no progress in construction of dedicated line to pooling station. Because of this Odisha is facing congestion and grid security is being compromised. Thereby, it was pointed out that Sterlite is mis-utilising the LILO connection.

OPTCL pointed that there should be firm commitment for commissioning schedule of 400 kV Sterlite- Jharsuguda line and periodical report of progress should be submitted to ERPC/NLDC.



PGCIL informed that as per the BPTA agreement the LILO connection of Sterlite is allowed till November, 2014 and Sterlite has to construct their dedicated line to Jharsuguda pooling station by that time. Otherwise continuation of LILO arrangements would not be possible.

Sterlite informed that the initial survey from LILO tapping points to Jharsuguda Pooling Point has been completed and execution work is pending due to forest clearance. SSL has already applied for forest clearance on 31.05.13. Hence, SSL has requested for completion time for construction of the 400 kV Sterlite-Jharsuguda line up to December, 2015.

**ERPC took serious note on non-completion of 400 kV Sterlite-Jharsuguda line and advised Sterlite to complete the commissioning of 2xD/C, 400 kV Sterlite-Jharsuguda line by 31<sup>st</sup> March, 2015. Sterlite was further advised to give the progress report on monthly basis to ERPC Secretariat.**

ERPC also decided that LILO arrangements of 400 kV Rourkela-Raigarh line for evacuating power generation of Sterlite will be withdrawn latest by 1<sup>st</sup> April, 2015.

Sterlite may update.

### **Deliberation in the meeting**

*Sterlite informed that the work is in progress.*

*OCC advised Sterlite to place officially, the details of progress of the commissioning work to Secretariat on monthly basis.*

## **Item no. B.11: New Islanding Schemes in Eastern Region**

### **B.11.1. FSTPS Islanding Scheme, NTPC**

*Latest status as available is as follows,*

<b>Requirement</b>	<b>Where Required</b>	<b>Action</b>	<b>Latest status</b>
PLCC - 4 Panels	<ul style="list-style-type: none"> <li>• 220 kV Lalmatia – 1</li> <li>• 220 kV Farakka – 1</li> <li>• 132 kV Dumka – 1</li> <li>• 132 kV Lalmatia – 1</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB will shift 3 panels from Sahebgunj/Pakur to 132 kV Lalmatia S/s</li> <li>• NTPC will take care of shifting 2 panels from 132 kV Lalmatia S/s to 220 kV Lalmatia and Farakka S/s.</li> <li>• JSEB will shift one panel from Sahebgunj/Pakur to 132 kV Dumka S/s</li> <li>• Installation of PLCC panels at 220 kV Lalmatia and Farakka S/s will be done by NTPC</li> <li>• Installation of PLCC panels at 132 kV Lalmatia and Dumka S/s will be done by JSEB</li> <li>• Commissioning of all the four panels will be done by Powergrid.</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB had already shifted 3 nos BPL make PLCC panels to 132KV Lalmatia S/S</li> <li>• NTPC to take care of two nos PLCC panels stocked at Lalmatia 132 KV S/S of JSEB for onward shifting of the same to 220 KV Lalmatia &amp; Farakka S/S</li> </ul>
2 trip relays (220 V) having at least 03 nos NO contacts	<ul style="list-style-type: none"> <li>• 132 kV Lalmatia – 1 relay</li> <li>• 132 kV Dumka – 1 relay</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB will provide 2 trip relays.</li> <li>• Commissioning will be done by Powergrid.</li> </ul>	<ul style="list-style-type: none"> <li>• Trip Relay available at 132 KV Lalmatia S/S is with 3nos “NO” contacts.</li> </ul>
4 wave traps	<ul style="list-style-type: none"> <li>• 132 kV Lalmatia – 2</li> <li>• 132 kV Dumka – 2</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB will provide four wave traps.</li> <li>• JSEB will do the installation and erection</li> <li>• Commissioning will be done by Powergrid.</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB confirmed that wave traps are available with them</li> </ul>

2 LMUs	<ul style="list-style-type: none"> <li>• 132 kV Lalmatia – 1</li> <li>• 132 kV Dumka – 1</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB will provide two LMUs.</li> <li>• JSEB will do the installation and erection</li> <li>• Commissioning will be done by Powergrid.</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB confirmed that LMUs are available with them</li> </ul>
4 UFR relays	<ul style="list-style-type: none"> <li>• 132 kV Lalmatia – 2</li> <li>• 132 kV Dumka – 2</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB will provide and erect.</li> <li>• Commissioning will be done by Powergrid.</li> </ul>	<ul style="list-style-type: none"> <li>• UFRs have been installed by Powergrid</li> </ul>
2 nos 48 V Battery bank with charger	<ul style="list-style-type: none"> <li>• 132 kV Lalmatia – 1</li> <li>• 132 kV Dumka – 1</li> </ul>	<ul style="list-style-type: none"> <li>• Powergrid will arrange 300 Ah battery bank along with battery chargers at both stations.</li> </ul>	
Coaxial Cable - As required at site	<ul style="list-style-type: none"> <li>• 132 kV Lalmatia</li> <li>• 132 kV Dumka</li> </ul>	<ul style="list-style-type: none"> <li>• JSEB will provide and laying/cabling.</li> </ul>	

*The issue was discussed in 27<sup>th</sup> TCC/ERPC meeting wherein,*

*Powergrid informed that, they have already visited Farakka, Lalmatia and Dumka S/s and installed the UFRs.*

*Powergrid also intimated that, PLCC panels were physically checked and cards are available.*

*JSEB insisted for checking the healthiness of PLCC by energizing the PLCC panels as decided in OCC. On reply Powergrid informed that, 48 V DC supply is required for checking the healthiness of PLCC panels/cards which is not available in Lalmatia and Dumka S/s.*

*JSEB informed that, the old PLCC panels may not work and insisted for installation of new PLCC panels. On reply, Powergrid informed that, purchasing new PLCC panels will take long time.*

*After deliberation, TCC advised JSEB to provide 48 V DC supply at their sub-stations for checking the healthiness of the PLCC panels.*

*JSEB assured to arrange 48 V DC supply at both the stations by 15<sup>th</sup> June, 2014 and Powergrid agreed to check the healthiness by 3<sup>rd</sup> week of June, 2014.*

*TCC advised JSEB and Powergrid to implement the scheme at the earliest and report the status in OCC.*

*Subsequently, Powergrid vide mail dated 04.06.14 informed that as per discussion held with JSUNL, due to non availability of 48V DC source at Dumka, the PLCC Panels of Dumka to be shifted to Lalmatia for checking the healthiness.*

*It is planned to check the healthiness of the PLCC panels in the 2nd week of June 2014. Further, JSEB was asked to confirm the followings so that necessary programme for checking the PLCC panels can be made.*

- 1. Shifting of PLCC panels from Dumka to Lalmatia*
- 2. Ensuring availability of 48 V DC source in all PLCC panels at Lalmatia and Farakka.*
- 3. Arrangement of transportation from Farakka to Lalmatia and back.*

*Further during commissioning of UFR relays at Lalmatia and Dumka, it was found that in addition to the PLCC panels with protection coupler, 01 no. speech panel without protection coupler are available for Lalmatia-Dumka & Lalmatia-Farakka links respectively. For implementation of Islanding scheme commissioning of Speech panel without protection coupler is not required. In view of that checking of the PLCC panels with protection coupler will only be carried out.*

*Powergrid, JSEB and NTPC may update the status.*

### **Deliberation in the meeting**

Powergrid informed that they have visited Farakka, Lalmatia & Dumka on 13<sup>th</sup> & 14<sup>th</sup> June, 2014 along with Erlang Teletronix for checking the healthiness of PLCC panels and submitted the report which is given at **Annexure- B.11.1**.

After detail deliberation, OCC recommended following:

- 1) Procurement of new PLCC panels for Lalmatia, Dumka and Farakka S/s
- 2) Procurement of two sets of 300 AH battery banks along with battery charger for Dumka and Lalmatia S/s as decided in 94<sup>th</sup> OCC.

#### **B.11.2. Chandrapura TPS Islanding Scheme, DVC**

In 27<sup>th</sup> TCC/ERPC meeting, DVC informed that the initial tender has to be closed as Party did not comply the terms and conditions of the tender. However, new tender has already been floated with squeezed implementation time of 150 days.

TCC/ERPC advised DVC to implement the scheme by 30<sup>th</sup> October, 2014 and reiterated that no further extension will be given.

DVC may update the status.

### **Deliberation in the meeting**

DVC informed that the decision of TCC had already been communicated to higher authority. DVC also informed that Tendering work is in the process.

#### **B.11.3. BKTPS Islanding Scheme, WBDCL**

In 27<sup>th</sup> TCC/ERPC, WBDCL informed that LOA has been placed on 14<sup>th</sup> May, 2014 and the work will be completed by December, 2014 (+/- 2 months).

WBDCL may update the status.

### **Deliberation in the meeting**

WBDCL informed that it will be completed in schedule.

#### **B.11.4. Tata Power Islanding Scheme, Haldia**

In 27<sup>th</sup> TCC/ERPC meeting, WBSETCL informed the scheme will be implemented by July, 2014.

WBSETCL may update the status.

### **Deliberation in the meeting**

WBSETCL informed that it will be completed in schedule.

**Item no. B.12: Concerned members may update the latest status.**

#### **B.12.1. Status of 400kV GMR- Angul D/C line.**

In 27<sup>th</sup> TCC/ERPC meeting, GMR appraised that the work of 400kV D/C GMR- Angul is in progress except some ROW issues at some sections, however they were trying to complete it by June, 2014.

GMR may update.

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

*GMR informed that the work will be completed by July, 2014 because they were facing some severe ROW problem.*

#### **B.12.2. Construction of dedicated lines by JITPL to Angul pooling station as part of Associated Transmission System (ATS)**

*In 27<sup>th</sup> TCC/ERPC meeting, JITPL informed that 400 kV JITPL-Angul D/C line will be completed by May, 2014.*

JITPL may update.

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

*JITPL informed that the work was completed on 31.05.2014.*

#### **B.12.3. Status of 400kV Maithon-Gaya and Koderma-Gaya D/C lines.**

*In 27<sup>th</sup> TCC/ERPC meeting, Powergrid informed that Maithon-Gaya and Koderma-Gaya 400kV D/C lines will be commissioned by June, 2014.*

Powergrid may update the latest status.

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

*Powergrid informed that the line were expected to be completed by 15<sup>th</sup> July, 2014.*

#### **B.12.4. Replacing/repairing of defective PLCC equipment at SgTPP end of 400 kV SgTPP-Farakka line**

*In 27<sup>th</sup> TCC/ERPC meeting, Powergrid informed that PLCC panels are ready to dispatch and will be installed by 15<sup>th</sup> June, 2014.*

Powergrid and WBPDCCL may update the status.

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

*Powergrid informed that work will be completed by 1<sup>st</sup> week of July, 2014.*

#### **B.12.5. The following line/Bus reactors are under presently under outage:**

*In last OCC, Members updated the status as follows:*

- a) 80MVAR Line reactor of 400kV Meramundali-Angul at Meramundali: Powergrid informed that work is in progress and it will be rectified by May, 2014.*
- b) 50MVAR Line reactor of 400kV Rourkella-TSTPP-I at TSTPP: NTPC informed that it has been charged.*
- c) 63 MVAR line reactor of 400 kV Baripada-Mendhasal at Memdhasal: Powergrid informed that, it will be restored by May, 2014.*

Members may update.

### **Deliberation in the meeting**

*Members updated the status as follows:*

- a) 80MVAR Line reactor of 400kV Meramundali-Angul at Meramundali: Powergrid informed that it will be rectified within 2-3 days.
- b) 50MVAR Line reactor of 400kV Rourkella-TSTPP-I at TSTPP: NTPC informed that it has been charged.
- c) 63 MVAR line reactor of 400 kV Baripada-Mendhasal at Memdhasal: Powergrid informed that, it has been restored.

#### **B.12.6. Depletion in OPTCL network due to impact of cyclone “Phailin”**

*In 97<sup>th</sup> OCC, OPTCL informed that the 220 kV Narendrapur-Mendasal line will be brought into service tentatively by May, 14.*

OPTCL may update the latest status.

### **Deliberation in the meeting**

*OPTCL informed that due to non- receipt of consignment of towers the work is delayed and expected to be completed by July, 2014.*

#### **B.12.7. 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG) S/s**

400/220 kV, 2X 315 MVA S/S at Bolangir has been established by Powergrid as part of ISTS system & the following 220 kV interconnecting lines was envisaged to be established by OPTCL:

- (i) LILO of OPTCL's Burla-Bolangir line at Bolangir (PG).
- (ii) Bolangir(PG) –Bolangir (OPTCL) S/C line.
- (iii) Bolangir(PG) –Kesinga S/C line.

*In 97<sup>th</sup> OCC OPTCL informed the status as follows:*

- (i) LILO of OPTCL's Burla-Bolangir line at Bolangir(PG) —Work is in progress and it would be completed by Nov, 2014
- (ii) Bolangir(PG) –Kesinga S/C line — Tendering work is in progress and it would take one year.

OPTCL may update the status.

### **Deliberation in the meeting**

*OPTCL informed the status as follows:*

- (i) LILO of OPTCL's Burla-Bolangir line at Bolangir(PG) —Work is in progress and it would be completed by Nov, 2014
- (ii) Bolangir(PG) –Kesinga S/C line —Tender opened and completion schedule is Dec, 2015.

#### **B.12.8. Power Evacuation from 400/ 132KV Lakhisarai Substation**

Powergrid vide letter dated 01.04.2014 informed that 400/132KV Lakisharai Substation along with 200 MVA ICT, 80 MVAR Bus Reactor and line bay of Lakhisarai (PG) – Lakhisarai(BSPTCL) 132 kV D/c line has been charged at rated voltage and declared under commercial operation w.e.f. 01.04.2014.

*In 97<sup>th</sup> OCC, BSPTCL informed the status as follows:*

1. Lakhisarai (PG) – Lakhisarai(BSPTCL) 132 kV D/c line – will be completed by June, 2014.
2. Lakhisarai (PG) – Jamui (BSPTCL) 132 kV D/c line – will be completed by Oct, 2014.

Powergrid and BSPTCL may update the latest status.

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

*BSPTCL informed the status as follows:*

1. Lakhisarai (PG) – Lakhisarai(BSPTCL) 132 kV D/c line – As per LOA, it will be completed by Aug, 2014.
2. Lakhisarai (PG) – Jamui (BSPTCL) 132 kV D/c line – will be completed by Feb, 2015.

#### **B.12.9. Power Evacuation from 400/ 220KV Daltanganj and Chaibasa Substations**

In last OCC, Powergrid informed that 400/220KV Chaibasa Substations will be ready by June, 2014 and Daltanganj S/S may take some more time to come. Further, it was informed that construction of intermediate 220/132 kV ICTs is being executed by Powergrid under the consultancy work of JSEB.

Powergrid informed the status as follows:

1. 400/220 kV Daltanganj which will be connected to existing Daltanganj and Garwa S/s – ready by June, 15.
2. 400/220 kV Chaibasa which will be connected to Chaibasa S/s- ready by Sep, 2014.

*In 27<sup>th</sup> TCC/ERPC meeting, JSEB informed the status of power evacuation scheme:*

1. 400/220 kV Daltanganj – There is no scope of Daltanganj S/s (JSEB) which was earlier planned. However, nearby two new sub-stations 400/220 kV Latehar and 220/132 kV Lohardaga are coming up for which land acquisition is going on.
2. 400/220 kV Chaibasa- Chaibasa (JSEB) S/s is being constructed by Powergrid under deposit work.

Powergrid and JSEB may update the status.

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

*JSEB informed that both the work was given to Powergrid under consultancy work. OCC requested Powergrid to update the status.*

*Powergrid informed that there is problem in land acquisition for 400/220 kV Daltanganj S/s, however the latest status will be given in next OCC.*

#### **B.12.10. Status of works related to Implementation of SPS for 500MW round the clock power through HVDC Bheramara**

In 97<sup>th</sup> OCC, Powergrid informed the status as follows:

- Line reactor of Behrampur-Jeerat will be converted into switchable bus reactor: tendering completed and expected by March, 2015.
- 400 kV Sagardighi-Behrampur D/C (Quad): Work has been awarded and will be commissioned by Dec, 2014.

Powergrid may update the status.

### **Deliberation in the meeting**

*Powergrid informed that work is in progress as per schedule.*

#### **B.12.11. Automatic Meter Reading (AMR)**

In 96<sup>th</sup> OCC Powergrid informed that, TCS representatives were not being allowed inside the OPTCL/GRIDCO substations. OPTCL/GRIDCO asked for the details and assured to resolve the issue.

*In 97<sup>th</sup> OCC, Powergrid informed that work is in progress and 39 out of 97 have been installed.*

Powergrid may update.

### **Deliberation in the meeting**

*Powergrid informed that 63 out of 97 AMR have been installed.*

*ERLDC stressed that the complete detail of the substations where AMR have been installed may be provided for verifying the transfer of data from these stations. Powergrid agreed.*

*NTPC pointed that the DCD at Farakka is giving frequent problem and requested Powergrid to issue two DCDs one each for Farakka and Kahalgaon.*

*OCC advised Powergrid to issue two DCDs to NTPC. Powergrid agreed*

#### **B.12.12. Modification of 132kV Bus arrangement at 220/132kV Purnea Sub-station of POWERGRID**

In 97<sup>th</sup> OCC, Powergrid informed that work will be awarded by June, 2014.

Powergrid may update the latest status.

### **Deliberation in the meeting**

Powergrid informed that status is same.

#### **Item no. B.13: Status of “Third Party Protection Audit”**

List of the observations along with updated compliances received from the constituents made available in reports of ERPC website ([www.erpc.gov.in](http://www.erpc.gov.in)).

Subsequently, CERC vide order dated 21.02.2014 in Petition No. 220/MP/2012 has directed all the utilities to ensure rectification of defects in the protection system as pointed in the protection audit within the time frame as specified in the order and submit the latest status to Member Secretary within one month of the issue of the said order.

In 95<sup>th</sup> OCC MS I/C informed that CERC vide order dated 21.02.2014 in Petition No. 220/MP/2012 decided that in order to implement the recommendations of the Protection Audit, a compliance mechanism with definite time line needs to be put in place as under:

- a) Each STU and CTU shall submit its action plan against each deficiency within one month from issue of this order clearly stating the deficiencies which can be corrected without any procurement (Category-A) and deficiencies involving procurement of equipment (Category-B). However, action plan for deficiencies dealt in Petition No. 146/MP/2013 shall be submitted therein;

- b) The remaining deficiencies, if any, in Category-A shall be rectified by the concerned STU and CTU within 2 months of issue of the order and compliance report in this regard shall be submitted to respective RPC.
- c) As protection is a matter of critical importance, a time period of one year, as informed by various agencies in RPC for rectifying the deficiencies, which involve procurement, cannot be allowed. All deficiencies of Category-B shall be rectified within 6 months of issue of the order. In this regard, reasons of non-availability of fund or delay in procurement process shall not be accepted. The procurement and implementation is to be completed by each STU using their own fund which can be reimbursed through a common request of funding through PSDF forwarded through RPCs as per procedure recently approved by Government of India.
- d) Each SLDC shall be responsible to monitor the action taken by STU. If any deficiency in the STU system in regard to the Category-A deficiencies is not corrected after 3 months of issue of this order, the concerned SLDC may approach the respective State Commission for appropriate action against defaulting State entity in accordance with State Grid Code. The Office-in-Charge of the concerned SLDC shall be responsible for monitoring and ensuring compliance of the action plan and filing of the petition as directed herein.
- e) RPCs at the end of each quarter shall prepare a report on the protection deficiencies and their rectification which shall be sent to this Commission with a copy to CTU not later than 45 days of expiry of the quarter. The report shall inter-alia identify deviations from time lines as well as the State sub-stations which have interface with ISTS system. CTU shall take necessary action and issue a show cause notice for disconnection to sub-station of STU for not complying with the Standards for Protection and Control as per Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 and Central Electricity Authority (Grid Standards) Regulations, 2010.

Accordingly, CERC has directed CTU, STUs and Generating Companies /Stations of all the regions to ensure rectification of defects in the protection system as pointed out in the protection audit within the time frame specified in paragraph 27 of the said order and submit the latest status of corrective actions to Member Secretary of the respective Regional Power Committee within one month of issue of this order. All RPCs are directed to furnish consolidated report with their observations/ recommendations to the Commission within 2 months of issue of this order. Thereafter, CTU and SLDCs shall submit quarterly report to the respective RPC latest by 15th day of the first month of next quarter and RPCs shall submit the report to the Commission latest by 15th day of the second month of next quarter.

Members may note till date majority of the observations are not complied. Latest updates as communicated to CERC are in ERPC website. Members please ensure compliances before next hearing in CERC.

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

*Members noted for compliance.*

#### **Item no. B.14: Restricted Governor Mode of Operation**

The latest status of units of ER under RGMO is circulated in the meeting.

Members may update.

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

*Members noted.*



**Item no. B.15: Thermal loading limits of Transmission lines**

For calculation on inter or intra-regional ATC/TTC and evacuation limit of power plant(s) NLDC/ERLDC is using minimum of three limits which is voltage limit, stability limit and thermal loading limit. While voltage limit and stability limit is clearly defined in CEA planning criteria and IEGC, the thermal loading limit of lines depends upon ambient temperature and maximum allowable conductor temperature. In absence of any information from assets owner at present ERLDC is using standard data available in CEA planning criteria for 45 degree ambient temperature and 75 degree conductor temperature. However to ensure reliability along with maximum utilization of assets the actual manufacturer data corresponding to that element should be used for determining the thermal limit of line.

For calculation of thermal loading limit all constituents are requested to provide following data for transmission lines under their control area. To start with data related to 220 kV and 400 kV may be compiled first.

Sl. No.	Name of Transmission line	Ambient Temperature	Max allowable conductor Temp	Current at Max allowable conductor Temp
1		40		
		45		
		48		
		50		

Members may note and submit the relevant information as per the given format.

**Deliberation in the meeting**

*After detailed deliberation, OCC felt that these data are design data and does not vary line to line so, ERLDC may take data from Powergrid/DVC for each type of conductor/voltage level of line and same may be used for calculation of thermal loading limit.*

*OCC further advised ERLDC to interact with CEA design wing or from Indian Standards on whether there is any effect of ageing on current carrying capacity at maximum allowable temperature.*

**Item no. B.16: 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 88<sup>th</sup> OCC, constituents requested for another workshop on this issue. OCC agreed and requested NTPC and CESC to share their scheme in the workshop.

Members may note and comply.

**Deliberation in the meeting**

*Members noted for compliance.*

### **Item no. B.17: 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 nominate their Nodal officers as advised.

Members may note and comply.

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

*Members noted for compliance.*

### **Item no. B.18: Certification through BIS as per IS 18001:2007 to all generating/transmission units. (Item No. B9 of 84<sup>th</sup> OCC meeting)**

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.

Members may note and update the status.

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

*Members noted.*

**Item no. B.19: Pollution mapping for Eastern Region -- Powergrid**

*In 27<sup>th</sup> TCC/ERPC meeting, it was informed that, OPTCL, BSPHCL and JSEB are yet to submit the filled excel format (which is available at ERPC website) for identification of the location.*

*OPTCL, BSPHCL and JSEB assured to identify the location as per the excel format and agreed to submit by 15<sup>th</sup> June, 2014.*

Powergrid may update the status.

**Deliberation in the meeting**

*Powergrid updated the latest status for identification of locations by the constituents; the same is enclosed at **Annexure- B.19**.*

*OCC advised the respective constituents to complete the identification of location at the earliest as the Pollution Mapping process is to be started by September/October, 2014.*

**Item no. B.20: Procurement of Emergency Restoration System (ERS Towers) for Eastern Region constituents- Powergrid**

*In 25<sup>th</sup> TCC/ERPC, Powergrid was advised to procure four sets of ERS. It was also decided that these four sets will be kept at Sikkim, Siliguri, Ranchi and Gaya and will be used by all constituents of ER during emergencies.*

*In 97<sup>th</sup> OCC, Powergrid informed that for ERS tower there are only two worldwide vendors. So finalization of tendering will take some more time with either of the vendors.*

Powergrid may update the latest status.

**Deliberation in the meeting**

*Powergrid informed that the status is same.*

**Item no. B.21: Status of available Emergency Restoration System (ERS Towers) in Eastern Region**

Powergrid may update status of total number of ERS towers available in Eastern Region and how many are being used.

Approval of OCC is required if these are being used for other regions.

Powergrid may update the latest status.

**Deliberation in the meeting**

*OCC requested Powergrid to submit the details of ERS already available in Eastern Region and how many of them are being used. Powergrid agreed to give the detail.*

*It was informed by Sterlite that 400 kV Raigarh-Sterlite-Rourkela- I line is under breakdown since 08.06.14 for a tower collapse under LILO portion and expected date of restoration would be around two months.*

*On deliberation Member Secretary, ERPC informed that CTU/Powergrid was already requested to assist STERLITE with ERS in restoring 400 kV Raigarh-Sterlite-Rourkela- I line which was out of service because of tower failure in LILO section. Sterlite was advised to give the detail programme to CTU/Powergrid for hiring & utilization of ERS tower for restoration of the line. Sterlite agreed to do the needful at the earliest.*

#### **Item no. B.22: Failure of Optical fibre link between Hatia- SLDC(Ranchi) –JESB**

JSEB vide letter dated 08.01.14 informed that Hatia- SLDC (Ranchi) optical fibre link (UGFO) is under breakdown since September, 2013 which results non-reporting of four (4) nos. RTU viz. Patratu, Sikidiri, Tenughat and Hatia.

To rectify the above defect, several reminders in written as well as verbal request have been made to Powergrid and same has been raised in different forum of ERPC meetings.

In 93<sup>rd</sup> OCC JSEB requested Powergrid to restore the link temporarily till its final restoration. Powergrid agreed to look into the matter.

Powergrid informed that the offer for temporary restoration will be forwarded to JSEB soon and after the concurrence of JSEB, it will be restored within 15 days.

*In 97<sup>th</sup> OCC, Powergrid informed that JSEB consent is still awaiting.*

JSEB and Powergrid may update.

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

*Powergrid informed that it will be restored by 25<sup>th</sup> June, 2014.*

*The 27<sup>th</sup> TCC advised all constituents to do the needful for restoration of SCADA data at the earliest. The latest status as updated in the meeting is given at **Annexure-B.22**.*

Members may update.

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

*Chuzachen informed that numerous communications has been made with Rangpo Substation regarding the intermittency of Chuzachen data after LILO with Rangpo Pooling Station. When no response was received, a technical visit has been undertaken at Rangpo Pooling Station by the Chuzachen team and matter was discussed with Rangpo Station Incharge and his team.*

*On inspection it is felt that, proper gain adjustment during the interlooping of Chuzachen Rangpo and Rangpo Gangtok PLCC link had not been done by ULDC - PGCIL during the time of commissioning of the Rangpo Pooling Station, because of which all the telemetry data passing through Rangpo Gangtok PLCC link is intermittent. To overcome this problem, Chuzachen has issued a Letter of Award to M/S ABB to come out with a solution and the matter is expected to be resolved by 30/06/2014 on the arrival of the service engineer at site.*

*NHPC informed that after LILO of Teesta-Binaguri-I at Rangpo S/s, the data is being transmitted intermittently due to hopping of data at Rangpo S/s and inconsistency of PLCC communication between Rangpo- Binaguri S/s. Also the data communication from BPL make PLCC panels installed at 400 kV Teesta-Binaguri-II is notfunctional which is under Powergrid scope.*

*The latest update of BSPTCL and WBSETCL Sub-station SCADA are given at **Annexure-B.22a**.*

*The latest status of SCADA as updated in the meeting is enclosed at **Annexure B.22**.*

*After detailed discussions the OCC found that in number of the cases CTU involvement is there. OCC advised CTU/Powergrid to do the needful for restoration of SCADA data latest by 30<sup>th</sup> June, 2014 and submit the detail report on action taken by them in next OCC.*

## **Replacement of RTUs at Kahalgaon, NTPC**

NTPC informed that on account of the fire incidence in RTU & SIC panels of the ULDC system at NTPC-Kahalgaon Switchyard control room, the real time data transmission to ERLDC for generation & power flow of various lines have stopped since 18<sup>th</sup> June, 2014. These RTU & SIC panels are the assets of PGCIL and needs to be made available by PGCIL at the earliest.

ERLDC also informed that data of those RTUs are very important and stressed for early restoration.

## **Deliberation in the meeting**

*After detailed deliberation, OCC advised Powergrid to replace the RTUs on priority basis latest by 15<sup>th</sup> July, 2014.*

## **Item no. B.23: Unreliable Auxiliary Power Supply at Powergrid S/S**

As per available information it is known that time and again PGCIL is facing Low Voltage/Unreliable supply problem in many of the grid S/S.

Powergrid May update the latest status for the following:

Sl. No.	Substation	Latest status
1.	400 kV Ranchi	Low voltage
2.	400 kV Jamshedpur	
3.	400 kV Arra	
4.	400 kV Muzaffarpur	
5.	400 kV Patna	
6.	400 kV Biharshariff S/s	Low voltage
7.	Any other S/S	

## **Deliberation in the meeting**

*Powergrid informed that the supply at BSEB area is not reliable and there were numbers of trippings in every month. BSPTCL pointed that the Auxiliary supply to Powergrid S/s are under control of Distribution Companies and they are now separate entity. So, Powergrid should take up the issue with the respective Distribution Circle and if needed, BSPTCL will extend their help.*

## **Item no. B.24: Review of SPS for enhanced Chuzachen generation**

*In 97<sup>th</sup> OCC, OCC decided to allow Chuzachen to enhance their generation upto 99 MW with SPS operation of one unit tripping (whichever is generating more). The other signaling part of Chuzachen SPS will be reviewed in next OCC.*

Members may deliberate.

## **Deliberation in the meeting**

*Chuzachen representative gave a presentation on the changed scenario due to commissioning of LILO of 400 kV Teesta-Binaguri at Rangpo S/s. Further, he requested the house for removal of following signals from the SPS as in the present scenario these incidences will not endanger the grid:*

- 1) Tripping of 132 Rangit- Rammam line*
- 2) Tripping of 132 kV Rangit- Kurseong line*
- 3) Loading of 132 Melli- Chuzachen line*

ERLDC expressed that at present the Chuzachen generation was already enhanced and SPS was also modified to tripping of one unit and requested to keep the other signals of SPS as it is till the monsoon is over.

After discussion, OCC decided to continue the existing SPS for Chuzachen with one unit tripping for the monsoon period and based on the experience of that period the same will be reviewed.

## **Item no. B.25: Mock Black start exercises in Eastern Region – ERLDC**

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

In 97th OCC, tentative schedule of Black Start for 2014-15 exercise was confirmed by the constituents.

As per the final schedule following generators are scheduled for black start during the month of May and June 2014.

- i. Chujachen HEP : – In month of May
- ii. U.Kolab HEP :- Last week of May
- iii. Rengali HEP :- 2nd Week of June
- iv. U. Indravati HEP :- 3rd Week of June
- v. Maithon HEP :- 1st Week of June

ERLDC has written letters to Gati Infra, SLDC OPTCL and DVC on 3rd June to finalize date for black start of CHEP, U.Kolab and Maithon HEP respectively.

In reply DVC has proposed that black start of Maithon HEP will be carried out on 17th June 2014.

Mock black start of Upper kolab was attempted in May,2014 but was unsuccessful.

Members may confirm the dates.

### **Deliberation in the meeting**

*The following generators are scheduled for black start:*

- i. Chujachen HEP : – In month of Jan, 15
- ii. Rengali HEP :- 1st Week of July, 14
- iii. U. Indravati HEP :- 2nd Week of July, 14

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

Report regarding test run of DG sets for the month of May, 2014 has not been received from any of the constituents. All test reports may be forwarded to [erldc.cal@gmail.com](mailto:erldc.cal@gmail.com) & [psdas\\_psd@yahoo.com](mailto:psdas_psd@yahoo.com).

Constituents may kindly ensure compliance.

### **Deliberation in the meeting**

*Members noted.*

**Item no. B.26: Low voltage being faced at Jeerat/Subhasgram substations**

With the onset of the summer season, the 400kV Bus voltages at Jeerat and Subhasgram substations of West Bengal are at times dipping to as low as 370kV and below. In view of above the tap positions at Jeerat/Subhasgram have already been changed to position '11' and '9' respectively. Also, units at KTPP/Bakreshwar/Sagardighi are required generate MVAR (lagging mode operation) to the maximum extent possible. Also, conversion of line reactor of 400kV Jeerat-Behrapore(at Jeerat end) to switchable Bus reactor needs to be expedited to take care of the low voltage problem in the peak hours. Presently, line reactor of 400kV Bakreshwar-Jeerat(at Jeerat end) and 400kV Jeerat-Behrapore(at Jeerat end) are open.

Feasibility of opening of line reactor of 400kV Sagardighi-Subhasgram (at Subhasgram end) may also be deliberated upon considering that the line is a long one 256Km(with 1x63 MVAR line reactor at Sagardighi end and 1x50MVAR at Subhasgram end).

OCC requested CTU/Powergrid to check the feasibility of opening of line reactor of 400kV Sagardighi-Subhasgram (at Subhasgram end). Powergrid informed that they will check the schematic diagram and revert back.

*In 97<sup>th</sup> OCC, ERLDC informed that they are awaiting Powergrid's response on feasibility of the above.*

ERLDC/Powergrid may update.

**Deliberation in the meeting**

*Powergrid informed that they will revert back soon.*

**Item no. B.27: Mock drill for startup power to Farakka & Kahalgaon stations of NTPC.**

During Grid failure on 31.07.2012 FSTPS & KhSTPS could not get the startup power on time and due to this both the stations had faced a number of technical problems and took a long time to bring back the units on bar. Black start exercise for Teesta HEP was carried out successfully on 31/03/2014 with isolating radial load of North Bengal. In view of reliable and quick restoration of units during the grid failure, it is requested that exercise for startup power of Farakka & Kahalgaon stations of NTPC from Teesta may please be studied and carried out by ERLDC.

*In 97<sup>th</sup> OCC, OCC requested ERLDC to do the study and make a draft procedure to explore conducting mock drill for startup power to Farakka & Kahalgaon stations from Teesta. ERLDC agreed.*

ERLDC may update.

**Deliberation in the meeting**

*ERLDC informed that the mock drill for startup power to Farakka & Kahalgaon stations from Teesta even though academically possible but as it needs considerable switching operations, technically it may not be feasible.*

**Item no. B.28: Black start and Restoration procedure of Eastern region- ERLDC**

Black start and restoration procedure of Eastern Region was updated by ERLDC on 30.11.13. Prior to updation a draft copy of same was circulated to all the constituents of eastern regional via email dated 15<sup>th</sup> November 2013 seeking comments as well as updates on following issues:

- a) Details of 220kV and above substation(s) not having synchronizing facility for synchronization of islands and time schedule for providing the same.
- b) Details of Minimum auxiliary power requirement and survival power requirement by unit/plant wherever left blank in the document

Status of data received regarding synchronization facility and auxiliary and survival power

SI No.	Constituent	Data received (Yes/No)
1	BSPHCL	No
2	DVC	Yes
3	JVSNL	No
4	OHPC/OPGC	Yes
5	West Bengal	Yes
6	CESC	Yes
7	NHPC	Yes
8	NTPC	Yes
9	CHEP	Yes
10	APNRL	Yes
11	MPL	Yes
12	GMR	Yes
13	JITPL	Yes

Members are once again requested to supplement the missing data.

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

*BSPHCL submitted the data.*

*JSEB agreed to provide the relevant data at the earliest.*

#### **Item no. B.29: Reactive Power performance of Generators and GT tap position optimization**

##### **a) Review of reactive power generation/drawal of generators vis-à-vis 400kV station bus voltage of units**

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

Generating stations have been monitored for sample dates in the month of may 14:

Power Plant	Max and Min Voltage observed for May 14 (KV)	Date for monitoring (May 2014)
Farakka STPS	421, 408	2, 3, 5
Khalgaon STPS	417, 403	3, 5, 14
Talcher STPS	409, 399	11, 12, 13
Teesta	410, 407	1, 2, 3
Bakreshwar TPS	411, 388	3, 4, 5
Kolaghat TPS	424, 394	3, 4, 5
Sagardighi TPS	414, 414	1, 2, 3
MPL	426, 417	2, 3, 4
Mejia-B	430, 419	3, 4, 5
DSTPS	432, 420	13, 14, 15
Adhunik TPS	427, 414	3, 5, 14
Sterlite	429, 423	1, 2, 4

ERLDC may update.



## **Deliberation in the meeting**

*Members noted.*

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

As discussed in the last OCC meeting, the status of reactive capability testing of identified generators is as follows:

- a) Adhunik TPS: In Nov, 13
- b) DSTPS: One unit is out due to coal shortage, test to be done on opportunity basis.
- c) Mejia & Koderma TPS: Test to be done when both units are in service.

**Concerned members may update the status.**

### **c) Optimization of GT tap position at Adhunik, Mejia-B and DSTPS**

In the 88<sup>th</sup> OCC it was decided to change the relevant taps of identified units as follows:

DSTPS GT-1 and 2		MEJIA'B' GT - 1 & 2	
Present tap position & voltage ratio	Suggested tap position & voltage ratio	Present tap position	Suggested tap position
5 (21kV/420 kV)	7 (21kV /399 kV)	4 (21kV /430.5 kV)	7 (21kV /399 kV)

Adhunik GT-1 & 2	
Present tap position & voltage ratio	Suggested tap position & voltage ratio
8 (16.5kV /420kV)	12 (16.5kV /400.68 kV)

In 95<sup>th</sup> OCC ERLDC informed that, they have issued messages for changing of taps at DSTPS and Adhunik for changing GT tap position of both the units from present position of 5 to 6 and from present position of 8 to 10 respectively. The messages were issued using the opportunity when both the units of the plants were not on bar. However, no confirmation has been received from DVC and Adhunik in this regard.

In last OCC, representative from Adhunik informed that, it is not possible to change the GT tap at their end due to technical reasons. DVC informed that, they will change the tap during opportunity shutdown.

*In 97<sup>th</sup> OCC, members requested ERPC Secretariat to convene a special meeting for detail deliberation on tap changing proposal before next OCC.*

*Because of paucity of time the said meeting was delayed & now it is being convened on 27<sup>th</sup> of June, 2014.*

Concerned members may update the status, if any, and note.

## **Deliberation in the meeting**

*Members were informed that special meeting for detail deliberation on tap changing proposal is scheduled on 27<sup>th</sup> June, 2014.*

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

### **Item no. C.1: Shutdown proposal of transmission lines and generating units for the month of July' 14**

Members may finalize the Shutdown proposals of the generating stations and transmission lines for the month of July' 14 is circulated in the meeting.

Members may finalize the shutdown proposal.

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

*Approved maintenance programme of generating stations and transmission elements for the month of July, 2014 is at **Annexure-C.1**.*

*OPTCL informed that they have allowed one day shutdown of Kania-Meramondali & Kania-Rengali to Powergrid but the shutdown was continued for three days.*

*OCC advised Powergrid to return the line timely after availing the scheduled shutdown. Powergrid agreed.*

#### **Shutdown of 400kV Angul-JITPL D/C line**

The 765kV Angul-Jharsuguda D/C line under construction is part of the ATS of Phase-I IPPs in Odisha. For stringing of this line, POWERGRID requires shutdown of 400kV JITPL-Angul D/c line on 25<sup>th</sup> and 26<sup>th</sup> June (8:00 hrs to 20:00 hrs each day), as the route of the 765kV line crosses over the 400kV dedicated line from JITPL to Angul. Consequently, JITPL has to keep its U#1 out of bar during the aforesaid period, to facilitate stringing of the 765kV D/C line.

*It was informed by PGCIL that JITPL is delaying the clearance even when its units are not in Bar. OCC took serious note of this issue as stringing of 765kV Angul-Jharsuguda D/C is requirement for national grid and requested JITPL to take suitable action whenever units will be out of bar.*

#### **Planned shutdown of unit-1 from 01-07-2014 for 7 days--NTPC**

NTPC vide letter dated 14-05-2014 informed that, unit-1 of Kaniha has completed 20 years of operation and the licensing authorities are not renewing the boiler license under Appendix-1A. Boiler is necessarily to be stopped for inspection of renewal of license. Accordingly, NTPC requested for short shutdown of unit-1 for 7 days from 01-07-2014 to 07-07-2014. NTPC also informed that, Appendix-1A is prepared after the LGBR hence the same could not be included in the LGBR.

*In 97<sup>th</sup> OCC, OCC agreed in principle and decided to review in next OCC along with other units S/D.*

Members may discuss.

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

*The shutdown was deferred till unit #2 comes in bar which is scheduled for shutdown for PCB clearance wef 01.08.14 to 14.09.14.*

**Item no. C.2: Anticipated power supply position during July'14**

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of July'14 were prepared by ERPC Secretariat on the basis of Provisional LGBR for 2014-15, keeping in view that the units are available for generation and expected load growth etc. and is circulated in the meeting.

Members may confirm.

**Deliberation in the meeting**

*Modified anticipated power supply position for the month of June, 2014 after incorporating constituents' observations is given at **Annexure-C.2**.*

**Item no. C.3: Prolonged outage of power system elements in Eastern Region****(i) Generating units:**

Generating Station	UNIT NO	CAP(MW)	DATE	REASONS FOR OUTAGE	Date of restoration
BOKARO B	3	210	12.10.13	ASH POND PROBLEM	
BANDEL	5	210	16.11.13	MAINTENANCE	
KODARMA	1	500	01.03.14	ASH POND PROBLEM	May, 14
MEJIA	3	210	15.06.14	HYDROGEN LEAKAGE	
DSTPS(ANDAL)	2	500	16.05.14	TUBE LEAKAGE	
STERLITE	2	600	08.06.14	TURBINE VIBRATION	

**(ii) Transmission elements**

Name of the Line/Element	Outage Date	Reason	Date of restoration
220 KV JEERAT - SATGACHIA D/C	15.06.10	DUE TO LAND SLIDE OF GANGES	
220 KV MENDHASAL -	12.10.13	TOWER COLLAPSE	
400/220 KV,315 MVA ICT - I AT	18.01.14	FAILURE OF R PHASE	
400 KV RANCHI - NEW RANCHI - I &	05.05.14	S/D AVAILED BY POWERGRD FOR	
400 KV FARAKKA - DURGAPUR - I	11.05.14	WAVE TRAP REPLACEMENT TO	
220 KV TSTPP - MEERAMUNDALI - I	24.05.14	CB PROBLEM AT MEERAMUNDALI	
400 KV BARH - PATNA - I	25.05.14	S/D AVAILED BY POWERGRD TILL	
765 KV GAYA-FATEHPUR	31.05.14	15 Nos tower collapsed between	
400KV KAHALGAON-BARH-II	08.06.14	TOWER DIVERSION WORK	
400 KV STERLITE-RAIGARH -I	08.06.14	TOWER LOC NO 36 TWISTED.	
400 KV ROURKELLA-STERLITE-I	08.06.14	TOWER LOC NO 36 TWISTED.	
400 KV MAITHON-MEJIA-D/C	11.06.14	TOWER LOC NO 93 TWISTED.	
400 KV TALA-BINAGURI-I	13.06.14	INSULATOR DECAPPING AT TALA	
220 KV BARIPADA-BALASORE-I	13.06.14	LINE UNDER B/D	

Members may update.

**Deliberation in the meeting**

*Members updated the latest status.*

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

1. 765kV 220/132 kV, 100 MVA ICT – II at Rangpo was charged for the first time at 19:04hrs on 15.05.14.
2. 220/132 kV, 100 MVA ATR - III at Joda was charged for the first time on 18.05.14.
3. 220/132 kV, 160 MVA ATR - II at New Bolangir was charged for the first time at 13:40hrs on 06.05.14.

4. 400/132 kV, 200 MVA ICT – II at Lakhisarai was charged for the first time at 19:24hrs on 30.05.14.
5. 50 MVAR L/R of 400 kV Kahalgaon – Lakhisarai at Lakhisarai was charged for the first time at 18:51hrs on 30.05.14.
6. 3\*80 MVAR 765 kV B/R – I at New-Ranchi was charged for the first time at 13:46hrs on 31.05.14.

All constituents are requested to intimate details of commissioning of new elements/generating units (if any) positively by the first working day of the current month for the previous month.

All members are also requested to verify above and also intimate regarding details of any other new elements commissioned but not included in the above list.

Members may note/update.

### **Deliberation in the meeting**

*Members noted.*

**Status of commissioning of generating station and transmission elements are as follows:**

#### **New generating units:**

S.No.	Power Plant	Plant Size	Expected date
1	GMR Unit#3	4x350MW	15 <sup>th</sup> Nov, 2013
2	Koderma Unit#2	2x500MW	Oct, 2013
3	Corporate Power Unit#1	2x270MW	
4	Teesta-III Unit#1	1x200MW	
5	Raghunathpur Unit#1	2x600MW	Nov, 2013
6	TLDP-IV	1x40MW	

#### **New transmission elements:**

SI No.	Name of Element	Expected date
1	400 kV Maithon-Gaya D/C	
2	400 kV Gaya-Koderma D/C	
3	400kV Sasaram-Daltonganj D/C & Daltonganj S/Stn	
4	400 kV Ranchi-Raghunathpur D/C	
5	400 kV Meramandali-Dubri D/C	
6	400 kV Corporate- Ranchi D/C	
7	400 kV IB-Meramandali D/C	
8	220 kV TLDP-IV – NJP ckt-2	2014
9	220 kV Jeerat-Rishra D/C	
10	220 kV Latehar-Daltonganj D/C	
11	220 kV Lohardaga-Lathehar D/C	
12	220 kV Bidhansai-Cuttack D/C	June,2014
13	220 kV Girdih-Koderma D/C	Sep, 2014

Members may update.

### **Deliberation in the meeting**

*Members updated the latest status.*

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

### **Item no. D.1: UFR operation during the month of May'14**

System frequency touched a minimum of 49.41 Hz in May'14. 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: Grid incidences during the month of May, 2014.**

Sl no	Disturbance Place	Date & Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	BSPHCL (Purnea)	01/05/14 at 17:54hrs	0	50	Total power failure occurred at 132/33kV Purnea (BSPHCL) s/s due to fault in downstream of BSPHCL system	-
2	JSEB(Tenughat, Patratu, Hatia)	03/05/14 at 14:08hrs	429	270	Various 220kV, 132kV lines & units emanating from PTPS s/s tripped due to B-Ø LA of 132kV PTPS-Patratu (DVC)-I line burst at Patratu (DVC).	GD-1
3	Farraka STPS	11/05/14 at 19:03, 20:20hrs	980	0	Various 400kV lines & Units tripped at FSTPP due to tower no.7 of 220kV Farraka-Lamatia line collapsed and line conductors fall over 400kV Farraka-DurgapurD/C.	GD-1
4	OPTCL (Budhipadar, Tarkera, Katapalli)	13/05/14 at 21:42hrs	700	500	All the lines emanating from Budhipadar s/s tripped due to bursting of Y-Ø Main Bus-II post insulator of 220kV Budhipadar-Tarkera-I.	GD-1
5	BSPHCL (Purnea)	16/05/14 at 07:08hrs	0	120	Total power failure occurred at 132/33kV Purnea (BSPHCL) s/s due to fault in 132kV Purnea (BSPHCL)-Forbisgunj line.	-
6	JSEB(Tenughat, Patratu, Hatia)	31/05/14 at 05:02hrs	337	200	Various 220kV lines & units at PTPS & Tenughat tripped due to inclement weather condition in JSEB system.	GD-1
7	WBSETCL (SAGARDIGHI TPS)	31/05/14 at 23:55hrs	390	0	Various 220kV lines & units at Sagardighi TPS tripped due to LV side B-Phase CT of 315 MVA, 400/220 KV ICT burst at Sagardighi.	GD-1

Members may note.

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

*Members noted.*

### **Item no. D.3: Any other items**

#### **D.3.1. Tripping of 132 kV Patratu (JSEB)- Patratu (DVC) line - DVC**

It was informed that whenever the said line was loaded beyond 40 MW it is getting tripped from Patratu (JSEB ) end on overload.

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

*OCC advised DVC to visit Patratu (JSEB) S/s and resolve the issue at the earliest. JSEB and DVC agreed.*

\*\*\*\*\*

Participants in 98<sup>th</sup> OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 20.06.14 (Friday)

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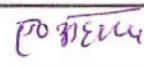
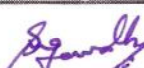




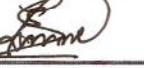
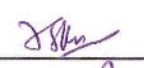
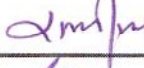
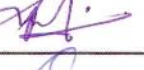
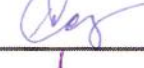
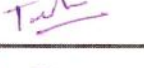
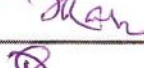
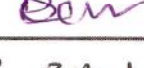

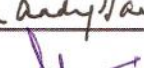

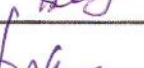
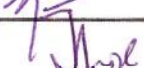
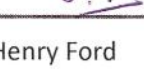


### Participants in 98<sup>th</sup> OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 20.06.14 (Friday)

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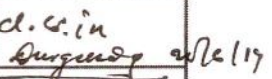
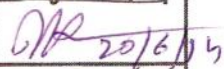

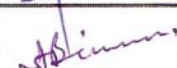
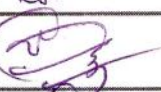
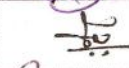
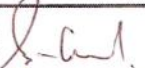


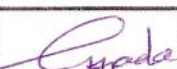
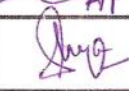
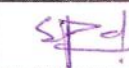

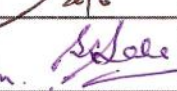
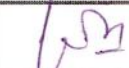
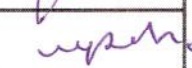



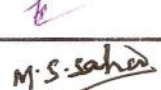


## Participants in 98<sup>th</sup> OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 20.06.14 (Friday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
41	D. S. NAG	DGM(O)	KTPS, WBPDCL	8336903888	dsnag@wbpdcl.co.in	
42	P. Kumar	ESE/SLDC	BSPTCL	7763816743		
43	Ajay Prasad	ESE/CRTL	JUSNL	9431584785		
44	A. Binwas	C.E., SLDC	WBSETCL	9434910030	amitava.binwas22@gmail.com	
45	D. Sanjay	<del>B. Railway</del> Dy CEE/RR	E. Railway	9062029312		
46	Sujit Nath	C.E. CPD	WBSETCL	9434910019	sujit.nath@wbsetel.in	
47	B. SARKHEL	SE(PS)	ERPC	9433065724	buddha_sarkhel@yahoo.co.in	
48	JOYDEB BANDYOPADHYAY	SECY	"			
49	D. K. Bauri	EE (O)	ERPC	9883617236	ceep.erpc@gmail.in	
50	G. Rao	AEE	ERPC	9547891353	eseb-cea@yahoo.com	
51	S. KEJRIWAL	EE	ERPC			
52	S.P. Datta	AGM(NTPC)	ERPC	9433067022	spdatta@rediffmail	
53	Vitihotra Kumar	SE(E)	CPD WBSETCL	9434910091	vitihotra.kumar@wbsetel.in	
54	S.K. SAHA	SSE	E. Railway	9002025315	Sanjay, Saha39@gmail.com	
55	P.K. Kundu	SE(E)	SLDC WBSETCL	9433086424	pkundu_1961@yahoo.co.in	
56	N. Saha	SM(PS)	WBPDCL (corp)	8886903700	nsaha@wbpdcl.co.in	
57	P. Banerjee	DE	WBSETCL	9432140765	preekant72@gmail.com	
58	A. K. Mohanty	Manager(E)	OHPC	9437657956	akm_678@yahoo.co.in	
59	P.K. Panda	AGM(CE)	OPTCL	9435207300	ele.p.panda@OPTCL.co.in	
60	Madhusudan Saha	AGM(elect)	GRIDCO	9692427876	gridco-elc@gmail.com	

"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford



### Participants in 98<sup>th</sup> OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 20.06.14 (Friday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
61	N. Khem	L.O	Girdh Kel	9433035435	khennur@k4409	N-18-61
62	N. Mandab	AGM(E)	Gati	8016082299	nicladriimandab@gatiinfra.com	20/6/14
63	J. Majhi	SMCE	NHPC Ltd.	9800048892	joqurwaram@rediffmail.com	J. Majhi
64	S P Dash	DGM	powergen	9433175651	spdash@powergen.co	SP Dash
65	B. D. BARK	AM	JITPL	9583040628	barkya-parama@rediffmail.com	Bark
66	Vijay Kumar &	Sr. Engineer	JITPL	9583040628	vijayg.c@rediffmail.com	Vijay
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"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford

**1. Rescheduling of planned maintenance shutdown of Central Sector (CS) Thermal/Gas units**

Region	Central Sector units originally scheduled for maintenance during monsoon		Central Sector units rescheduled for maintenance during post monsoon		Remarks
	Number	MW	Number	MW	
ER	15	4740	6	1880	

For details refer **Annexure-I****2. Status of hydro reservoirs**

Region	Total number of Reservoirs	Number of Reservoirs whose level is higher than last year	Number of Reservoirs whose level is less than last year	Remarks
ER	6	6	0	

For details refer **Annexure-II****3. Coal stock position at coal based thermal power stations of NTPC & DVC**

Region	Total number of CS coal based stations	Number of stations where coal available for 15 days or more	Number of stations where coal stock critical (less than 7 days)	Number of stations where coal stock super critical (less than 4 days)	Remarks
ER	9				Critical/Super Critical

Possibilities of transferring coal from stations of NTPC of ER to other NTPC stations of other regions were at this moment found not feasible.

**4. Progress of construction of transmission lines critical for greater inter-regional exchanges**

Region	No. Of identified critical transmission lines under construction as on 1.5.14	No. Of critical transmission lines			Remarks
		Subsequently commissioned	Likely to be commissioned in the current month	Awaiting for various clearances	
ER	2				

For details refer **Annexure-III**

**Annexure-I**

SYSTEM	POWER STATION	Unit NO.	Effective Capacity (MW)	Scheduled Maintenance Programme	Revised Maintenance Programme	Remarks
DVC	CTPS	Unit No. 3	130	11.07.2014 to 26.07.2014	Already completed	
	BTPS (B)	Unit No 1	210	16.08.2014 to 05.09.2014	16.08.2014 to 05.09.2014	Two units operation will be continued
	Mejia TPS	Unit No 4	210	25.08.2014 to 14.09.2014	25.08.2014 to 14.09.2014	Numbers of units will be there for maintaining generation.
		Unit No 6	250	21.09.2014 to 06.10.2014	Deferred	
		Unit No 7	500	15.07.2014 to 09.08.2014	Already completed	
NTPC	TTPS	Unit No 2	60	20.08.2014 to 03.09.2014	Will be reviewed in Aug, 2014	
		Unit No 3	60	06.09.2014 to 20.09.2014	OCC	
		Unit No 5			25.06.2014 to 16.07.2014	
		Unit No 6	110	20.07.2014 to 18.08.2014	10.07.2014 to 08.08.2014	
		Unit No 5	500	14.07.2014 to 11.09.2014	14.07.2014 to 11.09.2014	Allowed to attend unavoidable Turbine vibration
	KhSTPP Stg-I	Unit No 2	210	15.06.2014 to 14.07.2014	20.06.2014 to 10.07.2014	Other units should be in operation
	KhSTPP Stg-II	Unit No 5	500	19.08.2014 to 13.09.2014	Deferred to Oct/Nov, 2014	Generation will be continued if coal is available. As Unit is running with vacuum problem, status will be reviewed in OCC. If required short S/D may be allowed considering arrival of Monsoon.
		Unit No 7	500	15.07.2014 to 08.08.2014	Deferred to Oct/Nov, 2014	
	TSTPP Stg-I	Unit No 2	500	01.08.2014 to 14.09.2014	01.08.2014 to 14.09.2014	Allowed for PCB clearance for boiler licence & because of foreign expert tied up
	TSTPP Stg-II	Unit No 5	500	19.07.2014 to 17.08.2014	ER proposed for deferment	SR Cleared.
		Unit No 6	500	15.06.2014 to 14.07.2014	Already cleared & under Shutdown.	

During shutdown of Talcher units & considering network situations and status of monsoon, further reviewing will be done in OCC forum for evacuation of suppress generation if any.

**Annexure-II**

<b>Reservoir Level</b>										
Sl. No.	Name of Station	FRL	MDDL	07-06-2013	07-06-2014	06-06-2013	06-06-2014	31-05-2013	31-05-2014	12-06-2014
1	Burla	630 ft	590 ft	595.89	604.73	596.62	605.10	598.33	606.71	603.08
2	Balimela	1516 ft	1440 ft	N.A.	1487.40	N.A.	1487.60	1482.20	1487.90	1486.40
3	Rengali	123 mt	109 mt	109.91	114.24	110.01	114.45	111.70	115.41	113.24
4	U.Kolab	858 mt	844 mt	849.16	849.25	849.26	849.38	849.88	849.79	848.63
5	U.Indravati	641 mt	625 mt	628.00	629.44	628.10	629.63	628.70	630.52	628.60
6	Machkund	2750 ft	2685 ft	2709.00	-	2709.20	2725.60	2711.20	2727.00	

Detail Plan of Odisha for contingency is given at Annexure B.1a

**Annexure-III**

Sl. No.	Name of the line	COD
1	220 kV Balimela-Upper Sileru line	Already in charged condition
2	765 kV Dharamjaygarh-Jharsuguda D/C line	July, 2014
3	765 kV Angul-Jharsuguda D/C line	December, 2014

Shutdown of all major Transmission lines of CTU will be cleared in monthly OCC meetings depending upon the status of Monsoon.

220 kV Balimela- U. Sileru ideally charged from U.Sileru end wef 12.06.14.

Operational and Commercial modalities between Odisha and Andhra Pradesh are in the process of finalization.



# ଓଡ଼ିଶା ଜଳ ବିଦ୍ୟୁତ୍ ନିଗମ ଲିମିଟେଡ୍ *Annex-D, 1a*

(ଓଡ଼ିଶା ସରକାରଙ୍କ ଅଧୀନ)

ଓଡ଼ିଶା ରାଜ୍ୟ ଆରକ୍ଷା ଗୃହନିର୍ମାଣ ଏବଂ ସମାଜମଙ୍ଗଳ ନିଗମ ଭବନ, ବାଣୀବିହାର ଛକ, ଜନପଥ, ଭୁବନେଶ୍ୱର-୨୨

ଫୋନ୍-୯୧-୦୬୭୪-୨୫୪୨୯୮୩, ୨୫୪୨୮୦୨, ୨୫୪୫୫୨୭, ୨୫୪୨୮୨୭, ଫ୍ୟାକ୍ସ-୨୫୪୨୧୦୨, ଗ୍ରାମ-ହାଇଡ୍ରୋପାୱାର

## ODISHA HYDRO POWER CORPORATION LTD.

(A Government of Odisha Undertaking)

ODISHA STATE POLICE HOUSING & WELFARE CORPORATION BUILDING, VANIVIHAR CHOUK, JANPATH, BHUBANESWAR-22

Tel. : 91-0674-2542983, 2542802, 2545526, 2542826, Fax. : 2542102, GRAM: HYDROPOWER

E-MAIL : ohpc.co@gmail.com / md@ohpccltd.com, WEB: www.ohpccltd.com

OHPC – HQ – TECH – P & M - 20/2011(A) / 7696 / dt- 17.06.2014 FAX / Email

To

The Member Secretary I/C,  
Eastern Regional Power Committee,  
14, Golf Club Road,  
Tollygunge, Kolkata – 700033  
Fax No. – 033-24221802

**Sub: Planning & Regulation of Reservoir based hydro station – Regarding.**

Sir,

With reference to the above subject, it is to intimate that we can keep some water in the reservoirs of Balimela, Upper Kolab & Upper Indravati above MDDL because they are carry over reservoirs. But for Rengali & Hirakud reservoirs, the available water needs to be depleted to the MDDL. So, it was decided in the meeting held on dtd. 10.12.2013 with Principal Secretary, Water Resources Department that the Reservoir Level of Upper Indravati reservoir to be maintained at 626.00mt. on 15<sup>th</sup> July and 627.00 mt. on 30<sup>th</sup> June. Reservoir level of Rengali Power House is to be maintained at RL 110.00 mt. on 30<sup>th</sup> June' 2014. In view of the delayed monsoon and deficit monsoon, after discussion with Chief Engineer & Basin Manager, Upper Mahanadi Basin, it was decided on dt. 27.05.2014 that the reservoir level; of Hirakud Power House is to be maintained at RL of 602 Ft. on 15.06.2014 and 600 ft. on 25<sup>th</sup> June.

The present reservoir level of hydro stations and anticipated reservoir level on 1<sup>st</sup> July of OHPC are given below:

Sl. No	Name of the Power Stations	FRL / MDDL	RL as on Dated 17.06.2014	Anticipated RL as on Dated 01.07.2014
1	Hirakud	630 ft. / 590ft.	601.33 Ft.	599.40 ft.
2	Balimela	1516 ft. / 1440 ft.	1485.00 Ft.	1480.00 Ft.
3	Rengali	123.5 m / 109.72m	111.76 Mt.	110.70 m
4	Upper Indravati	642m / 625 m	628.20 Mt.	627.20 m
5	Upper Kolab	858 m / 844 m	848.07 Mt.	847.02 M

Further, the generation of OHPC will be optimized to utilized the water available during monsoon period. Planned Maintenance of unit – 4 of Upper Indravati Power House has been scheduled from 20.06.2014 to 14.07.2014. All the machines of OHPC will be available for generation during monsoon period except the units under forced outage. In consideration of the present water available in the reservoirs, a generation sechedule is prepared upto 31<sup>st</sup> July is enclosed herewith for your information and necessar action.

Yours faithfully,

Director (Operation)

Encl: Annexure - 1.

**Annexure - 1****Anticipated Generation Detail of OHPC Power Stations in MU**

Sl. No	Name of the Power Stations	17 <sup>th</sup> June to 30 <sup>th</sup> June		1 <sup>st</sup> July to 15 <sup>th</sup> July		16 <sup>th</sup> July to 31 <sup>st</sup> July		Total
		MW	MU	MW	MU	MW	MU	MU
1	HHEP, Burla	30	10.08	20	7.2	10	3.84	21.12
2	CHEP, Chiplima	20	6.72	10	3.6	5	1.92	12.24
3	BHEP, Balimela	150	50.4	150	54	200	76.8	181.2
4	RHEP, Rengali	40	13.44	10	3.6	5	1.92	18.96
5	UIHEP, Mukhiguda	130	43.68	100	36	50	19.2	98.88
6	UKHEP, Bariniput	80	26.88	80	28.8	80	30.72	86.4

**Anticipated Reservoir Level Details**

Sl. No	Name of the Power Stations	As on 17.06.2014	1 <sup>st</sup> July	16 <sup>th</sup> July	31 <sup>st</sup> July
1	HHEP, Burla	601.33 Ft.	599.40 Ft.	595.20 Ft.	594.20 Ft.
2	BHEP, Balimela	1485.00 Ft.	1480.00 Ft.	1475.50 Ft.	1469.50 Ft.
3	RHEP, Rengali	111.76 Mt.	110.70 Mt.	110.50 Mt.	110.00 Mt.
4	UIHEP, Mukhiguda	628.20 Mt.	627.20 Mt.	626.60 Mt.	626.00 Mt.
5	UKHEP, Bariniput	848.07 Mt.	847.02 Mt.	846.00 Mt.	844.80 Mt.



**MINUTES OF MEETING BETWEEN NTPC, POWERGRID, JUSNL AND ERLANG  
TELETRONIX HELD AT NTPC, FARAKKA ON 13.06.2014**

**Members Present:**

For NTPC, Farakka	For POWERGRID	For JUSNL	For ERLANG
Mr. Rajnish Kumar (Sr. Manager(EMD))	Mr. Rohit Kumar (Sr. Engineer)	Mr. B.L.Barnwal (Electrical E.E)	Mr. Binu John (Manager)

As decided in the 27 th ERPC meeting, POWERGRID, JSUNL and Erlang (Service Engineer for BPL make PLCC panels) representatives have visited NTPC, Farakka for inspectopn / checking of BPL make PLCC panel ( Sl. No. H1\_SZ\_10\_4070) with Protection coupler for implementation of Islanding Scheme for NTPC, Farakka.

PLCC panel and Protection coupler has been inspected and the following are the observations by Erlang representative.

01. Four modules were found damaged (Physical damages found in 67 LOGIC, 67 REC-F4, 95 PSU HP and 95 MEMRI). These modules need to be repaired before testing and commissioning.

02. It was found that, many wires were found snapped in PLCC and Protection coupler. The same need to be re-wired to switch on the PLCC and Protection coupler and hence the healthiness of all modules could not be verified.

03. Existing LMUs in the Lalmatia-Farakka link were physically inspected and found to be in order.

04. All the defective modules and the wiring are repairable.

JUSNL requested POWERGRID to submit offer for repair of all defective modules as well as all other modules which are not verified. So that, in case of requirement the same may be rectified at the time of commissioning.

*Rajnish Kumar*  
13.06.14  
(Rajnish Kumar)

*Rohit Kumar*  
13.06.14  
(Rohit Kumar)

*B.L. Barnwal*  
(B.L. Barnwal)

*Binu John*  
13.06.2014  
(Binu John)

*Islanding*  
*Settled*

**MINUTES OF MEETING BETWEEN POWERGRID, JUSNL AND ERLANG TELETRONIX  
HELD AT JUSNL, DUMKA ON 14.06.2014**

**Members Present:**

For POWERGRID	For JUSNL	For ERLANG
Mr. Rohit Kumar (Sr. Engineer)	Mr. B.L. Barnwal (Electrical E.E)	Mr. Binu John (Manager)

As decided in the 27<sup>th</sup> ERPC meeting, POWERGRID, JSUNL and Erlang (Service Engineer for BPL make PLCC panels) representatives have visited GSS, Lalmatia and Dumka for inspection / checking of healthiness of BPL make PLCC panels with Protection coupler for implementation of Islanding Scheme for NTPC, Farakka.

PLCC panel and Protection coupler has been inspected and the following are the observations by Erlang representative.

**GSS, Lalmatia**

**a. Lalmatia - Dumka Link** ( BPL 9505 V3 PLCC, SL. No. H1\_SZ\_10\_4069)

01. Six modules were found damaged (Physical damages found in 67 LOGIC, 67 REC-F4, 67 TIME, 67 PWR, 95 DATA and 95 MEMRI). These modules need to be repaired before testing and commissioning. Some components were found damaged in Motherboard, 95 PROT and OVP PCBs.
02. Many wires were found snapped in PLCC and Protection coupler. The same need to be re-wired to switch on the PLCC and Protection coupler and hence the healthiness of all modules could not be verified.
03. LMUs were physically inspected at store of Lalmatia and found to be in order. The same need to be installed. HF Cable needs to be laid. DC and AC supply, Grouting and earthing of panels to be done prior to the commissioning.

**b. Lalmatia - Farakka Link** ( BPL 9505 V3 PLCC, SL. No. H1\_SZ\_10\_4071)

01. Four modules were found damaged (Physical damages found in 67 LOGIC, 67 REC-F4, 67 REC-G2, 67 INOP). These modules need to be repaired before testing and commissioning. Some components were also found damaged in Motherboard.
02. Few wires were found snapped in PLCC and Protection coupler. The same need to be re-wired to switch on the PLCC and Protection coupler and hence the healthiness of all modules could not be verified.
03. DC and AC supply, Grouting and earthing of panels to be done prior to the commissioning.

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*Barnwal*

*Binu*

*Islandin*



**GSS, Dumka**

**c. Dumka- Lalmatia Link** ( BPL 9505 V3 PLCC, SL. No. H1\_SZ\_10\_4072)

01. Two modules were found damaged (Physical damages found in 95 MODEM and 67 INOP). These modules need to be repaired before testing and commissioning.
02. Few wires were found snapped in PLCC and Protection coupler. The same need to be re-wired to switch on the PLCC and Protection coupler and hence the healthiness of all modules could not be verified.
03. DC and AC supply, Grouting and earthing of panels to be done prior to the commissioning.

All the defective modules and the wiring are repairable.

JUSNL requested POWERGRID to submit offer for repair of all defective modules as well as all other modules which are not verified. So that, in case of requirement the same may be rectified at the time of commissioning.

  
(Rohit Kumar)

  
(B.L. Barnwal)

  
(Binu John)

Sr. No.	State	Total no. of Locations	No of location in scope of POWERGRID	No of location in scope of States	Locations identified by States	Dummy Insulator installation	Remarks	Co-ordinator from State
1	Bihar	116	57	59	44(Tower No & GPS Coordinates are missing)	to be intimated	Tower No & GPS Coordinates are missing in received 44 identified locations. The same needs to be provided. The balance locations needs to be identified & installed the dummy insulator immediately.	Shri Brij Mohan, A.B.E, BSPTCL, Patna. Ph - 7033091496, Email - bms282@yahoo.com
2	Jharkhand	105	39	66	23	to be intimated	The balance locations to be identified & dummy insulator installation to be carried out immediately.	Shri. Ajay Prasad, ESE, CRITIL, JUSNL, Kusai Colony, Doranda, Ranchi. Ph - 9431584785, Email - sldcranchi@gmail.com
3	West bengal	114	40	74	29	to be intimated	The balance locations to be identified & dummy insulator installation to be carried out immediately.	Shri. Ram Prasad Mandal, SE(E), WBSETCL, Kolkata, 700091. Ph - 9434910270, Email - mandalramprasad@gmail.com
4	Orissa	207	43	164	0	to be intimated	No data has been received till now. Location needs to be identified immediately. And dummy insulator installation to be carried out immediately.	Shri. Jayant Senapati, DGM (Elect.) OPTCL, Bhubaneswar. Ph - 9438907242, Email - ele.jksenapati@optcl.co.in
5	Sikkim	9	3	6	0	to be intimated	Details of Co-ordinator for Sikkim State are not known and needs to be provided. Data from 6 No.s of location needs to be provided. And dummy insulator installation to be carried out immediately.	

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

The latest status as updated in the 98<sup>th</sup> OCC meeting is as given below:

i) List of RTU supplied under ULDC Project but data is faulty/ intermittent:

SL no	Name of Utility	kV	Name of station	Reason for not reporting	Latest status
1	DVC	220	CTPS-B (2 x 250 MW)	Except GT MW & line flow, no data available	Powegrid informed that procurement of RTU is in progress.

ii) 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	NTPC	400	Farakka: (3x200+2x500MW)	MW, MVAR of primary (LV) side of all GT is not available.	NTPC agreed to make available these data by July, 2014.
2	OPTCL	220	Vedanta (9x135 MW)	No status points are available.	CB Status point Rectified. Isolators status and KV /HZ meausrands yet to be rectified.

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

S/n	Name of RTU locations	Latest status
1	Khagaul RTU, Barauni TPS, Dumraon, Lakhisarai, Sitamarhi, Siwan, Valmikinagar, Begusarai, Darbhanga, Purnea, Hatidah, Karmnasha, Samastipur	<i>The latest update as given by BSPTCL is at Annexure-B.22a.</i>  CTU involvement

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

S/n	Name of RTU Locations	Latest status
1	Ramchadrapur RTU, Jamtara RTU, Deoghar RTU, Garwarah RTU, Patartu RTU, Tenughat RTU, Goelkera, Hatia, Jaduguda, Kendposhi, Lalmatia, Rajkharswan, Subarnrekha	CTU Involvement.

v) 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	OCC advised to complete the work by 30 <sup>th</sup> June, 2014.

vi) **Non Availability of SCADA data from critical sub-stations****New IPP ( Complete data failure )**

- I. Chuzachen HPS:  
Highly intermittent since LILO of Chuzachen – Gangtok line at Rangpo.  
( **PLCC link intermittent between Chuzachen – Rangpo – Gangtok.**  
**Action : GATI / POWERGRID )**

*Chuzachen informed work will be completed by 30<sup>th</sup> June, 2014.*

- II. Maithon Right Bank Power Ltd.: Data stopped reporting since 04<sup>th</sup> May 2014.  
( **Equipment problem. Action : MPL .** )

*MPL informed that ABB is on job and data will be made available by 30<sup>th</sup> June, 2014.*

- III. SEL.: Data stopped reporting since 04<sup>th</sup> May 2014.  
( **Equipment problem . Action : STERLITE .** )

*Sterlite informed that their RTU is being reported from 4<sup>th</sup> June, 2014. ERLDC confirmed.*

- IV. JITPL (Angul): Data stopped reporting since 05<sup>th</sup> May 2014.  
( **Data Restored on 26/05/14. .** )

*JITPL representative informed that data has been restored. ERLDC confirmed.*

vii) **RTU telemetry provided but data are intermittent / new element not wired .**

- I. Sagardighi TPS : No data is available since 25<sup>th</sup> Feb 2014.  
( **Data Restored on 26/05/14. .** )
- II. NHPC Teesta: Highly intermittent since LILO of Teesta – Binaguri line at Rangpo.  
( **PLCC link intermittent between Teesta – Rangpo – Binaguri. Action : POWERGRID / NHPC. .** )

*Powergrid informed that work is in progress. OCC advised to finish the same by 30<sup>th</sup> June, 2014. Powergrid agreed.*

- III. NHPC Rangit :  
No measurands are available for Gangtok 132 KV feeder in Rangit NHPC RTU  
( **Feeders not wired with existing RTU. Action : NHPC . .** )

*Powergrid informed that work is in progress. OCC advised to finish the same by 30<sup>th</sup> June, 2014. Powergrid agreed.*

- IV. Sasaram 765 KV: Data reporting highly intermittent.  
( **Communication Links between Biharshariff – Sasaram are intermittent. Action : POWERGRID .** )

*ERLDC informed that data is available.*

- V. Ranchi 765 KV : Data reporting highly intermittent.  
**PLCC Communication Links between – Ranchi ( Namkum) – Ranchi ( Beru) are intermittent also SAS not configured properly. Action: POWERGRID.**

*Powergrid informed that work is in progress. OCC advised to finish the same by 30<sup>th</sup> June, 2014. Powergrid agreed.*

- VI. Lalmatia JSEB: MW / MVAR/ OLTC tap of 220/132 KV ICT –II not available .  
**Feeders not wired with Lalmatia RTU of NTPC . Bay own by JSEB (JUSNL). Action : JSEB ( JUSNL).**

*OCC advised to finish the same by 30<sup>th</sup> June, 2014.*

- VII. Mendhasal: 400 KV Baripda 1 & 2 line flow and Reactors data, Tap position of both 400 ICTs not available since charging of bays.  
**Feeders not wired with Mendhasal RTU of OPTCL. Action : OPTCL**

*OPTCL informed that work is in progress and data will be made available soon.*

- VIII. JSL ( Meramundali -400): Most of the data not available .  
**JSL is not entertaining, OPTCL for rectification of data which is not reporting , as informed by OPTCL during SCADA O & M meeting.**

- IX. Jhasurguda 400: Data reporting is highly intermittent.  
**Intermittent PLCC communication link between Jharsuguda – Rourkela . Also GPRS data reporting very poor.**

*Powergrid informed that work is in progress. OCC advised to finish the same by 30<sup>th</sup> June, 2014. Powergrid agreed.*

- X. Angul 400: Data reporting is highly intermittent.  
**PLCC communication Link problem between Angul – Bolangir . Also**

**GPRS data reporting very poor.**

*Powergrid informed that work is in progress. OCC advised to finish the same by 30<sup>th</sup> June, 2014. Powergrid agreed.*

- XI. Bolangir 400 : Data reporting is highly intermittent.  
**Communication Link problem between ERLDC – Baolangir. Action : POWERGRID.**

*Powergrid informed that work is in progress. OCC advised to finish the same by 30<sup>th</sup> June, 2014. Powergrid agreed.*

- XII. DVC :  
**( Old RTU not working .New RTU not commissioned Action : DVC .)**
- Ramgarh : \*Data for 220 KV bay not available.
  - Putki
  - Patherdiah
  - Kalipahari

*DVC informed that, CTU has to take appropriate action as these are under priority list RTU.*

viii) **Sub - Stations (765 & 400 kV) Telemetry not provided :**

- I. Bidhan Nagar 400 ( WB)  
**RTU not commissioned Action : WBSETCL**

*WBSETCL informed that RTU has been commissioned and it is reporting.*

- II. Khargpur 400 ( WB)  
**RTU not provided for data telemetry Action : WBSETCL**

*WBSETCL informed that RTU has been commissioned and data will be integrated shortly.*

ix) **Sub - Stations (220 & 132 kV) Telemetry not provided :**

- I. OPTCL:  
 ➤ BPSL data not available.  
**( Data started reporting since 26<sup>th</sup> May 2014 )**
- II. BSPTCL ( BSEB )  
**( RTU not provided for data telemetry , Action : BSPTCL )**
- Gopalganj
  - Darbhanga

- Begusarai
- Kisanganj
- Arrah
- Rajgir
- Jagdishpur
- Sipara
- Hajipur (New)
- Madhepura
- Banka

***The latest update is at Annexure-B.22a.***

**III. WBSETCL**

**( RTU not provided for data telemetry , Action : WBSETCL )**

- Subhasgram
- New Bishnupur
- Bantala
- New Town
- Krishna Nagar
- CESC S/s: EM 220 kV
- CESC : S/s :Kasba-132 kV, EM-132 kV Jadavpur, Chakmir, Majerhat and CESC Belur.
- Kalingpong
- Karseong

***The latest update is at Annexure-B.22a.***

**IV. DVC**

**( RTU not provided for data telemetry , Action : DVC.)**

- Burnpur
- Dhanbad
- Chandil ( Manique )

**V. JSEB**

**( RTU not provided for data telemetry , Action : JSEB. )**

- Hatia New
- Manique (Chandil)
- Japla



**BIHAR STATE POWER TRANSMISSION Co. LTD.**

Vidyut Bhawan, Bailey Road, Patna-800 021

Letter no. 1839 Patna,  
03/ULDC/2011Dated 20-06.2014

From,

Bhaskar Sharma,  
Director (Projects)  
BSPTCL, Patna

Fax: 0612 2504 557

To,

Sri A. K. Bandyopadhyaya,  
Member Secretary, (I/C),  
Eastern Regional Power Committee,  
14 Golf Club Road, Tollygunj, Kolkata-700 033.

Fax: 033 24221802

Sub: Non availability of Telemetry data of BSPTCL Sub-stations.

Ref: Your office letter no. ERPC/MS/2014 dated 05-06-2014.

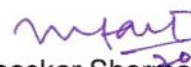
Sir,

Please refer to the above. As desired status of RTUs and the reason of non-availability if any are as follow:

SN	RTU Location	Remarks
1.	Jakkanpur, Khagaul, Dumraon, Karmnasa, Sitamarhi, Purnea & Koshi	Now, All RTUs are communicating. Intermittency of GPRS related issue has been taken up with Airtel.
2.	Hathidah, Lakhisarai & Darbhanga	Temporarily out due to re-conductoring of T/L. Shall start communicating by end of June/July.
3.	Samastipur	PGCIL has been requested to provide E1 channel from Samastipur to MTPS.
4.	BTPS	RTU dismantled. Renovation/overhauling work is going on. SAS is expected to operational by the end of October, 2014.
5.	Begusarai, Rajgir and Hajipur 220 kV	Power grid/Chemtrols & Telecom wing of BSPTCL are working to get communicated. Expected by the end of this month.
6.	Jagdishpur, Sipara, Madhepura	RTU has been supplied by PGCIL under Sub-transmission project of Bihar but integration is left out. Pursuing with Power grid for its integration.
7.	Siwan, Valmikinagar, Gopalganj, Darbhanga, Kishanganj and Arrah:	RTU along with communication has been included in the scope of work of Power grid under up gradation/replacement scheme of ULDC. It was scheduled to be completed by June end. Power grid requested to expedite.

Further, this is to inform that as per decision of ERPC in its 20<sup>th</sup> meeting, approval to Power grid has already been communicated vide this office letter no. 2386 dated 05-12-2012 & letter no. 361 dated 19-02-2013 to go ahead with up-gradation/replacement of ULDC along with communication. This includes replacement of existing RTUs supplied under ULDC-ER project and provision of RTUs at all operating as well as under construction GSS with communication plan for integration at HQ level. It was scheduled to be made available by June, 2014. There is inordinate delay in part of Power grid. The communication package is yet to be finalized by them. So, Power grid may also be requested from your side to expedite the work and complete it on urgent basis.

Yours faithfully,

  
 [Bhaskar Sharma]  
 Director (Projects)





WBSETCL

## WEST BENGAL STATE ELECTRICITY TRANSMISSION CO. LTD.

(A GOVERNMENT OF WEST BENGAL ENTERPRISE)

CIN:U40109WB2007SGC113474, Website: [www.wbsetcl.in](http://www.wbsetcl.in)

Office of the Addl. Chief Engineer & HOD

### Communication Department

Abhikshan Building, BN Block, Sector - V, Salt Lake, Kolkata - 700 091

☎033-2367-1235:☎Fax: 033-2367-1235: ☎EPBX: 033-236-9178/9201/9202Extn.-234:✉[tuhin.chakraborty@wbsetcl.in](mailto:tuhin.chakraborty@wbsetcl.in)

Registered Office: Vidyut Bhavan: Block-DJ, Sector-II: Bidhannagar: Kolkata-700 091

Annexure - B.22a

Memo No. CMN/CERC/14086

Dated -17.06.2014

To  
The Member Secretary (I/C),  
Eastern Region Power Committee,  
14, Golf Club Road, Tollygunj,  
Kolkata - 700 033.

Sub: Non-availability of Telemetry data of WBSETCL Sub-Stations.

Sir,

The latest status of data telemetry of WBSETCL Sub-Stations as updated in the 27<sup>th</sup> TCC Meeting are as follows:-

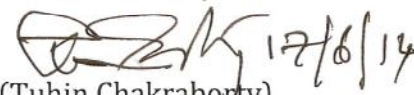
#### Latest Status of New RTUs of WBSETCL

Sl No.	Name of the SubStation	Remarks
1.	Bidhannagar 400 KV	RTU already Commissioned and data are reporting to ULDC System.
2.	Kharagpur 400 KV	Commissioning of RTU is completed; data will be integrated very shortly.
3.	New Town 220KV	Commissioning of RTU is completed; data will be integrated very shortly.
4.	Subhasgram 220 KV	RTU has reached at site. Commissioning work will start soon
5.	New Bishnupur 220 KV	RTU has reached at site. Commissioning work will start soon
6.	Krishna Nagar 220 KV	RTU will reach at site soon.
7.	Karseong 132 KV	RTU has reached at site. Commissioning work will start soon.
8.	Dalkhola 220 KV	RTU has reached at site. Commissioning work will start soon.
9.	CESC S/S : Kasba 132KV,EM-132KV, Jadavpur, Chakmir, Majerhat, Belur	All data (128 analog & 28 digital statuses) are now available from CESC SCADA System; SOE data from said RTU will be available through ICCP link after commissioning of new DATA Server at SLDC, Howrah under ULDC Expansion Project executed by M/S Power Grid.
10.	Kalimpong 66 KV S/S	RTU will reach at site very soon
11.	Bantala 220 KV S/S	RTU has reached at site. Commissioning work will start soon.

All RTU's above are covered under ULDC Expansion Project executed by M/S PGCIL.  
This is for your kind information and necessary action please.

Yours faithfully,

READA



(Tuhin Chakraborty)

Addl. Chief Engineer & HOD  
Communication Department  
WBSETCL

## Annexure-C.1

### Proposed Maintenance Programme of thermal units during July, 2014.

SYSTEM	POWER STATION	Unit NO.	Effective Capacity	Maintenance Programme	Remarks	No.of Days
JSEB	TVNL	Unit No. 1	210	10.07.2014 to 23.08.2014	Annual Overhauling	45
WBPDCL	STPS	Unit No. 6	250	15.07.2014 to 13.08.2014	Boiler Overhauling	28
		Unit No. 5	210	31.07.2014 to 10.09.2014	BTG/GT/DCS	
		Unit No. 6	210	25.06.2014 to 14.07.2014	Blr. O/H & DVR	
WBPDCL	BKTPP	Unit No. 3	210	10.07.2014 to 30.07.2014	Blr. O/H	20
DPL	DPL	Unit No. 6	110	22.07.2014 to 15. 08.2014	Overhauling	22
		Unit No. 7	300	15.07.2014 to 14.08.2014	Overhauling	30
MPL		Unit No.1	525	03.02.2014 to 07.02.2014	OH	5
		Unit No.2	525	22 July'14 - 17 Aug '14	Overhauling	25

Refer Annexure-B.1 for NTPC and DVC units

**EASTERN REGIONAL LOAD DESPATCH CENTRE  
KOLKATA**

**TRANSMISSION ELEMENTS OUTAGE APPROVED IN 98TH OCC MEETING OF ERPC**

	S/D APPROVED IN OCC								
Sr. No	NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
1	132 kV D/C Budhipadar-Sundargarh	20-06-2014	08:00	20-06-2014	17:00	ODB	ER-II	For stringing work of 765kV S/C Angul-Jharsuguda Line	OPTCL
2	132KV SINGHESWAR TO SONWARSHA S/C	22-06-2014	08:00	24-06-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 800KV HVDC LINE(ISLAMPUR-SAHARSA PACKAGE)	BIHAR
3	400 KV Sundargarh-Rourkela-I	23-06-2014	08:00	24-06-2014	17:00	ODB	ER-II	Rectification of 400 kV Isolator mechanical interlocks	NLDC
4	132 kV D/C Budhipadar-Tarkera & 132 kV S/C Sambalpur-Kuchinda	23-06-2014	08:00	23-06-2014	17:00	ODB	ER-II	For stringing work of 765kV S/C Angul-Jharsuguda Line	OPTCL
5	400 KV Sundergarh - Raigarh # 1	24-06-2014	09:00	24-06-2014	17:00	ODB	ER-II	Insulator replacement at Location No.- 757	NLDC
6	400KV RNC-RNC(NEW)- 3 & 4	24-06-2014	07:00	26-06-2014	18:00	ODB	ER-I	S/D FOR OPGW INSTALLATION WORK (involving Removal of Aviation Globules & Reinstallation of the same in newly installed OPGW)	
7	400 KV ANUGUL - JITPL D/C	25-06-2014	08:00	26-06-2014	20:00	ODB	ER - II	CROSSING OF 765 KV ANUGUL - JHARSUGUDA LINK	JITPL
8	125 MVAR Bus reactor - I at Sundargarh	25-06-2014	08:00	26-06-2014	17:00	ODB	ER-II	Rectification of 400 kV Isolator mechanical interlocks	
9	400KV Malda-Purnea-I	25-06-2014	07:00	28-06-2014	18:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants.	NLDC
10	220 KV RAMCHANDRAPURA - JODA	25-06-2014	08:00	30-05-2014	14:00	ODB	ER-I	FOR TOWER ERECTION AT CHAIBASA	Optcl/Jharkhanda
11	A/R OF 400KV PTN-BALIA-1	25-06-2014	07:00	31-07-2014	18:00	ODB	ER-I	FOR INSTALLATION OF OPGW WORK(A/R WILL BE MADE OFF ONLY)	NLDC
12	A/R OF 220KV ARA-KHAGAUL D/C	25-06-2014	07:00	31-07-2014	18:00	ODB	ER-I	FOR INSTALLATION OF OPGW WORK(A/R WILL BE MADE OFF ONLY)	BIHAR
13	765 KV, 3*80MVAR B/R-II AT NRNC	25-06-2014	08:00	27-06-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
14	400 KV SEL - Raigarh # 2	26-06-2014	09:00	26-06-2014	17:00	ODB	ER-II	Jumper tightening works,VD adjustment,Corona ring tightening and spacer tightening works at location Nos.- 374,426,432,433,434,441,498.	NLDC
15	400 KV PTN - BARH - I	26-06-2014	09:00	26-06-2014	19:00	ODB	ER-I	FOR DISMENTALLING WORK OF L/R OF SAID LINE AT PTN END	NLDC
16	400 KV Rourkela - Ranchi # 1	27-06-2014	10:00	27-06-2014	14:00	ODB	ER-II	Implementation of revised relay settings on account of line impedance measurement and changing of CT ratio for Main-I & Main-II Distance protection from 1000/1 to 2000/1 as per revised relay settings.	NLDC
17	125 MVAR Bus reactor - II at Sundargarh	27-06-2014	08:00	28-06-2014	17:00	ODB	ER-II	Rectification of 400 kV Isolator mechanical interlocks	
18	132 kV S/C Sambalpur-Rairakhol	27-06-2014	08:00	27-06-2014	17:00	ODB	ER-II	For stringing work of 765kV S/C Angul-Jharsuguda Line	OPTCL
19	400 KV PTN - BARH - II	27-06-2014	09:00	28-06-2014	19:00	ODB	ER-I	FOR DISMENTALLING WORK OF L/R OF SAID LINE AT PTN END.	NLDC
20	220 KV D/C BIHARSHARIF - BEGUSARAI T/L (OF BSPHCL)	27-06-2014	08:00	28-06-2014	18:00	OCB	ER-I	FOR STRINGINGING WORKS OF 400 KV KISHANGANJ - PATNA T/L BETWEEN BSEB TOWER NO. 67-68.	BIHAR
21	400KV KHLG-BSF-2	28-06-2014	08:00	30-06-2014	18:00	OCB	ER-I	FOR LILO WORK OF 400 KV KHLG - BSF - 2 AT LAKHISARAI	NLDC
22	400KV KHLG-LAKHISARAI-1	28-06-2014	08:00	30-06-2014	18:00	OCB	ER-I	FOR LILO WORK OF 400 KV KHLG - BSF - 2 AT LAKHISARAI	NLDC
23	400KV LAKHISARAI-BSF-1	28-06-2014	08:00	30-06-2014	18:00	OCB	ER-I	FOR LILO WORK OF 400 KV KHLG - BSF - 2 AT LAKHISARAI	NLDC
24	400 KV Sundargarh - Raigarh-II	28-06-2014	08:00	28-06-2014	17:00	ODB	ER-II	Rectification of 400 kV Isolator mechanical interlocks	NLDC
25	400 kV Rourkela-Sundargarh-Raigarh I & II	28-06-2014	08:00	28-06-2014	17:00	ODB	ER-II	For stringing work of 765kV S/C Angul-Jharsuguda Line	NLDC
26	765 KV, 3*80MVAR B/R-I AT NRNC	28-06-2014	08:00	05-07-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
27	400KV Malda-Purnea-II	30-06-2014	07:00	01-07-2014	18:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants.	NLDC
28	220 kV D/C Budhipadar-Tarkera	30-06-2014	08:00	02-07-2014	17:00	ODB	ER-II	For stringing work of 765kV S/C Angul-Jharsuguda Line	OPTCL
29	400 KV Rourkela - Ranchi # 2	01-07-2014	10:00	01-07-2014	14:00	ODB	ER-II	Implementation of revised relay settings on account of line impedance measurement and changing of CT ratio for Main-I & Main-II Distance protection from 1000/1 to 2000/1 as per revised relay settings.	NLDC
30	220 KV Subhasgram-CESC - I	01-07-2014	09:00 HRS	01-07-2014	13:00 HRS	ODB	ER-II	CT Oil Sampling work	WBSETCL
31	315 MVA ICT#3 at Subhasgram	01-07-2014	14:00 HRS	01-07-2014	17:00 HRS	ODB	ER-II	CT Oil Sampling work	WBSETCL
32	132KV ARA-JAGDISHPUR	01-07-2014	08:00	01-07-2014	12:00	ODB	ER-I	FOR AMP WORKS	BIHAR
33	A/R OF400 KV Keonjhar-Rengali	01-07-2014	09:00	31-07-2014	18:00	ODB	ER - II	OPGW STRINGING WORK	
34	A/R OF132 KV RANGIT - GANGTOK	01-07-2014	09:00	31-07-2014	18:00	ODB	ER - II	OPGW STRINGING WORK	SIKKIM
35	A/R OF 400 KV BINAGURI - TEESTA	01-07-2014	09:00	31-07-2014	18:00	ODB	ER - II	OPGW STRINGING WORK	TEESTA
36	A/R OF 400 KV BOLANGIR - ANUGUL	01-07-2014	09:00	31-07-2014	18:00	ODB	ER - II	OPGW STRINGING WORK	
37	A/R OF 400 KV SUBHASGRAM - JERAT	01-07-2014	09:00	31-07-2014	18:00	ODB	ER - II	OPGW STRINGING WORK	WBSETCL
38	315MVA ICT-II at Maithon	02-07-2014	09:00	02-07-2014	17:00	ODB	ER-II	LA replacement work & 220KV CT Connector replacement work	DVC
39	132KV ARA-ARA	02-07-2014	08:00	02-07-2014	12:00	ODB	ER-I	FOR AMP WORKS	BIHAR
40	220KV BTPS-CTPS D/C(DVC)	02-07-2014	09:00	03-07-2014	17:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 91/0 TO 92/0	DVC

41	400 KV MTN - KODERMA - 2	03-07-2014	08:00	04-07-2014	18:00	OCB	ER-I	PERMANENT S/D OF SAID CKT. IS REQUIRED .ON RESTORATION THE LINE WILL BE CHARGED AS A 400 KV GAYA - MTN - II	NLDC/DVC
42	400 KV MTN - KODERMA - 2	03-07-2014	08:00	07-07-2014	18:00	OCB	ER-I	PERMANENT S/D OF SAID CKT. IS REQUIRED .ON RESTORATION THE LINE WILL BE CHARGED AS A 400 KV GAYA - KODERMA - II	NLDC/DVC
43	220 KV D/C Birpara-Malbase S/C	03-07-2014	0900 Hrs	03-07-2014	1700 Hrs	ODB	ER-II	Replacement of insulators damaged by miscreants.	NLDC
44	400 KV Jeerat - Behrampore Line	03-07-2014	09:00 HRS	05-07-2014	17:00 HRS	OCB	ER-II	Circuit Breaker Replacement work & Line LA replacement	SHUTDOWN IS NOT ALLOWED BY WBSETCL, ADVISED POSSIBILITY OF TRANFER OF THE LINE TO TRANSFER BAY AT JERAT END
45	400 KV MTN - KODERMA - 1	04-07-2014	08:00	05-07-2014	18:00	OCB	ER-I	PERMANENT S/D OF SAID CKT. IS REQUIRED .ON RESTORATION THE LINE WILL BE CHARGED AS A 400 KV GAYA - MTN - I	NLDC/DVC
46	A/R OF 400KV KHLG-BANKA-1	04-07-2014	07:00	31-07-2014	18:00	ODB	ER-I	FOR INSTALLATION OF OPGW WORK(A/R WILL BE MADE OFF ONLY)	NLDC
47	220KV Maithon-Dhanbad-I	04-07-2014	09:00	04-07-2014	17:00	ODB	ER-II	Y-PH CVT replacement	DVC
48	400 KV D/C BIHARSHARIF-MUZAFFARPUR T/L	04-07-2014	08:00	05-07-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 400 KV BARH-GORAKHPUR LINE	
49	400 KV MTN - KODERMA - 1	05-07-2014	08:00	08-07-2014	18:00	OCB	ER-I	PERMANENT S/D OF SAID CKT. IS REQUIRED .ON RESTORATION THE LINE WILL BE CHARGED AS A 400 KV GAYA - KODERMA - I	NLDC/DVC
50	400 KV BSF - GAYA LINE	05-07-2014	08:00	14-07-2014	18:00	OCB	ER-I	PERMANENT S/D OF SAID CKT. IS REQUIRED. ON RESTORATION THE SAID LINE WILL BE CHARGED AS 765 KV GAYA - BALIA	BIHAR
51	400 KV SSRM - BALIA	05-07-2014	08:00	04-07-2014	18:00	OCB	ER-I	PERMANENT S/D OF SAID CKT. IS REQUIRED. ON RESTORATION THE SAID LINE WILL BE CHARGED AS A 400 KV BSF - SSRM - IV	NLDC
52	400 KV BSF - SSRM - 3	05-07-2014	08:00	04-07-2014	18:00	ODB	ER-I	S/D OF SAID CKT. IS REQUIRED IN VIEW OF CHARGING OF 400 KV BSF - SSRM - IV & 765 KV GAYA - BALIA LINE.	NLDC
53	400 KV FARAKKA - SAGARDIGHI	05-07-2014	08:00	05-07-2014	14:00	ODB	ER-II	COMMISSIONING OF PLCC	WBSETCL
54	400 KV Rourkela-Sterlite-Raigarh II	05-07-2014	08:00	05-07-2014	17:00	ODB	ER-II	For stringing work of 765kv S/C Angul-Jharsuguda Line	NLDC
55	132 KV S/C SIWAN-MASRAKH ( BSPTCL)	05-07-2014	08:00	06-07-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 800 KV HVDC LINE AND 400 KV BARH-GORAKHPUR LINE	BIHAR
56	765 KV 3*500MVA ICT-II AT NRNC	05-07-2014	08:00	07-07-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
57	400 KV FARAKKA - SAGARDIGHI	06-07-2014	08:00	06-07-2014	14:00	ODB	ER-II	RESTORATION OF PLCC	WBSETCL
58	400 KV ARAMBAG - BIDHANNAGAR	06-07-2014	07:00	06-07-2014	15:00	ODB	WBSETCL	MAINTENANCE WORK	
59	315MVA ICT-I at Maithon	07-07-2014	08:00	07-07-2014	12:00	ODB	ER-II	220KV Y& B-Ph Bushing inspection	DVC
60	400 KV Jeerat - Subhasgram Line	07-07-2014	09:00 HRS	09-07-2014	17:00 HRS	OCB	ER-II	Circuit Breaker Replacement work	SHUTDOWN IS NOT ALLOWED BY WBSETCL, ADVISED POSSIBILITY OF TRANFER OF THE LINE TO TRANSFER BAY AT JERAT END
61	100 MVA ICT - III AT PRN S/S	07-07-2014	08:00	21-08-2014	18:00	OCB	ER-I	FOR RETROFITTING OF 100 MVA ICT WITH 160 MVA ICT	BIHAR
62	400KV Malda-Farakka-II	08-07-2014	08:00	08-07-2014	18:00	ODB	ER-II	Relay retrofitting at Frakka & Malda End & CVT replacement at Malda end under ADDCAP.	NLDC
63	132KV BANKA-BANKA (OF BSPHCL)	08-07-2014	09:00	08-07-2014	12:00	ODB	ER-I	FOR AMP WORKS	BIHAR
64	400 KV PTN-BARH- 3 & 4	08-07-2014	08:00	09-07-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 400 KV BARH-GORAKHPUR LINE	NLDC
65	400KV Malda-Farakka-II	09-07-2014	08:00	09-07-2014	18:00	ODB	ER-II	Relay retrofitting at Frakka & Malda End & CVT replacement at Farakka end under ADDCAP.	NLDC
66	400 KV KAHALGAON - BANKA - II	09-07-2014	09:30	09-07-2014	16:30	ODB	NTPC	PM & RELAY TESTING	NLDC
67	765 KV 3*500MVA ICT-I AT NRNC	09-07-2014	08:00	10-07-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
68	220 KV Birpara-Salakati Ckt-I	10-07-2014	0900 Hrs	10-07-2014	1700 Hrs	ODB	ER-II	Replacement of insulators damaged by miscreants.	NLDC
69	220 KV Birpara-Salakati Ckt-II	11-07-2014	0900 Hrs	11-07-2014	1700 Hrs	ODB	ER-II	Replacement of insulators damaged by miscreants.	NLDC
70	400 KV Malda-Farakka-I	11-07-2014	08:00	11-07-2014	18:00	ODB	ER-II	Relay retrofitting at Malda End.	NLDC
71	315 MVA ICT-III at Malda	12-07-2014	08:00	12-07-2014	18:00	ODB	ER-II	CT change under ADDCAP & 89T isolator rectification & adjustment.	WBSETCL
72	132 KV D/C SIWAN-GOPALGANJ LINE( BSPTCL)	12-07-2014	08:00	13-07-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 800 KV HVDC LINE AND 400 KV BARH-GORAKHPUR LINE	BIHAR
73	400 KV Bongaigaon-New Siliguri Ckt-I	13-07-2014	0900 Hrs	13-07-2014	1700 Hrs	ODB	ER-II	Replacement of insulators damaged by miscreants.	NLDC
74	400 KV ARAMBAG - KTPP	13-07-2014	07:00	13-07-2014	15:00	ODB	WBSETCL	MAINTENANCE WORK	
75	400 KV Bongaigaon-New Siliguri Ckt-II	14-07-2014	0900 Hrs	14-07-2014	1700 Hrs	ODB	ER-II	Replacement of insulators damaged by miscreants.	NLDC
76	400KV Maithon-Kahalgaon-II Line with LR	14-07-2014	09:00	14-07-2014	17:00	ODB	ER-II	PRD inspection/leakge arrest/PRD replacement of LR,Line CVT replacement	NLDC
77	315 MVA ICT#2 at Subhasgram	14-07-2014	09:00 HRS	15-07-2014	17:00 HRS	OCB	ER-II	220 KV Bushing replacement	WBSETCL
78	315MVA ICT-I at Rourkela	15-07-2014	09:00	15.07.2014	17:00	ODB	ER-II	To attend oil leakage in OLTC and rectification of driving mechanism problem by M/S BHEL	OPTCL
79	220KV Maithon-Kalyaneshwari-I	16-07-2014	09:00	16-07-2014	17:00	ODB	ER-II	Line isolator remote operation checking	DVC
80	400 KV KAHALGAON - BARH - II	16-07-2014	09:30	16-07-2014	17:30	ODB	NTPC	PM & RELAY TESTING	NLDC
81	315MVA ICT-II at Rourkela	17-07-2014	09:00	17.07.2014	17:00	ODB	ER-II		OPTCL
82	315 MVA ICT#1 at Subhasgram	17-07-2014	09:00 HRS	19-07-2014	17:00 HRS	OCB	ER-II	OLTC overhauling work	WBSETCL
83	220KV Maithon-Kalyaneshwari-II	18-07-2014	09:00	18-07-2014	17:00	ODB	ER-II	Replacement of CVT due to humming sound	DVC
84	50 MVA ICT-IV at Malda	18-07-2014	07:00	18-07-2014	18:00	ODB	ER-II	CT & CVT change under ADDCAP.	WBSETCL

85	765 KV 3*80MVAR L/R OF 765KV NRNC-DHARAMJAIGARH AT NRNC	20-07-2014	08:00	22-07-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
86	220KV Maithon-Dhanbad-II	21-07-2014	09:00	21-07-2014	17:00	ODB	ER-II	TBC isolator checking for remote operation under NTAMC	DVC
87	400 KV ARAMBAG - PPSP - 1	23-07-2014	09:00	23-07-2014	16:00	ODB	WBSETCL	MAINTENANCE WORK	
88	132 KV KAHALGAON - SABOUR	23-07-2014	09:30	23-07-2014	17:30	ODB	NTPC	PM & RELAY TESTING	BIHAR
89	400KV Maithon-Right Bank-II	24-07-2014	09:00	27-07-2014	17:00	ODB	ER-II	Strung bus repair,Y-Ph line CT replacement	MPL
90	400KV Maithon-Kahalgaon-I Line with LR	24-07-2014	09:00	24-07-2014	17:00	ODB	ER-II	Reactor isolator operation checking for NTAMC ; leakage arrest from reactor	NLDC
91	132 KV Malda-WBSETCL-I	24-07-2014	07:00	24-07-2014	18:00	ODB	ER-II	CT change under ADDCAP.	WBSETCL
92	400 KV ARAMBAG - BAKRESWAR	25-07-2014	08:00	27-07-2014	15:00	OCB	WBSETCL	RETROFITTING OF D.P & A/R RELAY	
93	132 KV D/C VAISHALI-SHEETALPUR T/L (BSPTCL)	25-07-2014	08:00	26-07-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 400 KV BARH-GORAKHPUR LINE	BIHAR
94	400KV Maithon-RTPS(DVC)	26-07-2014	09:00	30-07-2014	17:00	ODB	ER-II	PIR removal of main Bay CB .S/D required for crane movement. Line will be charged through TIE bay when crane movement is not required during PIR removal work	DVC
95	132 KV Malda-WBSETCL-II	26-07-2014	07:00	26-07-2014	18:00	ODB	ER-II	CT change under ADDCAP.	WBSETCL
96	400 KV JERAT - BAKRESWAR	28-07-2014	08:00	30-07-2014	15:00	ODB	WBSETCL	RETROFITTING OF D.P & A/R RELAY	
97	220 KV KORBA - BUDHIPADAR - III	28-07-2014	09:00	30-07-2014	18:00	ODB	WR/NLDC	DIVERSION OF 220 KV LINE FOR SE RAILWAY	OPTCL
98	132KV SSRM-DEHRI	29-07-2014	10:00	29-07-2014	16:00	ODB	ER-I	FOR AMP WORKS	BIHAR
99	315 MVA ICT - I AT JERAT	30-07-2014	07:00	30-07-2014	15:00	ODB	WBSETCL	MAINTENANCE WORK	
100	132KV SSRM- MOHANIA	30-07-2014	10:00	30-07-2014	16:00	ODB	ER-I	FOR AMP WORKS	BIHAR
101	132 KV BARH-HATHIDAH D/C (BSPTCL)	30-07-2014	08:00	31-07-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 400 KV BARH-GORAKHPUR LINE	BIHAR
102	132KV MOHANIA-KARAMNASA	31-07-2014	10:00	31-07-2014	16:00	ODB	ER-I	FOR AMP WORKS	BIHAR

## Annexure-C.2

Anticipated Power Supply Position for the month of  
Jul-14

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	<b>BIHAR</b>		
	i) NET MAX DEMAND	2650	1291
	ii) NET POWER AVAILABILITY- Own Source	169	63
	- Central Sector	1784	1238
	iii) SURPLUS(+)/DEFICIT(-)	-697	10
2	<b>JHARKHAND</b>		
	i) NET MAX DEMAND	1000	700
	ii) NET POWER AVAILABILITY- Own Source	476	193
	- Central Sector	672	432
	iii) SURPLUS(+)/DEFICIT(-)	148	-75
3	<b>DVC</b>		
	i) NET MAX DEMAND (OWN)	2645	1640
	ii) NET POWER AVAILABILITY- Own Source	4483	2726
	- Central Sector	438	316
	Long term Bi-lateral (Export)	2069	1539
	iii) SURPLUS(+)/DEFICIT(-)	207	-137
4	<b>ORISSA</b>		
	i) NET MAX DEMAND	3500	2329
	ii) NET POWER AVAILABILITY- Own Source	2600	1752
	- Central Sector	1025	686
	iii) SURPLUS(+)/DEFICIT(-)	125	109
5	<b>WEST BENGAL</b>		
5.1	<b>WBSEDCL</b>		
	i) NET MAX DEMAND (OWN)	5360	3200
	ii) CESC's DRAWAL	690	250
	iii) TOTAL WBSEDCL's DEMAND	6050	3451
	iv) NET POWER AVAILABILITY- Own Source	3712	1675
	- Import from DPL	-50	-33
	- Central Sector	1957	1405
	v) SURPLUS(+)/DEFICIT(-)	-432	-404
5.2	<b>DPL</b>		
	i) NET MAX DEMAND	280	225
	ii) NET POWER AVAILABILITY	230	193
	iii) SURPLUS(+)/DEFICIT(-)	-50	-33
5.3	<b>CESC</b>		
	i) NET MAX DEMAND	1800	1008
	ii) NET POWER AVAILABILITY - OWN SOURCE	1070	728
	FROM WBSEDCL	730	250
	iii) TOTAL AVAILABILITY	1800	978
	iv) SURPLUS(+)/DEFICIT(-)	0	-30
6	<b>WEST BENGAL (WBSEDCL+DPL+CESC)</b> <b>(excluding DVC's supply to WBSEDCL's command area)</b>		
	i) NET MAX DEMAND	7440	4433
	ii) NET POWER AVAILABILITY- Own Source	5011	2595
	- Central Sector	1957	1405
	iii) SURPLUS(+)/DEFICIT(-)	-472	-434
7	<b>SIKKIM</b>		
	i) NET MAX DEMAND	95	42
	ii) NET POWER AVAILABILITY- Own Source	16	4
	- Central Sector	133	91
	iii) SURPLUS(+)/DEFICIT(-)	55	53
8	<b>EASTERN REGION</b>		
	<b>At 1.03 AS DIVERSITY FACTOR</b>		
	i) <b>NET MAX DEMAND</b>	16825	10435
	Long term Bi-lateral	2069	1539
	ii) <b>NET TOTAL POWER AVAILABILITY OF ER</b> <b>(INCLUDING C/S ALLOCATION)</b>	16207	9961
	iii) <b>PEAK SURPLUS(+)/DEFICIT(-) OF ER</b> <b>(ii)-(i)</b>	-617	-474