### <u>Eastern Regional Power Committee</u> <u>Kolkata-33</u>

### Salient Decisions taken in 106<sup>th</sup> OCC meeting held on 26.02.15

- 1. Powergrid agreed to restore and maintain the PLCC system at both ends (its own end as well as the constituent end) of a line wherein the other ends are not being maintained by respective constituents for some reasons or others. It was decided that the cost of restoration and maintenance of PLCC system at such (constituent) ends of the line will be borne by the respective constituents. In addition to this the constituents also agreed to extend all possible support to Powergrid in carrying out the work.
- 2. OCC agreed to the Powergrid proposal of commissioning of one 240 MVAR (3 X 80 MVAR) line reactor meant for 765kV GAYA VARANASI S/C transmission line as bus reactor at 765kV GAYA S/s.

### **Eastern Regional Power Committee**

Minutes of 106<sup>th</sup> OCC Meeting held on 26<sup>th</sup> Feb, 2015 at ERPC, Kolkata

List of participants is at Annexure-A.

#### Item no. A.1: Confirmation of minutes of 105th OCC meeting of ERPC held on 22.01.2015

The minutes were uploaded in ERPC website and circulated vide letter dated 09.02.15 to all the constituents. No comments were received till date.

Members may confirm the minutes.

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

Members confirmed the minutes of above meeting.

#### **PART B**

#### Item no. B.1: DR, EL and Reactor status installed in Eastern Region

The latest status is available at ERPC web site.

Members may confirm.

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

The house was informed that as per the IEGC, all 400kV and 220kV S/s should have EL and DR. Accordingly, OCC advised all constituents to go through the list available in ERPC website and update the status. All constituents agreed.

#### Item no. B.2: List of Reactors yet to be commissioned in Eastern Region

List of newly commissioning rectors is circulated in the meeting.

Members may update.

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

Members updated the tentative date of commissioning. Updated list is enclosed in **Annexure-B.2.** 

#### Item no. B.3: PLCC status installed in Eastern Region

Latest status on ownership of PLCC system is available in ERPC website.

The list discrepancies observed in the PLCC system ownership and Third Party Protection Audit is circulated in the meeting.

In line with 29<sup>th</sup> TCC decision, members may place the road map for settlement of the discrepancies.

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

Members updated the latest status.

Powergrid agreed to restore and maintain the PLCC system at both ends (its own end as well as the constituent end) of a line wherein the other ends are not being maintained by respective constituents for some reasons or others. The details of lines of similar nature are in **Annexure-B3**.

It was decided that the cost of restoration and maintenance of PLCC system at such (constituent) ends of the line will be borne by the respective constituents. In addition to this the constituents also agreed to extend all possible support to Powergrid in carrying out the above work.

#### Item no. B.4: Status of UFRs healthiness installed in Eastern Region

In 105<sup>th</sup> OCC, it was decided that constituents should check the UFR enunciation & PT fuse and thereby certify on monthly basis that UFRs are in service.

Certification for the month of January, 2015 not yet received from constituents.

Members may update.

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

BSPTCL, DVC, OPTCL and WBSETCL submitted the UFR healthiness certificate. OCC advised all other constituents to submit the certification for every month.

#### Item no. B.5: Healthiness of SPS existing in Eastern Region

In 105<sup>th</sup> OCC meeting, it was decided that constituents should certify the healthiness of SPS in every OCC meeting, after carrying out simulated checking of SPS.

Certification for the month of January, 2015 not yet received from constituents.

Members may update.

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

The house was informed that certification of healthiness of SPS for the month of January, 2015 was not yet received from constituents.

Powergrid informed that the SPS setting at Beharampur end was recently modified in view of changed grid scenario due to commissioning of Sagardighi-Behrampur (HTLS) line hence, they could not check the SPS for Power Export to Bangladesh.

OCC felt that before changing the SPS settings, it should be informed/ discussed in ERPC forums. OCC also advised CTU and ERLDC to share the settings details with the house.

OCC advised respective constituents to check the SPS on monthly basis and submit the healthiness certification.

#### Item no. B.6: New Islanding Schemes in Eastern Region

#### B.6.1. FSTPS Islanding Scheme, NTPC

98<sup>th</sup> 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.

In 100<sup>th</sup> OCC, Powergrid informed that the estimate of Rs. 53,10, 526/- has already been sent to JSEB and requested JSEB to release the amount as early as possible.

In 105<sup>th</sup> OCC, Powergrid informed that they are yet to receive payment from JUSNL. Powergrid also informed that LOA is to be awarded for batteries and PLCC equipment and without this receipt from JUSNL awarding LOA would be difficult.

In 29<sup>th</sup> TCC/ERPC meeting, JUSNL informed that approval of the fund was delayed due to Election, change of CMD and other administrative problems. JUSNL however assured that payment will be made by 31st March, 2015. Powergrid informed that they would take around 6 months for implementation after receiving payment from JUSNL.

NTPC informed that implementation of the NTPC part will be commissioned by April, 2015.

Powergrid/ JUSNL may update the status.

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

JUSNL informed that payment will be made to Powergrid by 31st March, 2015.

#### B.6.2. Chandrapura TPS Islanding Scheme, DVC

In 29<sup>th</sup> TCC/ERPC meeting, DVC informed that material will reach to the site by March, 2015 and the islanding scheme will be implemented by April, 2015.

DVC may update the status.

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

DVC informed that the islanding scheme will be implemented by April, 2015.

#### B.6.3. BkTPS Islanding Scheme, WBPDCL

In 29<sup>th</sup> TCC/ERPC meeting, WBPDCL informed that only unit#3 is remaining to be included in the islanding scheme and it will be done within a week. WBPDCL also informed that the BkTPS islanding scheme as a whole would be in service by end of February, 2015. However, it was informed that WBSETCL/WBSEDCL are to confirm some settings pertaining to this islanding scheme. WBPDCL, WBSETCL, WBSEDCL agreed to settle the issue bilaterally.

WBPDCL may update the status.

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

WBPDCL informed that unit#3 has been included in the islanding scheme.

OCC requested WBPDCL to give a presentation on implementation of BkTPS islanding scheme so that the onsite representative can share their experience with the house for the benefit of constituents. WBPDCL agreed to give a presentation in next OCC meeting.

#### B.6.4. Tata Power Islanding Scheme, Haldia

In 29<sup>th</sup> TCC/ERPC meeting, WBSETCL informed that Tata Power Islanding Scheme, Haldia has been commissioned on 11<sup>th</sup> February, 2015.

Members may note.

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

OCC requested WBSETCL to share their experience on implementation of Tata Power islanding scheme for the benefit of constituents.

WBSETCL agreed.

#### Item no. B.7: T-connection in 132kV Lalmatia-Khahalgaon line

In 105<sup>th</sup> OCC, JUSNL informed that they will remove the T connection on 27<sup>th</sup> January, 2015 and agreed to send the report to ERPC Secretariat.

Thereafter, JUSNL vide letter dated 27<sup>th</sup> January, 2015 informed that they had decided to avoid the above T-connection by making LILO of 132kV Lalmatia-Kahalgaon and 132kV Lalmatia-Sahebganj lines at Lalmatia S/s with new transfer bus which is under construction. The LILO is expected to complete by 20<sup>th</sup> February, 2015.

Accordingly, JUSNL requested to extend the time line for removal of jumper connection in 132kV Kahalgaon (BSPTCL)-Lalmatia(JUSNL) line to 20<sup>th</sup> February, 2015.

On 19-02-2015 JUSNL informed that they opened the T-connection of 132kV Kahalgaon (BSPTCL)-Lalmatia(JUSNL) line on 15-02-2015 at 16:36 hrs. The schematic diagram is enclosed in **Annexure-B.7**.

JUSNL may update the status.

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

Members noted.

### Item no. B.8: Handing over of O & M of 220 kV Farakka –Lalmatia transmission system -- NTPC

In 29<sup>th</sup> TCC it was decided that ECL is to handover the O&M part of the line to JUSNL on chargeable basis keeping the ownership with them and advised both ECL and JUSNL to discuss the commercial and technical issues in lower forums of ERPC.

TCC also advised secretariat to convene a special meeting in 1<sup>st</sup> week of March, 2015 with all concerned for final settlement of the issue. The meeting is scheduled to be held on 11.3.15.

Members may note.

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

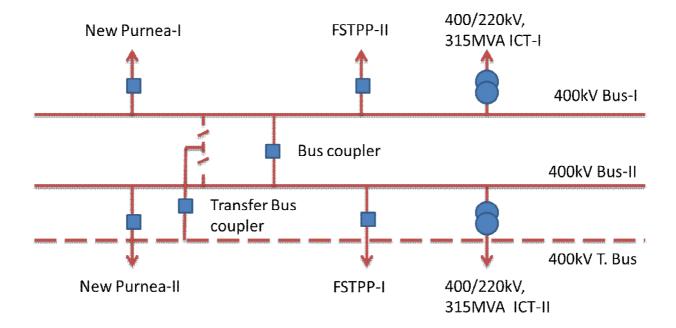
Members noted.

#### Item no. B.9: Configuration of transmission elements at 400kv Malda S/s---ERLDC

Malda S/s is having DMT (Double Main and Transfer scheme) Bus configuration. Upto March/April months, due to lower availability of hydro in Bhutan/Sikkim/NER, FSTPP-Malda D/C

gets congested. To mitigate the congestion arising in case of shutdown/tripping of one circuit of FSTPP-Malda section, ERLDC resorts to opening the Bus coupler at Dalkhola and one circuit of Malda-Purnea D/c. However, in case the tripped line of FSTPP-Malda D/c and opened line of Malda-Purnea D/c are in separate Buses, the entire section of FSTPP-Malda-Purnea would remain coupled through the Bus coupler at Malda only. Hence, to avoid the situation the following needs to be noted:

- a) Presently the element & Bus configuration is as follows:
- Bus-l> FSTPP-Malda-II & Malda-Purnea-I
- Bus-II> FSTPP-Malda-I & Malda-Purnea-II



Powergrid may take care in ensuring that the tripped and manually opened lines are in the same Bus and are not connected through the Bus coupler. Powergrid may give necessary feedback to ERLDC in case of real time switching so that such a situation is avoided. In case of any change in Bus/element configuration as shown above, the same should be intimated to ERLDC immediately.

b) The over-current and other protection settings of the 400kv Bus coupler at Malda may also be furnished.

Powergid may respond.

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

ERLDC informed that with the present configuration Powergrid should not change the bus configuration without prior permission from ERLDC.

Powergrid agreed.

Powergrid confirmed that with present over current settings, 800MW power can safely be catered through 400kV bus coupler at Malda. However, the continuous flow of such huge power may be avoided as bus coupler was not designed for continuous loading/over loading.

ERLDC assured consideration of the same during real time operation.

## Item no. B.10: COMMISSIONING OF ONE (O1) NO. 240 MVAR (3 X 80 MVAR) LINE REACTOR MEANT FOR 765kV GAYA – VARANASI S/C TRANSMISSION LINE AS BUS REACTOR AT GAYA S/s----Powergrid

765kV Gaya- Varanasi S/C line is being constructed by POWERGRID under JIPP project with 240 MVAR (3 x 80 MVAR) Line Reactor. However, the commissioning of the said line will be delayed considerably due to ROW problems. In the mean time, the line reactor of the said line, have arrived at site and likely to be commissioned by March'15.

It is proposed that the said 240 MVAR line reactor may be installed & commissioned as Bus Reactor at Gaya sub-station to contain the voltage problems. After completion of the line (765 kV Gaya- Varanasi S/C line), the said Reactor will be commissioned along with the line as a Line Reactor.

Members may discuss.

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

OCC agreed to the proposal.

#### Item no. B.11: Status of "Third Party Protection Audit"

List of the observations in 1<sup>st</sup> third party audit along with updated compliances received from the constituents are available in ERPC website (**www.erpc.gov.in**).

The format for data collection to initiate 2<sup>nd</sup> Third Party Protection Audit is circulated to constituents and also made available in ERPC website. All constituents requested to send requisite information by 16<sup>th</sup> March, 2015. On site inspection of 2<sup>nd</sup> Third Party Protection Audit will commence after receiving the data.

Members may ensure submission of the data.

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

OCC advised all constituents to send the requisite data as per the format available at ERPC website. Constituents agreed.

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

#### B.12.1. Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

In 29<sup>th</sup> TCC/ERPC meeting, Sterlite explained that they are seriously trying to complete the line at earliest and requested for extension of LILO.

It was decided to allow the extension of LILO connectivity till next TCC/ERPC meeting provided Sesa Sterlite makes considerable progress in the construction of the line and bay.

Accordingly, ERPC advised Sterlite to expedite the construction of the line.

It was also decided that ERPC team along with CTU personal will do the on-site inspection of the physical progress made by Sesa Sterlite in the construction of the line and bay, before the next TCC/ERPC meeting. Accordingly, the possibilities of further extension of the LILO will be explored in 30th TCC/ERPC meeting.

Thereafter, Powergrid vide letter dated 18.02.2015 informed the following:

- 1. Sterlite bay no. 15 & 18 at 765/400kV Sundargarh(Jharsuguda) S/s will be started after receiving clearance from their Corporate Engg..
- 2. Consultancy of bays is with Powergrid for which Sterlite has placed the award on M/s SR construction, who are already working on bay no.21 and 24.
- 3. Bay no. 19&24 of Sterlite are under hold as informed by Powergrid Corporate Engg.
- 4. Line construction is not under Powergrid consultancy. However, the line job has not yet been awarded. Reportedly, it may be awarded in this month. The detail status shall be known after on-site physical verification.

Sterlite may further update.

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

Sterlite and Powergrid updated the status as follows:

- 1. Sterlite bay no. 15 & 18 at 765/400kV Sundargarh(Jharsuguda) S/s will be started after receiving clearance from their Corporate Engg.: *Powergrid informed that they are yet to receive the clearance.*
- 2. Consultancy of bays is with Powergrid for which Sterlite has placed the award on M/s SR construction, who are already working on bay no.21 and 24.: Sterlite informed that order has been placed for equipment.
- 3. Bay no. 19&22 of Sterlite are under hold as informed by Powergrid Corporate Engg.: Powergrid informed that they will give the clearance soon.
- 4. Line construction: Sterlite informed that forest diversion approval is under progress.

OCC advised Sterlite to expedite the construction work. It was informed that on on-site verification of the physical progress as decided in 29<sup>th</sup> TCC/ERPC meeting would be carried out sometimes in the month of May.

### B.12.2. Implementation of double bus scheme and commissioning of remaining tie/main breakers at Angul S/S.

In 104<sup>th</sup> OCC, the implementation of Double Bus scheme scheduled to be completed by end of November, 2014 was not complete because of natural calamity and non availability of consent for shut down by other constituents. Powergrid informed the status of bus configuration at 400kV Angul Substation is as follows:

- i. 400kV GMR bays (2 nos): Done on 21.12.2014
- ii. 400kV GMR-JITPL ties (2 nos): Done on 21.12.2014
- iii. 400kV ICT-I & II bays: Done on 21.12.2014
- iv. 400kV ICT-III & IV bays and 400kV Monnet bays (2 nos): Subjected to Shutdown clearance

Powergrid may update.

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

For commissioning of 400kV ICT-III & IV bays and 400kV Monnet bays (2 nos) it was informed that shutdown will be allowed in March, 2015.

#### B.12.3. Status of 400 kV GMR- Angul D/C line.

i) 400kV GMR-Angul D/C line has been commissioned. However it was informed in 104<sup>th</sup> OCC that the GMR lines are connected to single bus of 400kV Angul S/s, which may create problem for GMR evacuation under contingency.

Powergrid informed commissioning of the second bus scheme for GMR & some other sections were not completed because of Hud-Hud cyclone and non-availability of shut down by other constituents.

In 105<sup>th</sup> OCC, Powergrid informed that the missing part of Bus-II will be commissioned by January, 2015.

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

It was informed that the missing part of Bus-II is ready and will be commissioned by March, 2015.

**ii)** It was informed that Powergrid-HVDC vide a letter to GMR pointed out insufficient clearance of GMR line with Talcher-Meramundali line because of sag.

In 105<sup>th</sup> OCC GMR informed that they would look into it and give feedback.

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

GMR informed that the clearance of GMR line with Talcher-Meramundali line is about 7m which is sufficient.

OCC advised Powergrid and GMR to visit the site jointly and report in the next OCC.

**iii)** Powergrid vide letter dated 18-02-2015 requested for shutdown of 400kV Rourkela-Sterlite-II and Sterlite-Raigarh-II for stringing of 765kV Angul-Jharsuguda line-1 part-II. Powergrid also informed that they are not getting shutdown of this line from last 3 OCC meetings.

On defaulting of permitting the shutdown, Powergrid asked for permission to complete the work using hot line method at the cost of the party.

Powergrid and GMR may update the issues.

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

ERLDC informed that this type of shutdown was not applied by Powergrid in 104<sup>th</sup> & 105<sup>th</sup> OCC and they applied for shutdown in this OCC.

OCC advised to allow the shutdown for stringing of 765kV Angul-Jharsuguda line-1 part-II.

Sterlite informed that they will not able to evacuate their power with above shutdown hence they will communicate their decision within 3 days after consulting with their higher officers.

#### B.12.4. Status of construction of Chuzachen bay at Rangpo S/s.

In 29<sup>th</sup> TCC Meeting, Sikkim informed that they will send the proposal to Powergrid for consultancy.

Sikkim may update.

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

Sikkim representative was not available in the meeting.

#### B.12.5. Status of 80MVAR Line reactor of 400kV Meramundali-Angul at Meramundali

In 29<sup>th</sup> TCC/ERPC meeting, OPTCL & Powergrid informed that the rector has been charged on 12th February, 2015.

Members may note.

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

It was informed that the issue has been deliberated in 28<sup>th</sup> PCC held which was held yesterday; wherein OPTCL informed that the reactor was in out of service because of non availability of LA. OPTCL was advised to charge the reactor by arranging LA.

#### B.12.6. Non availability of important bays at FSTPP end

In 105<sup>th</sup> OCC, NTPC updated the status as follows:

- a) Main bay of FSTPP-Sagardighi at FSTPP end: Will be completed by January, 2015
- b) Bay connecting FSTPP-Malda-II to Bus-II which is under outage since disturbance at FSTPP on 28/08/14 (Bay connecting to Bus-I in service).: Will be brought into service in 1<sup>st</sup> week of February, 2015
- c) FSTPP-KhSTPP-IV Tie bay: Will be done in February, 2015.

NTPC may update.

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

FSTPP, NTPC informed the status of remaining 400kV CBs at 400kV FSTPP S/s as follows:

- a) Main bay of FSTPP-Sagardighi at FSTPP end: Completed
- b) Bay connecting FSTPP-Malda-II to Bus-II which is under outage since disturbance at FSTPP on 28/08/14 (Bay connecting to Bus-I in service).: Work has been completed but not charged. NTPC informed that PGCIL is yet to give clearance for charging. OCC alike PCC, advised NTPC and Powergrid to coordinate and charge the CB
- c) FSTPP-KhSTPP-IV Tie bay: Work has been completed but not charged. OCC alike PCC advised NTPC and Powergrid to coordinate and charge the tie.

#### 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 Katapalli-Bolangir line at Bolangir (PG).
- (ii) Bolangir(PG) -Bolangir (OPTCL) S/C line.
- (iii) Bolangir(PG) -Kesinga S/C line.

In 105<sup>th</sup> OCC, OPTCL informed that status as follows:

- (i) LILO of OPTCL's Burla (Katapalli)-Bolangir line at Bolangir (PG)- By March' 2015
- (ii) 220 kV Bolangir(OPTCL)- Bolangir (PG) S/C line, which is a part of proposed Bolangir-Kesinga D/C line with one ckt LILO at Bolangir (PG)- Getting delayed due to land disputes.
- (iii) Bolangir(PG) –Kesinga S/C line —Tender opened and completion schedule is not yet finalized.

OPTCL may update the status.

#### Deliberation in the meeting

OPTCL informed that LILO of OPTCL's Burla (Katapalli)-Bolangir line at Bolangir (PG) will be completed in schedule.

#### B.12.8. Power Evacuation from 400/220KV Daltonganj and Chaibasa Substations

#### 1. 220/132/33 kV Chaibasa:

Issue was discussed in 29<sup>th</sup> TCC Meeting wherein, Powergrid informed that the work was held up because of non receipt of Rs. 230 cr from JUSNL and it will be restarted after receiving the amount from JUSNL. JUSNL informed that they have already given Rs. 694.22 cr out of total amount Rs. 1480 cr. to Powergrid for various projects. Still Powergrid did not complete single project.

After deliberation, TCC advised ERPC Secretariat to convene a separate meeting on 23rd February, 2015 with all concerns to reconcile the status and for the purpose advised both Powergrid and JUSNL to submit the latest status of the project to ERPC Secretariat by 18th February, 2015.

#### 2. 220/132 kV Daltanganj:

- Land acquisition matter has been taken up with Jharkhand Govt. & expected to be resolved by January, 2015.
- Thereafter, 400/220kV Daltanganj S/s would be constructed by October, 2015.
- Powergrid requested JUSNL to expedite the construction of 220/132kV Daltanganj S/s for evacuation of power from 400/220kV Daltanganj S/s

Issue was discussed in 29<sup>th</sup> TCC Meeting wherein, TCC advised Secretariat to convene a separate meeting on 23rd February, 2015 with all concerns to reconcile the status and for the purpose advised both Powergrid and JUSNL to submit the latest status of the project to ERPC Secretariat by 18th February, 2015.

Members may update.

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

The house was informed that in line with TCC decision a separate meeting was held on 23<sup>rd</sup> February, 2015 wherein the target date for completion has been fixed in consultation with JUSNL and Powergrid. Minutes of the meeting is already available at ERPC website.

#### B.12.9. Status of 50 MVAR Behrampur-Jeerat line reactor

In 105<sup>th</sup> OCC, Powergrid informed that order has been placed for conversion of Behrampur-Jeerat line reactor to switchable bus reactor and the work is expected to be complete by December, 2015.

Powergrid may update the status.

#### Deliberation in the meeting

Powergrid informed that conversion of Behrampur-Jeerat line reactor to switchable bus reactor is expected to be completed by Mar, 2016.

### B.12.10. Modification of 132kV Bus arrangement at 220/132kV Purnea Sub-station of POWERGRID

In 102<sup>nd</sup> OCC, Powergrid informed that order will be placed in October, 2014 and the implementation would take 18 to 24 months.

In 105<sup>th</sup> OCC, Powergrid informed that the scheme will be implemented by July, 2016.

Powergrid may update the latest status.

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

Powergrid informed that the scheme will be implemented in schedule.

### B.12.11. Augmentation of Transformation Capacity in PGCIL Grid S/s at Muzaffarpur, Purnea, Sampatchak(Patna) & Sasaram-- BSPHCL

In 101<sup>st</sup> OCC, Powergrid informed that the work order has been placed on 20.06.2014 for augmentation of the transformation capacity at Purnea, Sampatchak(Patna) & Sasaram. The work is expected to be complete by January, 2016.

For Muzaffarpur the order is expected to be placed on October, 2014.

In 105<sup>th</sup> OCC, Powergrid informed that the status as follows,

- Augmentation of additional 500MVA, 400/220kV ICT at Muzaffarpur: The order was placed on 20<sup>th</sup> October, 2014 for augmentation of transformation capacity and it will take 18-24 months for completion.
- Replacement of 2x315MVA, 400/220kV ICTs at Sampatchak(Patna) & Sasaram by 2x500MVA ICTs: will be completed by January, 2016.
- Replacement of 400/220kV ICTs at Purnea by 2x500MVA ICTs: One 160 MVA ICT has already been augmented and other one will be completed by March, 2015.

Powergrid may update the status.

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

Powergrid informed that the work will be completed in schedule.

#### B.12.12. Synchronization of 132 kV Dalkhola (WB)-Kishanganj(BSPTCL) S/C

WBSETCL/Powergrid may update the status of metering problem.

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

WBSETCL informed that the line is ready charging but SEM is not working properly.

OCC advised Powergrid to replace the meter immediately. Powergrid agreed.

### B.12.13. Non functioning of main meter (NP-5896-A) at Teesta end of 400 kV Rangpo line-1 and time drift in SEMs of FSTPS GT meters

The Main Meter (NP-5896-A) installed in line Teesta-V Rangpo Line-1 is non functional since last 3 months and consequently SEM data from this meter is not being provided to ERLDC. Presently data for this line is being provided by the Check Meter (NP-5895-A). Keeping in view the provision of CEA Metering Regulation 2006 and subsequent amendments, it is requested to do necessary action for replacement of the defective Main meter at the earliest. The matter has been taken up with ERLDC and PGCIL through emails but remedial action is awaited.

In 104<sup>th</sup> OCC, PGCIL informed that they would replace the meter within a week.

NTPC pointed that 7 series meters are not allowing time correction and Powergrid agreed to replace all the 7 series meters but till date their meters were not replaced.

OCC advised Powergrid to replace the meters immediately and resolve the problem of the meters with L&T. Powergrid agreed.

Thereafter, Farakka, NTPC informed vide letter dated 07.01.2015, time drift of SEMs of GT-1, 2, 3, 4 & 5 of their station has reached to 8 minutes. All these meters are of 7 series meters. Besides this, few SEM meters of installed in following lines are also getting stalled/inoperative from last few months,

- Farakka-Sagardighi (Main-NP 5213-A)
- Farakka-Berhampore (Main-NP 5221-A)
- Farakka-Kahalgaon-2 (Main-NP 5200-A)
- GT-6 (NP 5216-A)

In 105<sup>th</sup> OCC, it was understood that considerable number of meters are having time drift & some with even 28 minutes drift. On deliberation it was informed that using a software, now-a-days available in market, time drifts are possible to get corrected in one go.

Therefore, it was decided that a separate meeting with L&T will be convened by ERLDC to discuss the meter drifting issues and its correction with software. All the constituents were advised to attend.

PGCIL may update.

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

The house was informed that these sort of meter related issues will be discussed with L&T Engineers in a separate meeting.

#### B.12.14. Commmissioning of Ind-Bharath to Jharsuguda D/C(dedicated line)

In the last OCC Ind-Bharath had confirmed that the line would be commissioned by March, 2015.

Ind-Bharath may update.

#### Deliberation in the meeting

Ind-bharath communicated the construction of above as follows:

- 104 towers out of total 125 towers have been completed. A minor change in the existing alignment for erection of towers has now been made to avoid some portion of forest land. Hence completion of construction of the line may take some time.
- Dedicated ATS to 765/400kV Sundergarh line will be completed by April, 2015.
- LC for drawal of enhance startup power has been opened.

### Item no. B.13: Non-availability of 132kV Transfer bus for modification of 132kV bus arrangement at 220/132kV Siliguri Substation---Powergrid

25<sup>th</sup> TCC/ERPC approved the modification of 132kV bus arrangement at 220/132kV Siliguri S/s and accordingly award has been placed in October, 2014. The agency has already mobilized at site and work of GIS is expected to be started from 09.03.2015.

Dismantling of 132kV transfer bus is required for carrying out the work. The transfer bus will not be available from 09.03.2015 till completion of the work, which is expected by November, 2016.

Members may note.

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

Members noted.

#### Item no. B.14: Future requirement of Special Energy Meters and DCDs --- Powergrid

The requirement of frequency based ABT Special type meters up to 2014 has been procured by POWERGRID and likely to be exhausted shortly. Beneficiary Constituents of ER are requested for assessment of their requirement of Special Type Energy Meters and DCDs for the period from 2015 to 2017 and intimate the same in the next OCC meeting so that the advance action for procurement can be taken.

Members may note and submit the requirement of SEMs and DCDs.

#### <u>Deliberation in the meeting</u>

ERLDC informed that they will submit the list of requirement in next OCC.

OCC advised all constituents to submit the details of additional requirement of SEMs and DCDs, if any,by next OCC. Consolidated list will be placed in next OCC.

#### Item no. B.15: Auxiliary power consumption through Tertiary of the Transformer

PGCIL has submitted a proposal to CERC to allocate power to its AC substations in the country from some CGSs to meet auxiliary consumption through tertiary transformer akin to allocation for its HVDC stations because various states follow varying treatment for the power drawn by them through their own transformer. The quantum is of the order of 35 MW on all India basis.

Members may deliberate.

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

After detailed discussion, OCC advised all constituents to send their views to ERPC Secretariat within a week for onward submission to CERC.

All constituents agreed.

### 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.

#### 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.

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

Members noted.

#### 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.

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

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

Members may note and update the status.

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

Members noted.

#### Item no. B.19: Restricted Governor Mode of Operation

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

Members may update.

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

Members noted.

#### Item no. B.20: Pollution mapping for Eastern Region -- Powergrid

In 105<sup>th</sup> OCC, Powergrid informed that the Instrument Kits for measurement related to Pollution Mapping were already dispatched to the constituents. Powergrid requested to commence the first set of Pollution measurements by second week of February, 2015 and communicate the results. The format for filling up the results is already available in ERPC website.

The issue was discussed in 29<sup>th</sup> TCC Meeting, wherein JUSNL expressed certain difficulties in receiving the kits from dispatcher. TCC advised Powergrid to look into. Powergrid agreed.

Powergrid may update the status.

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

JUSNL informed that they have received the Pollution Mapping test kit. Powergrid confirmed that the Pollution Measurement would start in schedule.

#### Item no. B.21: Mock Black start exercises in Eastern Region – ERLDC

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

Program for conducting black start exercise 2014-15 as updated in last OCC,

SI	Name of	Schedule	Actual	Schedule	Tentative Date
no	Hydro Station				
		Te	st-l	Test-I	
1	U.Kolab	Last week of	3 <sup>rd</sup> June 2014	2 <sup>nd</sup> or 3 <sup>rd</sup> week of	27 <sup>th</sup> Mar, 2015
		May, 2014		March, 2015	
2	Maithon	1 <sup>st</sup> week of	17 <sup>th</sup> June 2014	1 <sup>st</sup> Week of October	Done on 10 <sup>th</sup>
		June 2014		2014	February, 2015
3	Rengali	2 <sup>nd</sup> week of	19 <sup>th</sup> September	Last week of	1 <sup>st</sup> week of
		June 2014	2014	November 2014	May, 2015
4	U. Indarvati	3 <sup>rd</sup> week of	16 <sup>th</sup> December	2 <sup>nd</sup> week of February	Done on 10 <sup>th</sup>
		June 2014	2014	2015	February, 2015
5	Subarnarekha	2 <sup>nd</sup> week of		1 <sup>st</sup> week of January	Water is not
		October 2014		2015	available
6	Balimela	1 <sup>st</sup> week of	19 <sup>th</sup> November	1 <sup>st</sup> week of March	
		Nov. 2014	2014	2015	
7	Teesta-V	2 <sup>nd</sup> week of	16 <sup>th</sup> December	Last week of March,	
		Nov. 2014	2014	2015	
8	Chuzachen			April, 2015	
9	Sikidri			4 <sup>th</sup> week of	
				December, 2014	

Members may update.

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

It was informed that a workshop on Black Start exercise is scheduled to be held on 26<sup>th</sup> March, 2015 at U. Kolab hydro station and the black start exercise of U. Kolab hydro station will be conducted on 27<sup>th</sup> March, 2015.

Members noted.

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

Tets run report of DG sets for blackstart has been received only from Odisha hydro units. The test run reports of other machines may be sent to <a href="mailto:erldc.cal@gmail.com">erldc.cal@gmail.com</a> and <a href="mailto:erldc.cal@gmail.com">erldc.cal@gmail.com</a> and <a href="mailto:erldc.cal@gmail.com">erldc.cal@gmail.com</a>.

Constituents may kindly ensure compliance.

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

Members noted.

#### iii) Updating of Restoration Procedure of Eastern Region for 2014

The Restoration Procedure of Eastern Region has been updated till the current year. Soft copy of the draft updated procedure would be circulated among OCC members during the meeting.

Members may offer their valuable observations by 7-12-14 for finalization of the procedure.

In this connection, updated information pertaining to restoration of traction supply in Eastern Region was sought vide ERLDC/SS&MIS/2014/2446 dated 24-10-14, addressed to Eastern Railways, East-Central Railways, South-Eastern Railways, East-Coast Railways and South-East-Central Railways. However, no comments have been received from them, despite requesting them once again vide email dated 5-11-14. Under the circumstances, it is presumed that there are no changes in the information pertaining to traction supply.

In 103<sup>rd</sup> OCC, ERLDC circulated the Restoration Procedure of Eastern Region for 2014 and requested to send their comments by 7<sup>th</sup> December, 2014 for finalization of the procedure.

In 104<sup>th</sup> OCC, ERLDC informed that they have received the comments from DVC and Railways. The Restoration Procedure is ready and it would be published within a week.

In 105<sup>th</sup> OCC, NTPC informed that Kahalgaon stage-II, Farakka stage-III and Barh units are not there in the restoration procedure. NTPC requested to include. ERLDC agreed.

ERLDC may update.

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

ERLDC informed that the information is yet to be received from NTPC. NTPC agreed to send the relevant information.

#### Item no. B.22: Restoration of SCADA data

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

Updated status as updated in SCADA meeting which was held on 28<sup>th</sup> January, 2015 is circulated in the meeting.

CTU may update.

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

OCC advised CTU to update the latest status.

#### Replacement of RTUs at Kahalgaon, NTPC

In 105<sup>th</sup> OCC, Powergrid informed that RTU has been commissioned. But as Unit#6 data is not made available to the interfacing unit so the same is not getting reported.

NTPC agreed to provide the Unit#6 data to interfacing unit.

Powergrid/NTPC may update.

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

NTPC agreed to provide the Unit#6 data to interfacing unit.

### Item no. B.23: Reporting of the failure of equipment / towers of transmission lines to Standing Committee of Experts

As per Section 73 of Electricity Act 2003, Central Electricity Authority is to carry out investigation of failure of equipment of substations / generating stations and failure of transmission line towers. Accordingly, following two Standing Committees have been constituted taking representation from academic institutes, Research Institutes like CPRIs and utility to investigate the cause of failures.

- a) Standing Committee of Experts to investigate the failure of Transmission line Towers of 220kV and above voltage level of Power utilities.
- b) Standing Committee of Experts to investigate the failure of Equipment of 220kV and above substation / Generating stations of Power utilities.

The prime objective of the above Standing Committees is to visit site of failure, investigate the cause of failure, discuss various failures in the meeting and recommend remedial measures to avoid repetition of such failures in future. In such forum utilities share their experiences, maintenance practices, action taken to rectify the problem, and measures taken to avoid repetitions of such failures in future. In the process the participating utilities are mutually benefitted so as to adopt best practices. Unfortunately it has been observed that number of utilities [State Utility, Private Sector Utility, Public Sector Utility] neither report the failure of equipment / towers of transmission lines nor participate in such national level meetings of the above committees. Hence, the basic purpose of formation of above committees gets defeated.

In view of above it is requested that all utilities in your region may please be advised to report the incidence(s) of failure(s) immediately after occurrence of such failure (s) to Chief Engineer (SE & TD), Central Electricity Authority (CEA), 3<sup>rd</sup> Floor, Sewa Bhawan, R.K.Puram, New Delhi-110066 (Fax no.011-26170541) and also to participate in such forum regularly.

Members may note.

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

Members noted.

#### Item no. B.24: Over-voltage settings of EHV lines in ER

Data from is pending in respect of certain newly commissioned lines from ER-I(Nabinagar), WBSETCL(Parulia/Sagardighi), Anugul(ER-II).

The list of lines whose data is still pending would be presented in the meeting.

Members may update.

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

List of over voltage settings yet to be updated by the constituents is enclosed at **Annexure-B.24**. OCC advised concern members to submit the settings to ERLDC.

### Item no. B.25: Reactive Power performance of Generators and GT tap position optimization

Maximum and minimum voltage was observed (data taken from SCADA)
Generating stations have been monitored for sample dates in the month of January 15

Power Plant	Max and Min Voltage	Date for monitoring
	observed for Jan 15 (KV)	(January 2015)
Farakka STPS	425,415	8,16,18
Khalgaon STPS	Data not Available	NA
Talcher STPS	416,411	12,22
Teesta	419,394	1,15,24
Bakreshwar TPS	412,394	10,16,21
Kolaghat TPS	428,405	8,12,14
Sagardighi TPS	Data not Available	NA
MPL	422,412	8,22,23
Mejia-B	424,416	10,21,22
DSTPS	427,419	18,22,24
Adhunik TPS	429,418	2,22,24
Sterlite	429,422	3,8,10

ERLDC may update.

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

ERLDC presented the performance of the generators.

Members noted.

#### a) Schedule for reactive capability tests

From last many OCCs reactive capability testing of following units are pending:

- a) Adhunik TPS
- b) DSTPS
- c) Mejia & Koderma TPS

Further OCC may decide date for carrying out reactive testing of GMR and JITPL.

Members may decide.

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

Members noted.

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

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.

Accordingly, a special meeting was convened on 27<sup>th</sup> June, 2014. During the meeting following tap position was agreed:

SI. No.	Utility	Present GT tap position	Agreed tap position in the meeting
1	APNRL: GT-1	8	9
	APNRL: GT-2	3	4
2	Mejia-B, DVC	4	5
3	DSTPS, DVC	5	6

Subsequently, DVC vide mail dated 3<sup>rd</sup> July, 2014 informed that GT tap position of MTPS units U#7&8 has been changed from Tap no. 4 to Tap no. 5.

In 101<sup>st</sup> OCC, ERLDC informed that MPL should also reduce the GT tap from tap position 5 to 6. MPL informed that they will confirm in the next OCC.

In 102<sup>nd</sup> OCC, APNRL informed that they have changed the GT tap position of both the GTs as per agreed settings.

MPL informed that they may face high voltage problem while synchronization of their generator with the agreed GT tap position.

ERLDC assured that they will take care of the voltage problem during synchronization of their generator and advised to change the GT tap position.

In 103<sup>rd</sup> OCC, MPL informed that they need clear cut written communication from ERLDC that during synchronization of their generators what actions they need to take.

ERLDC once again assured that they will take care of the high voltage during synchronization of the generators.

Since the deliberations are already noted in the minutes of special meeting of GT tap, OCC felt no separate written communication is required and advised MPL to change the tap position. MPL agreed.

ERLDC and MPL may update the status.

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

Members noted.

In 104<sup>th</sup> OCC, members felt that one reactor at Jamshedpur is necessary to tackle the high voltage problems and decided to place the proposal to standing committee.

DVC vide letter No.LD/25/ERPC/640 dated 03.01.2015 informed that the tap position of DSTPS GT #1 was changed from 5 to 6. Further, DVC has submitted the observations of CE, DSTPS and requested to suggest suitable measure to address the problem.

ERLDC and DVC may update the status.

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

After detailed deliberation members felt that one 125 MVAR reactor will be installed at Rourkela which will be sufficient to control the Jamshedpur voltage.

OCC requested ERLDC to co-operate with DVC while synchronization of DSTPS units to bring down the voltage.

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

### Item no. C.1: Shutdown proposal of transmission lines and generating units for the month of March' 15

Members may also finalize the Shutdown proposals of the generating stations and transmission lines for the month of March' 15 is circulated in the meeting.

Chuzachen informed that recently operational difficulties are being faced due to loss of pressure in the SF6 Line Breaker of the 132 KV Chuzachen Melli breaker at Chuzachen end. To avoid Breaker lockout or unwanted tripping of the breaker losing the grid connectivity, manufacturer M/S Siemens was contacted for a solution.

M/S SIEMENS may send their service engineers to Chuzachen site for the rectification of the defect with effect from 27/02/2015 to 05/03/2015.

Since this is a double circuit feeder in close vicinity, the 132 KV Chuzachen - Rangpo feeder will also be required to be taken out of service to ensure safety of manpower for the maintenance works. Availing this opportunity pre-monsoon Line patrolling of both the 132 KV Chuzachen Rangpo and Chuzachen Melli feeder is also being planned.

With 132 KV Rangit - Rangpo / 132KV Rangpo - Gangtok I / !32 Kv Rangpo - Gangtok II / 132KV Melli-Siliguri / 132KV Rangit - Melli remaining in service during the mentioned time period, grid connectivity with Melli and Gangtok will be ensured. It is understood that, Chuzachen generation will not be available during this time period.

In view of above, Chuzachen requested for shutdown of 132KV Chuzachen Melli and 132 KV Chuzachen Rangpo feeder w.e.f 27/02/15- 05/03/15

Powergrid requested for shutdown of 765kV Jharsuguda-Dharmajaygarh D/C line for rectification of insulator strings for 6 days from 26.04.2015 on continuous basis.

JUSNL requested for shutdown of 220kV Ramchandrapur-Joda S/C line for tower height rising work.

Members may confirm.

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

Approved maintenance programme of transmission elements for the month of March, 2015 is at **Annexure-C.1**.

#### Item no. C.2: Anticipated power supply position during March'15

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of March'15 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 March, 2015 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
MEJIA	1	210	02.01.15	LESS DEMAND	May, 2015
MEJIA	4	210	09.11.15	LESS DEMAND	May, 2015
STERLITE	3	600	22.01.15	DESYNCHRONIZED DUE TO LESS SCHEDULE	
KODERMA	1	500	12.11.14	LESS DEMAND	
DSTPS	2	500	01.12.14	LESS DEMAND	May, 2015
WARIA	4	210	24.11.14	LESS DEMAND	
BANDEL	5	210	16.11.13	MAINTENANCE	April, 2015
JITPL	1	600	16.08.14	LEAKAGE IN STATOR	Available
JITPL	2	600	16.02.15	TURBINE PROBLEM	Available
APNRL	1	270	25.11.14	TURBINE PROBLEM	
KOLAGHAT	5	210	08.02.15	Capital Overhauling	24 <sup>th</sup> Feb, 2015

#### (ii) Transmission elements

Name of the Line/Element	Outage	Reason	Date of restoration
220 KV CHUKHA-BIRPARA-I	11.01.15	S/D AVAILED BY CHUKHA	Charged but did not withstand
220 KV INDRAVATI-THERUVALI-III	02.02.15	B-N FAULT	15 <sup>th</sup> February, 2015

Members may update.

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

Members updated the latest status.

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

- 1. 220kV 765kV Gaya-Balia was charged for the first time at 21:31hrs of 05/01/15.
- 2. 400/220kV ICT-I at Chaibasa was charged for the first time at 22:54hrs of 20/01/15. Subsequently associated 220kV bays and 220kV Bus-II at Chaibasa was charged at 23:10hrs of 20/01/15 respectively.
- 3. 500 MVA, 400/220kV ICT-V at Subhashgram was charged for the first time on no load at 15:56hrs of 26/01/15.Subsequently ICT-V was loaded at 16:14hrs of 27/01/15.
- 4. 125 MVAr Bus Reactor at Rourkela was charged for the first time at 19:30hrs of 31/01/15.

Members may update.

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

Members noted.

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

#### New generating units:

S.No.	Power Plant	Plant Size	Expected date
1	Teesta-III Unit#1	1x200MW	
2	Raghunathpur Unit#1	2x600MW	

#### New transmission elements:

SI No.	Name of Element	Expected date
1	400 kV Maithon-Gaya D/C	Commissioned
2	400 kV Gaya-Koderma D/C	Commissioned
3	400kV Sasaram-Daltonganj D/C & Daltonganj S/Stn	October, 2015
4	400 kV Ranchi-Raghunathpur D/C	
5	400 kV Meramandali-Dubri D/C	
6	400 kV Corporate- Ranchi D/C	
7	400 kV Sterlite-Meramandali D/C	
8	220 kV TLDP-IV – NJP ckt-2	March, 2015
9	220 kV Jeerat-Rishra D/C	
10	220 kV Latehar-Daltonganj D/C	Charged at 132kV
11	220 kV Lohardaga-Lathehar D/C	Charged at 132kV
12	220 kV Bidhansai-Cuttack D/C	March, 2016
13	220 kV Girdih-Koderma D/C	June, 2015
14	400kV Rajarhat-Purnea D/C(with LILO of one circuit each	February, 2016
	at Farakka and Gokarno)	-
15	Augmentation of 400kV Farakka-Malda D/C with HTLS	December, 2015
	conductor	

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 Jan'15

System frequency touched a minimum of 49.55Hz in January'15 on 15/01/15 at 07:36Hrs. Accordingly, no report of operation of UFR has been received from any of the constituents.

Members may note.

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

Members noted.

#### Item no. D.2: Non-compliance of directions issued by SLDC

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

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

No report from any constituent has yet received. Hence ERLDC would be considering 'Nil' report for all constituents for January'15.

Members may note.

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

Members noted.

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

Sl no	Disturbance Place	Date & Time	Generati on loss (MW)	Load loss (MW)	Remark	Category
1	400/220kV Meeramundali S/S	02/01/15 at 05:40 & 06:04hrs	0	0	Various 400kV lines emanating from Meramundali tripped simultaneously due to occurrence of over voltage at Meramundali.	
2	765/400kV Angul S/s	20/01/15 at 11:23hrs	0	0	Due to failure of B-Ø CT of 400kV Angul- Meramundali-I at Angul various 400kV lines from Angul tripped.	

Members may note.

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

Members noted.

Item no. D.4: Any other items.

### 1. Periodical furnishing of information related to generation cost, power / energy shortage etc.

In order to address the problem of energy shortage existing in different parts of the country, and ensure nationwide merit order dispatch, Ministry of Power has recently advised POSOCO to compile the variable cost of thermal power plants and state-wise details of power / energy shortage.

Concerned entities are therefore requested to furnish the following information on a quarterly basis. Details are enclosed in **Annexure-D4.1**.

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

Constituent members agreed to send the relevant information.

### 2. Proposal for review of PDO conditions for HVDC Gajuwaka Poles, in view of repeated tripping of lines in S. Odisha

In view of repeated trippings of EHV lines causing major disturbance in South Odisha for the past six months, ERLDC proposed to review the PDO conditions for HVDC Gazuwaka to meet the eventualities arising out of the consequences.

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

The existing & proposed PDO conditions were presented by ERLDC. Details are enclosed in Annexure-D4.2.

The house was informed that the issue was already deliberated in 28th PCC meeting. OCC appreciated the proposal and advised OPTCL to study and send their views. OPTCL agreed.

#### 3. Charges for oil sample test in PGCIL testing Lab-- BSPTCL

BSPTCL informed that, PGCIL is taking charges for oil sample tests. BSPTCL opined that PGCIL testing lab as well as its land is capitalized by PGCIL and it is included in Transmission tariff or in O&M head. Therefore, PGCIL should not charge BSPTCL for oil sample tests.

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

OCC requested Powergrid to look into the matter.

Powergrid informed that they will revert back after consulting with their HQ.

### Participants in 106th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 26.02.15 (Thursday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
1	A. le bauly from	MS.	ERPC	9433068533	msespe-power	Daudyop
2	D.K. Stenevagean	Acm	Enuc	94330 41802		# 2 Dec
3	G. Charrabenly	DGH	ERLDO	9433041815	C.goutam62@	ourne
4	PS Das	ASJSM	HUC	9433041837	psdas-psd@	6
5	S. BANERJEE	Ast GM	ERLDC	9433041823	0	a Serci
6	AUBEHELA	D4M	POWER SHIP	9437175638	aubthura1968 @	m de
7	B. Pan	CE (SLDC)	DVC	9903247/02	brahmanenda.ponodvc.gov	P
8	1 Nayer	-AGM	NTPC FR-2 Pshubaeur	9437041581	& narped Mpc. 10.	Berge
9	ANIL KUMAR	DGM	NTPC ER-)	9431215301	nipe coin	コントー
10	UGYEN TSHERM	s EE/OD	KHP, 86PC	17610624	ogentshe das	· aug:
11	M. PRASAD	HEAD/PMD	DGPC	7407028065	munopescular para 1.	12
12	W. Manotal	AGM(E)	Gaki	8016084299	niladri, mand Ogatiinfra .com	28/2/15
13	VH-K. Satapaho	GM-PER	GAR KAMADINA	7752020465	haresh.satapalt	o dry
14	M. K. Panda	AGM - SSL	Sterlite Seon Sterlite He Thomas and		manaskumar. pandag vedanla	
15	PK Sundicke	PGM GKR		9777580352		12
16	AloK I natop Singh	Engr	ERLDC	9007285390	eloktratep1@	ALOE
17	B. Vermer	Eng91	ERLOC	<i>ಎಎಡ</i> , ೩%	Drambonard &	bar
18	M.K. Thakuz	Dy Manages	ERLDC	9432351832_		मर्गाल
19	P. Banuye	Supt: Eng.	MBSEPUL	943214076	preclastic	19-2
20	Tsheny Duba	HE	CHP/DADE	17713350	twiduk 56 pogmail	· listin

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

### Participants in 106<sup>th</sup> OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 26.02.15 (Thursday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
21	Tandin Doiji	EF (Moch)	THP/BAPL		tondin dinjidh Ognail com	or those
22	S. Wongdi	Dy EE	CHI/DEDL	2	Singuywagt@ hotonart.com	(D)
23	Robit Kennar	æ.sr. Engr	fowererso, ER-s	9431815714	grace un	300
24	T.R. Mohapetra.	D·M	ERIOL	9433041873		Tile
25	J. JARDAR	ASSR - G-M	BRIDG	9433041840	Sulgemen. powergi st. E. gonart. Gry	wes
26	K. Rajundra	CMIAM	POWECKELO.	94-34-740019-	Krajendra@ Powergrisiadia	क्रिक
27	5-19-9444	So. Kroj a.	4	7434713523		Any
28	R. Biswas	St. Mgr.	DP2 -	9434735785	SSlde.dps Comaircom	en-
29	Herray Gadan	Dy may	3 77PL	3971270037	FOURK BOLES	D
30	vilay Kumas G.	Sr. Engineer	JITA	9583040	sitplodista @gost: Con.	wif
31	SANDIP PAL	Sm (50)	CESC	9831054651	sandip pal@	(any)a
32	Madhusudanseho	a AGM (elut)	GRIDCOLLO- Bhuhamora	9692427876	grides ebc agmail	M.S. Sahoo
33	H.P. Mahapatri	Mariki)	OHPC Rhilms	9861164943	hym. ohpe	H-/
34	PRABIR HALDER	DGM(OS)	WEFOCL	8336903685	pheldoor@ ubpice.	P. Hold
35	Pebarshi De	DIM(SC)	CEIC	9163312742	debassi. de	dile
36	N.Kler	LO.	Goodle	9432035435	Khannarth 418go	D. C. OLD)
37	forizzudha Seth	ÐM	, ,	9438606354	ele asethi @ gnodeo co in	to the
38	Archana Sal	My CEI)	OPTCL	9437189538	orchu_sel@	Ad-
39	Sudipola Ghosh	AM (PS)	HERDEL	9474363864	8- suliples@ rediffmail.com	S. Host
40	Ex. Boy	2E(E)	WRSETCL	9434910093		But

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### Participants in 106th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 26.02.15 (Thursday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
41	S. R. Sola	SSE	E.R.y.	900 2025315	Sanjay. Saha 3900 gmail G	Sale
42	T. K.De	A.CE	MBSERY	9433875748		The
43	G. Poo	ARE	ERPC	9547891353		1 da
44	P. K.DE	BE	ERPC	9433/25844	prderpe @	Res
45	M. R. Mohanty	80.G.H.(P)	SCAC Colisto	74140700	Symps & sidionis	· Kost
46	PRASHANT KUMARDE	Dam (Even)	SIN, OPTCL, Dhubaryson	9 4 9 8 9 0 7 4 0 6	prashoneu dos Quanos lo (n	De
47	A.BISWAS	c.E., SLDC	WBSETCL	9434910030	anitar birras 22 Eguril com	16
48	Sujit Walk	CE; CPD	WOSETCL	9184910019	Sanitral @ w bedde	160 HIS
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50	5.5. Mish	ESE	JUSHL	9771904825	Figural (an	7300
51	P. KUMAR	ESE.	BSPTCL	776381674	prakhatkron	gkm
_	Harish Chander	DYCEE	E. Rlys.	9002020312	harish chander 37@yahoo.in	an
53	D.S. NAC	Dy anco)	WBPOCL	8336903888	dsnagowspa	l. Cain Quag
54	D. K. Bayo;	EE (0)	ERPC	9883617236	ecopiespe agouite	Some
55	B. SAPKHEL	SE(PS)	ERPC	94338577		Sall
56	BANDYOPAON	se (c)	"			B
57	RAKESH KUMAR	AGm(05)	PATWA.	943101344.	sakesh kemos 12@NFC.Co.in	Dokuescum
58						
59						
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### **Annexure-B2**

### **Additional Bus Reactor (Under Implementation or Proposed)**

Sl No	Sub-Station	Capacity	Tentative date of commissioning
1	400 kV Jamsedpur	2 x 125 MVAR	July, 2015
2	400 kV Baripada	2 x 125 MVAR	June, 2016
3	400 kV Jeypore	1 x 125 MVAR	June, 2015
4	400kV Maithon	1X125 MVAR	July, 2015
5	400kV Rourkella	1X125 MVAR	Commissioned
6	400kV Biharshariff	1X125 MVAR	March, 2015
7	400kV Rengali	2X125 MVAR	October, 2015
8	400kV Biharshariff	1X125 MVAR	October, 2015
9	400kV Durgapur	2X125 MVAR	March, 2016

List of Thired Party Protection observations related to PLCC

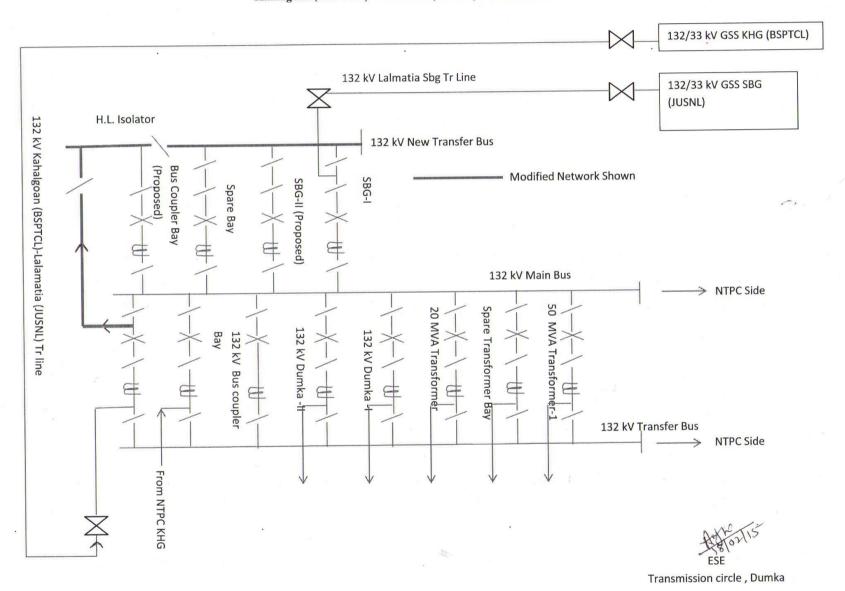
2.50	t of fillied Party Protection observations related to PLCC									
1	Jaypore 400 kV -	28-01-2013	PLCC of 220 kV lines is not working	Line belongs to OPTCL.						
	Powergrid									
2	Rengali 400 kV -	02/01/2013	PLCC for 220 kV lines is not available	Line belongs to OPTCL						
	Powergrid									
3	Rourkela 400 kV -	22-01-2013	Only one PLCC channel is available for 220 kV line protection	Line belongs to OPTCL						
	Powergrid									
4	TSTPS, Kaniha 400 kV -	29-12-2012	PLCC facility for protection is not available for 220 kV lines	OPTCL is the owner of the associated PLCC system of the 220 kV						
	NTPC			Lines.						
				The scheme for PLCC aided tripping for 220 Kv Lines is in place at						
				Kaniha but non functional due to absence of protection coupler in						
				associated PLCC system.						
				OPTCL may be perused to provide protection coupler in the						
				associated PLCC system						
5	Gaya 765 kV -	28-12-2012	Auto reclosing and carrier aided tripping features for 220 kV lines are							
	Powergrid		not in service due to problem at remote end (BSPTCL).							
6	Patna 400 kV -	29-12-2012	PLCC for 220 kV lines not in service due to problem at remote end	There is no problem at Patna end. For BSPTCL end PLCC panels						
	Powergrid		(BSPTCL).	supplied. To be commissioned by Sept'13.						

### List of Owner of PLCC equipment

SL No	TIE-LINE	CONNECTED SYSTEM		INECTED SYSTEM LENGTH (KM) CO		(KM) CONDUCTOR (Type) VOLTS (kV) NO OF CKTS		Ow	nership	Maintenance		Owner of Line	
								End1	End2	End1	End2		
7	INDRAVATI (PG)-INDRAVATI	POWERGRID(ER)	OPTCL	1	MOOSE	400	S/C	OPTCL	OPTCL	OPTCL / POWERGRID	OPTCL	OPTO	CL
								POWERGRI	STERLITE		STERLITE	POINT	Γ(26
8	RAIGARH-STERLITE	POWERGRID(WR)	VEDANTA	147	TWIN MOOSE	400	S/C	D(WR)	ENERGY Ltd	POWERGRID(WR)	ENERGY Ltd	KM)/REM.	AINING
			POWERGRID(E					STERLITE	POWERGRID(		POWERGRI	PORTION	OF THE
12	STERLITE-ROURKELA	VEDANTA	R)	114	TWIN MOOSE	400	S/C	<b>ENERGY Ltd</b>	ER)	STERLITE ENERGY Ltd	D(ER)	LINE IS O	WN BY
13	BARIPADA-MENDASAL	POWERGRID	OPTCL	272	TWIN MOOSE	400	D/C	POWERGRID	POWERGRID	POWERGRID	POWERGRID / OPTCL	POWER	
								POWERGRI				Upto LILO	portion
44	DEHRIGAYA	BSEB	POWERGRID	96	ZEBRA	220	D/C	D/BSEB	POWERGRID	POWERGRID/BSEB	POWERGRID	POWERGR	RID(ie 11
								POWERGRI				Upto LILO	portion
45	GAYABODHGAYA	POWERGRID	BSEB	16	ZEBRA	220	D/C	D	POWERGRID	POWERGRID	POWERGRID	POWERGR	
												length 07 K	-
												LILO)ov	,
								<b>POWERGRI</b>			POWERGRI	POWERGRIE	D and rest
47	CHANDIL-RANCHI	JUSNL	POWERGRID	42	ZEBRA	220	S/C	D/JUSNL	POWERGRID	POWERGRID/JUSNL	D	own by .	JUSNL
54	BALIMELA-U.SILLERU	OPTCL	APTRASCO	24	ZEBRA	220	S/C						
55	BUDHIPADAR-RAIGARH	OPTCL	CHATTISGARH	81	ZEBRA	220	S/C						
58	BUDHIPADAR-KORBA	OPTCL	CHATTISGARH	180	ZEBRA	220	D/C	POWERGRID	POWERGRID (WR)	POWERGRID / OPTCL	POWERGRID	POWER	GRID

**Annexure-B7** 

Schematic Diagram Showing modification in the Transmission Network at Lalmatia GSS for removal of T- Connection in the 132 kV Kahalgoan (BSPTCL) – Lalmatia (JUSNL) Transmission Line.



### **Annexure-B24**

S.NO	LINE NAME	WHICH END OVER VOLTAGE SETTINGS TO BE SUBMITTED	ORGANISATION
1	400 KV GMR-ANGUL-I	ANGUL	ER-II(Odisha projects)
2	400 KV GMR-ANGUL-II	ANGUL	ER-II(Odisha projects)
3	765KV JHARSUGUDA-DHARMJAYGARH-I	JHARSUGUDA	ER-II(Odisha projects)
4	765KV JHARSUGUDA-DHARMJAYGARH-II	JHARSUGUDA	ER-II(Odisha projects)
5	765 KV NEW RANCHI-DHARMJAYGARH-II	NEW RANCHI	ER-I
6	400KV CHAIBASA-ROURKELA-I	CHAIBASA	ER-I
7	400KV CHAIBASA-ROURKELA-II	CHAIBASA	ER-I
8	400 KV MAITHON -GAYA - I	GAYA	ER-I
9	400 KV KODERMA-GAYA-I	GAYA	ER-I
10	765 KV GAYA-BALIA	GAYA	ER-I
11	400KV PUSAULI-NABINAGAR-I	PUSAULI	ER-I
12	400KV PUSAULI-NABINAGAR-II	PUSAULI	ER-I
13	400KV BIHARSHARIFF - PUSAULI-IV	PUSAULI	ER-I
14	400KV BIHARSHARIFF - PUSAULI-IV	BIHARSHARIFF	ER-I
15	400 KV KHARAGPUR-KOLAGHAT-II	KOLAGHAT	WBSETCL
16	400 KV KHARAGPUR-KOLAGHAT-II	KHARAGPUR	WBSETCL
17	400 KV BIDHANNAGAR - DURGAPUR-II	BIDHANNAGAR	WBSETCL
18	400KV BERHAMPORE-SAGARDIGHI-I	SAGARDIGHI	WBSETCL
19	400KV BERHAMPORE-SAGARDIGHI-II	SAGARDIGHI	WBSETCL
20	400KV SUBHASHGRAM-HALDIA-I	HALDIA	CESC
21	400KV SUBHASHGRAM-HALDIA-II	HALDIA	CESC
22	400kV IBEUL-RAIGARH	IBEUL	IBEUL
23	400 KV JHARSHUGUDA-IBEUL	IBEUL	IBEUL
24	400KV PUSAULI-NABINAGAR-I	NABINAGAR	NTPC
25	400KV PUSAULI-NABINAGAR-II	NABINAGAR	NTPC

### EASTERN REGIONAL LOAD DESPATCH CENTRE KOLKATA

#### TRANSMISSION ELEMENTS OUTAGE APPROVED IN 106TH 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
	A/R OF 220 KV BIRPARA-SALAKATI-D/C	17/02/2015	07:00	26/03/2015	17:00	ODB	ER-II/ ULDC	OPGW STRINGING WORK	
	A/R OF 400 KV BARIPADA-KEONJHAR	17/02/2015	07:00	26/03/2015	17:00	ODB	ER-II/ ULDC	OPGW STRINGING WORK	
	A/R OF 400 KV BOLANGIR - ANUGUL	17/02/2015	07:00	26/03/2015	17:00	ODB	ER-II/ ULDC	OPGW STRINGING WORK/ PID WORK	TECCTA
	400 KV TESTA - RANGPO - BINAGURI - I	17/02/2015	08:00 10:00	26/03/2015	18:00 10:30	ODB ODB	ER-II/ ULDC ER-II/ OR	OPGW STRINGING WORK Isolation of 50 MVAR LR	TESSTA NLDC
	400 kv Indravati-rengali s/c line 50 MVAR LR in Rengali line	18/02/2015 18/02/2015	10:00	18/02/2015 06/03/2015	17:00	OCB	ER-II/ OR	For Drying out	NLDC
	220 KV Bus Section-1 at Durgapur	22/02/2015	10:00	22/02/2015	13:00	ODB	ER-II/ OR	Bus Jumper connection for bus isolator replacement	
	160MVA ICT-II at Birpara	22/02/2015	09:00	23/02/2015	17:00	ODB	ER-II	AMP & NFS Commissioning	WBSETCL
	400KV Malda-Purnea-I	22/02/2015	07:00	22/02/2015	18:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants & line isolator works under NTAMC.	W002102
0	220 KV Waria - durgapur #2	23/02/2015	08:00	01/03/2015	18:00	OCB	ER-II	CB & Isolator replacement under ADDCAP (25 years)	DVC
1	220 KV Bus Section-1 at Durgapur	23/02/2015	09:00	09/03/2015	18:00	OCB	ER-II	Line jumper replacement & Bus Jumper isolation for bus isolator replacement	
2	132 KV Rangit- Rangpo and	23/02/2015	08:00	27/02/2015	17:00	ODB	ER-II	Erection of 220 KV D/C Rangpo-Melli Line	Sikkim
3	400KV Malda-Purnea-II	23/02/2015	07:00	23/02/2015	18:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants & line isolator works under NTAMC.	
4	400 KV Rourkela - Talcher # 1	25/02/2015	08:00	25/02/2015	18:00	ODB	ER-II/ OR	For replacement of damaged insulators in Middle and Bottom phase at location no 247.	
5	765/400 KV ICT-I AT NEW RANCHI	25/02/2015	08:00	27/02/2015	18:00	ODB	ER - I	FOR BALANCE ERECTION OF AUXILIARY BUS	NLDC
6	400 KV PRN - BSF - I	25/02/2015	10:00	25/02/2015	18:00	ODB	ER - I	FOR COMMISIONING OF B - PH CVT(NOT COMMISONED)	NLDC
7	125 MVAR Bus Reactor at Rourkela	26/02/2015	08:00	26/02/2015	18:00	ODB	ER-II/ OR	Checking of Interlock and VT Selection Ckt.	
8	765 kV D/C Jharsuguda-Dharamjaygarh transmission line (Both Ckts. Together)	26/02/2015	08:00	03/03/2015	17:00	OCB	ER-II/ OR	To attend balanced punch point issues of transmission line	NLDC
9	400 KV PRN - BSF - II	26/02/2015	10:00	26/02/2015	18:00	ODB	ER - I	FOR COMMISIONING OF Y - PH CVT(OIL LEAKAGE)	NLDC
0	315MVA ICT-II AT Maithon	26/02/2015	09:00	26/02/2015	17:00	ODB	ER-II	Testing of LA & 220KV CT Connector replacement work	DVC
1	400 KV ANUGUL - BOLANGIR	27/02/2015	08:00	28/02/2015	17:00	ODB	ER-II/ OR	CROSSING WORK OF 765 KV ANUGUL - JHARSUGUDA	NLDC
-			08:00		17:00	OCB	ER-II/ OR		NLDC
3	765/400kV 1500MVA ICT-1 at Sundergarh	27/02/2015 27/02/2015	08:00	28/02/2015 03/03/2015	17:00	OCB	ER-II/ OR	Fire fighting commissioning work.  For erection of extra BPI and Rectfication of mechanical interlock problem in 400	NEDC
3	400 KV BUS-2 at Sundargarh	27/02/2015		03/03/2015	17:00			KV Isolator	
4	400KV Bus -II at Bolangir	27/02/2015	09:00	27/02/2015	17:00	ODB	ER-II/ OR	AMC Works & Rectification works on Bus-side isolator	
5	400 KV CHAIBASA - RKL - 1	27/02/2015	10:00	27/02/2015	14:00	ODB	ER - I	FOR BUS EXTN. WORK AT CHAIBASA.	
6	400KV MTN-KHG-II Line with LR	27/02/2015	09:00	27/02/2015	14:00	ODB	ER-II	Y-PH CVT Replacement	
7	63 MVAR B/R AT MUZ	27/02/2015	08:00	27/03/2015	18:00	OCB	ER-I	FOR ITS DISMANTLING & REPLACEMENT BY COMMISSIONING A NEW 125 MVAR	
8	220 KV NPRN - PRN - II	27/02/2015	08:00	27/02/2015	18:00	ODB	ER-I	FOR CT REPLACEMENT WORK AT NEW PURNEA DUE TO OIL LEAKAGE	
0	400 KV Bus - I at Rourkela	28/02/2015	08:00	28/02/2015	18:00	ODB	ER-II/ OR	AMP Work	
<u>,</u>	400 KV JSR-MTN	28/02/2015	09:00	28/02/2015	13:00	ODB	ER - I	TO REPLACE ONE GRADING CAPACITOR HAVING DGA VOILATION	
1				1					All DO
1	765/400 KV ICT-II AT NEW RANCHI	28/02/2015	08:00	02/03/2015	18:00	ODB	ER - I	FOR ERECTION OF AUXILIARY BUS	NLDC
2	220 KV RANCHI - HATIA - II	28/02/2015	10:00	28/02/2015	14:00	ODB	ER - I	FOR AMP WORK	
3	S/D of 400 kV BSF- LAKHISARAI- 2 and 400 KV LAKHISARAI- KHLG-2	28/02/2015	06:30	28/02/2015	19:00	ODB	ER - I	FOR making LILO of OPGW of BSF- Kahalgoan OPGW Link at Lakhisarai (Old Backbone Link of Telecom & ULDC to be made LILO at Lakhisarai. Data of Central Sector i.e. SSRM, BSF, GAYA, LKR, BANKA, BARH, Patna, MZF, won't be available between 10:00 hrs to 16:00 hrs.)	NLDC
34	132 KV Gangtok - Rangpo#I and	28/02/2015	08:00	04/03/2015	17:00	ODB	ER-II	Erection of 220 KV D/C Rangpo-Melli Line	Sikkim
5	315 MVA ICT-V & 400 KV BUS-II at Malda	28/02/2015	07:00	28/02/2015	18:00	ODB	ER-II	BUS-II isolator works of ICT-V under NTAMC.	
6	765 KV S/C RNC - DHARAMJAYGARH LINE ALONGWITH ITS L/R AT NRNC AND 765 KV B/R - 2 ATNRNC	28/02/2015	09:00	28/02/2015	17:00	ODB	ER - I	FOR ERECTION OF 765 KV AUX. BUS.	NLDC
7	400KV Rourkela-Sterlite-2 & Sterlite-Raigarh-2 (LILO of former 400KV Rourkela-Raigarh-Ckt-4 at Sterlite)	01/03/2015	08:00	01/03/2015	17:00	ОСВ	ER-II/ OR	Stringing works of 765KV S/C Angul-Jharsuguda Transmission line, Line-I, Part-II	There would be no evacuation path for SEL.
8	132 KV Chujachen - Melli	01/03/2015	08:00	05/03/2015	17:00	ODB	ER-II	Erection of 220 KV D/C Rangpo-Melli Line	Chuzachen
9	132 KV Chujachen - Melli	01/03/2015	08:00	05/03/2015	17:00	ODB	ER-II	Erection of 220 KV D/C Rangpo-Melli Line	Chuzachen
)	132 KV CHUZCHEN - MELLI & CHUZACHEN - RAGPO	01/03/2015	08:00	07/03/2015	17:00	OCB	CHUZACHEN	TO ATTEND SF6 GAS LEAKAGE OF BREAKER AT CHUZACHEN	Sikkim
1	765kV Dharamjaygarh Line-2	01/03/2015	08:00	03-032015	17:00	OCB	ER-II/ OR	Erection of Beam near Dharmjaygarh line-2 for Dharamjaygarh Line-3&4 Bay extension work.	NLDC
								FOR OPGW INSTALLATION WORK. (NTPC may be advised to facilitate A/R Switch	

					r	T===	1		
43	A/R OF 400 KV KAHALGAON - MTN -2	01/03/2015	06:30	31/03/2015	19:00	ODB	ER - I	FOR OPGW INSTALLATION WORK	Either Barh - Khg or Bsf - banka - 2, one will be
44	A/R OF 400 KV BSF - BANKA -2	01/03/2015	06:30	31/03/2015	19:00	ODB	ER - I	FOR OPGW INSTALLATION WORK	issued.
45	A/R OF 400 KV JSR - BRPD -2	01/03/2015	06:30	31/03/2015	19:00	ODB	ER - I	FOR OPGW INSTALLATION WORK	Either Baripda - Keonjhar or JSR - Baripada - II, one will be issued.
46	220 KV Bus Section-1 at Durgapur	01/03/2015	10:00	01/03/2015	13:00	OCB	ER-II	Bus Jumper connection for bus isolator replacement	
47	ICT#2 at Subhasgram	01/03/2015	07:00	02/03/2015	22:00	OCB	ER-II	220KV Yph Bushing replacement	WBSETCL
48	315 MVA ICT - I AT NEW PURNEA	01/03/2015	08:00	19/05/2015	18:00	OCB	ER - I	S/D REQUIRED ON CONTINUOUS BASIS FOR REPLACEMENT OF THIS TRANSFORMER BY 500 MVA ICT.	BSEB
49	400 KV Bus - II at Rourkela	02/03/2015	08:00	02/03/2015	18:00	ODB	ER-II/ OR	AMP Work	
50	765/400kV 1500MVA ICT-2 at Sundergarh	02/03/2015	08:00	03/03/2015	17:00	OCB	ER-II/ OR	Fire fighting commissioning work.	NLDC
51	125 MVAR B/R - I AT NEW NPRN	02/03/2015	10:00	02/03/2015	14:00	ODB	ER - I	FOR AMP WORK	
52	132 KV S/C SAHARSHA - UDAKISHANGANJ LINE OF BSPTCL	02/03/2015	08:00	03/03/2015	18:00	ODB	ER - I	FOR STRINGING WORK OF OF 800 KV HVDC ISLAMPUR - SAHARSHA SECTION OF BISWANATH CHARIYALI - AGRA LINE	BIHAR
53	132 KV D/C BARH - HATIDAH T/L OF BSPTCL	02/03/2015	08:00	03/03/2015	18:00	ODB	ER - I	FOR STRINGING WORK OF OF 400 KV D/C BARH - GKP T/L .	BIHAR
54	315MVA ICT-I AT Maithon	02/03/2015	09:00	02/03/2015	17:00	ODB	ER-II	Relay retrofitting,42489T (Y-Ph) Isolator arm replacement	DVC
55	400 KV Jamshedpur- Durgapur # 2	02/03/2015	14:30	02/03/2015	15:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
56	400 KV Jamshedpur- Durgapur # 3	02/03/2015	15:30	02/03/2015	16:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
57	400 KV BSF - LAKHISARAI - 2	02/03/2015	09:00	02/03/2015	13:00	ODB	ER - I	FOR LINE BAY AMP	NLDC
58	400 KV BUS - II AT NRNC	02/03/2015	09:00	02/03/2015	18:00	ODB	ER-I	BALANCE ERECTION WORKS FOR BUS BAR EXTENSION & JUMPERING WORKS.	
59	400 KV BUS - II AT GAYA	02/03/2015	08:30	03/03/2015	18:00	ODB	ER-I	FOR BUS EXTENSION & BUS SIDE ISOLTOR RELACEMENT WORKS.	
60			1			ODB	ER-II/ OR	For tightening of Jumpers, Adjustment of VD, Corona Ring and spacer at various	NLDC
OU	400 KV SEL - Raigarh # 2	03/03/2015	08:00	03/03/2015	17:00			locations.	INLDG
61	400KV (3X105MVA) ICT#I at Jeypore	03/03/2015	09:00	03/03/2015	17:00	OCB	ER-II/ OR	For AMP works	
62	220 KV GAYA(PG) - DEHRI (BSPTCL) - I & II	03/03/2015	09:00	04/03/2015	18:00	ODB	ER - I	FOR STRINGING WORK OF OF 765 KV GAYA - VARANASI T/L	BIHAR
63	220 KV Bus-I at Birpara	03/03/2015	09:00	03/03/2015	11:30	ODB	ER-II	for opening iso lator drop-out for Iso retrofitting.	
64	220 KV Bus-II at Birpara	03/03/2015	11:45	03/03/2015	14:15	ODB	ER-II	for opening iso lator drop-out for Iso retrofitting.	
65	400 KV Bus I at Subhasgram	03/03/2015	07:00	03/03/2015	17:00	ODB	ER-II	Bus Isolator AMP	WBSETCL
66	400 KV Bus coupler & 400 KV BUS-II at Malda	03/03/2015	07:00	03/03/2015	18:00	OCB	ER-II	BUS-II isolator works of Purnea-I, Purnea-II, Farakka-II, 315 MVA ICT-III ,Bus Coupler & TBC under NTAMC. All feeders will be charged through TBC after one	
00	400 KV Bus coupler & 400 KV Bos II at Maida	03/03/2013	07.00	03/03/2013	10.00	OOD	EK II	by one during isolator maintenance.	
67	220 KV BUS COUPLER AT KANIHA	03/03/2015	09:00	04/03/2015	18:00	ODB	NTPC	AMP WORK	OPTCL
68	400 KV BSF - BANKA - I	03/03/2015	09:00	03/03/2015	13:00	ODB	ER - I	FOR LINE BAY AMP	NLDC
69	400 KV ANDAL - JAMSHEDPUR - I	03/03/2015	08:00	04/03/2015	17:00	ODB	DVC	PREVENTIVE MAINTENANCE	
70	765 KV BUS - II AT NRNC	03/03/2015	09:00	03/03/2015	18:00	ODB	ER-I	ALIGNMENT AND CRM OF ISOLATOR 71289 A	
71	132 KV S/C DEHRI - KUDRA T/L (PART OF DEHRI - KARAMNASA T/L OF BSPTCL)	03/03/2015	09:00	04/03/2015	18:00	ODB	ER-I	FOR STRINGING OF 765 KV GAYA - VARANASI T/L	BIHAR
72	132 KV SIWAN - GOPALGANJ T/L OF BSPTCL	03/03/2015	08:00	04/03/2015	16:00	ODB	ER-I	STRINGING WORK OF 400 KV D/C BARH - GORAKHPUR T/L	BIHAR
72	132 KV HAJIPUR - SHITALPUR T/L OF BSPTCL	03/03/2015	08:00	04/03/2015	16:00	ODB	FR-I	STRINGING WORK OF 400 KV D/C BARH - GORAKHFOR I/L	BIHAR
7.4	100 MVA ICT AT SILIGURI	03/03/2015	08:00	08/03/2015	16:00	OCB	ER-II	OIL FILTERATION WORK	WBSETCL
74 75		04/03/2015	08:00		18:00	ODB	ER-II/ OR	AMP Work	NLDC
76	400 KV Rourkela - Raigarh # 2 with Line Reactor			04/03/2015 04/03/2015		ODB	FR - I		NLDC
77	125 MVAR B/R - 2 AT NEW NPRN 400KV MTN-RTPS(DVC)	04/03/2015 04/03/2015	09:00	09/03/2015	14:00	ODB	ER-II	FOR AMP WORK 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
78	400 KV Bus II at Subhasgram	04/03/2015	07:00	04/03/2015	17:00	ODB	ER-II	Bus Isolator AMP	WBSETCL
79	160 MVA ICT-II at Malda	04/03/2015	08:00	04/03/2015	15:00	ODB	ER-II	For NIFS commissioning.	WBSETCL
80	400KV Binaguri-Bongaigaon-III	04/03/2015	09:00	04/03/2015	17:00	ODB	ER-II	Replacement of REL521 with REL670	NLDC
81	400 KV Rourkela - Sundargarh # 1	05/03/2015	09:00	05/03/2015	18:00	ODB	ER-II/ OR	AMP Work	
82	400 KV BUS-1 at Sundargarh	05/03/2015	08:00	09/03/2015	17:00	OCB	ER-II/ OR	For erection of extra BPI and Rectfication of mechanical interlock problem in 400 KV Isolator	
83	63.5 MVAR Bus Reactor at Jeypore	05/03/2015	09:00	05/03/2015	17:00	OCB	ER-II/ OR	For AMP works	
84	400 KV B'Nagar Line-1 reactor (line outage during	05/03/2015	08:00	11/03/2015	18:00	OCB	ER-II	Offline dry out. Moisture content is high	
85	switching (on/off) 400 KV B'nagar line will be switched off (10-15 min) during reactor isolation on 05/03/14	05/03/2015	08:00	05/03/2015	08:15		ER-II	Line for isolating line reactor	
86	66kV S/C Melli-Namchi T/L (Sikkim Power Deptt)	05/03/2015	08:00	10/03/2015	17:00	ODB	ER-II	Erection of 220 KV D/C Rangpo-Melli Line	
87	160 MVA ICT-I at Malda	05/03/2015	08:00	05/03/2015	15:00	ODB	ER-II	For NIFS commissioning.	WBSETCL
88	400 KV ANDAL - JAMSHEDPUR - II	05/03/2015	08:00	06/03/2015	17:00	ODB	DVC	PREVENTIVE MAINTENANCE  For tightening and checking of humans. Adjustment of VD. Corone Ding and	
89	400 KV Rourkela - Sundergarh # 2	06/03/2015	08:00	06/03/2015	17:00	ODB	ER-II/ OR	For tightening and checking of Jumpers, Adjustment of VD, Corona Ring and spacer at various locations.	
90	400 kv Indravati-rengali s/c line	06/03/2015	09:30	06/03/2015	17:00	ODB	ER-II/ OR	For testing of 50 MVAR Reactor & it's bay equipments	NLDC
91	400KV MAITHON-JAMSHEDPUR & MAITHON-MEJIA-3	06/03/2015	09:00	10/03/2015	17:00	ODB	ER-II	Replacement of insulator strings at crossings	DVC
92	400 KV Rourkela - SEL # 2	07/03/2015	09:00	07/03/2015	18:00	ODB	ER-II/ OR	AMP Work	NLDC
14	400KV	07/03/2015	09:00	07/03/2015	18:00	ODB	ER-II	AMP	WBSETCL
93	400KV Haldia - Subhasgram # 1								
94	100 MVA ICT AT BIRPARA	07/03/2015	08:00	12/03/2015	16:00	OCB	ER-II	OIL FILTERATION WORK	WBSETCL
				12/03/2015 07/03/2015 07/03/2015	16:00 12:00 14:00	OCB ODB ODB	ER-II WBSETCL WBSETCL	OIL FILTERATION WORK RELAy retrofitting RELAy retrofitting	WBSETCL

98	WESTECL   FC   WESTECL   FC   R-II   FO   FC   FC   FC   FC   FC   FC   FC	AANUFACTURER  Adolfication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Adolfication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Adolfication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC NLDC NLDC WBSETCL WBSETCL WBSETCL
98 400kv KTPP-ARMB	VBSETCL FC R-II FO R-II FO R-II BL SEB TC R-II/ OR FI R-II/ OR FI R-II/ OR FI M R-II/ OR FI M R-II/ OR FI M R-II FO CC R-II M M R-II FO CC CC CC CC CC	OR MAINTENANCE WORK.  or re-connection of isolator drop-out for Isolator retrofitting.  or re-connection of isolator drop-out for Isolator retrofitting.  out re-connection of isolator drop-out for Isolator retrofitting.  out re-connection of isolator drop-out for Isolator retrofitting.  out reconductoring  OWER HEIGHT RISING WORK  MP Work  ire fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF  MANUFACTURER  Andification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for  tonstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for  ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Andification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC WBSETCL WBSETCL
99	R-II fo R-II fo R-II fo R-II fo R-II BL SEB TC R-II/ OR AI R-II/ OR AI R-II/ OR FI M R-II fo CC R-II fo CC CC R-II fo CC	or re-connection of isolator drop-out for Isolator retrofitting.  or re-connection of isolator drop-out for Isolator retrofitting.  use reconductoring  OWER HEIGHT RISING WORK  MIP Work  ire fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF  ANNUFACTURER  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for  construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for  fornstruction of GIS Buiding under ERSS-IV package awared to M/s L&T.	NLDC WBSETCL WBSETCL
100   220 KV Bus-II at Birpara   08/03/2015   14:15   08/03/2015   16:45   ODB   ER-	R-II	or re-connection of isolator drop-out for Isolator retrofitting.  Jus reconductoring  OWER HEIGHT RISING WORK  MP Work  Ire fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF  MANUFACTURER  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for  fornstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for  fornstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC WBSETCL WBSETCL
101   220 KV Bus-I at Birpara	R-II   BL   SEB   TC   SEB   TC   SEB   TC   SEB   TC   AB   AB   AB   AB   AB   AB   AB   AB	Jus reconductoring OWER HEIGHT RISING WORK MAP Work  Ire fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF MANUFACTURER  Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for tonstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for tonstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC WBSETCL WBSETCL
102   220 KV RAMCHANDRAPUR - JODA   08/03/2015   08:00   13/03/2015   17:00   OCB   JSE     103	SEB	OWER HEIGHT RISING WORK  MP Work  The fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF ANNUFACTURER  Additionation of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus., 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Additication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus., 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Additication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  Additication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC WBSETCL WBSETCL
103       400 KV Rourkela - Raigarh # 2       09/03/2015       09·00       09/03/2015       17:00       ODB       ER-         104       765kV, 240MVAr Bus Reactor-1 at Sundergarh       09/03/2015       08:00       10/03/2015       17:00       OCB       ER-         105       200 MVA ICT -1 AT LAKHISARAI       09/03/2015       08:00       09/03/2015       18:00       ODB       ER-         106       132kV Transfer Bus at Siliguri       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-         107       132kV Siliguri -Kurseong (Rangeet)Line       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-         108       132kV Siliguri -Melli Line       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-         109       100MVA ICT-1 of Siliguri       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-	R-II	IMP Work  ire fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF  MANUFACTURER  Identification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for  forstruction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require  or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for  forstruction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC WBSETCL WBSETCL
104	R-II	ire fighting commissioning work.  O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF MANUFACTURER  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	NLDC WBSETCL WBSETCL
105       200 MVA ICT -1 AT LAKHISARAI       09/03/2015       08:00       09/03/2015       18:00       ODB       ER         106       132kV Transfer Bus at Siliguri       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-         107       132kV Siliguri -Kurseong (Rangeet)Line       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-         108       132kV Siliguri -Melli Line       09/03/2015       06:00       09/03/2015       20:00       ODB       ER-         109       100MVA ICT-1 of Siliguri       00DB       ER-       0DB       ER-	R - I TC MM  R-II fo Cc  R-II fo Cc  R-II fo Cc  Cc  Cc	O CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF MANUFACTURER MODIFICATION OF MANUFACTURER MODIFICATION OF MANUFACTURER OF dismantling of Transfer Bus., 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus., 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	WBSETCL WBSETCL
106 132kV Transfer Bus at Siliguri	R-II MM R-II fo Cc CC R-II fo Cc CC CC CC CC CC	MANUFACTURER  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for isonstruction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for isonstruction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	WBSETCL
106 132kV Transfer Bus at Siliguri	R-II fo	AANUFACTURER  Adolfication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus., 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Adolfication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus., 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Buiding under ERSS-IV package awared to M/s L&T.  Adolfication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	WBSETCL
132kV Siliguri -Kurseong (Rangeet)Line	R-II fo CC	or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Addiffication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Addiffication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	
132kV Siliguri -Kurseong (Rangeet)Line	R-II fo CC	or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Addiffication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  Addiffication of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	
132kV Siliguri -Kurseong (Rangeet)Line	R-II CC	Construction of GIS Building under ERSS-IV package awared to M/s L&T.  Addiffication of existing AIS 132kV Swithching Scheme to GIS-Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Building under ERSS-IV package awared to M/s L&T.  Addiffication of existing AIS 132kV Swithching Scheme to GIS-Shutdown require	
132kV Siliguri -Kurseong (Rangeet)Line  09/03/2015 06:00 09/03/2015 20:00  132kV Siliguri -Melli Line 09/03/2015 06:00 09/03/2015 06:00 09/03/2015 20:00  DB ER-  109 000 000 000 000 000 0000 000 000 0	R-II fo	Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for construction of GIS Building under ERSS-IV package awared to M/s L&T.  Addification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	WBSETCL
107   108   109	R-II fo Cc R-II fo Cc	or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  ### Additional Company of the American Properties of the America	WBSETCL
107   108   109	R-II fo Cc R-II fo Cc	or dismantling of Transfer Bus , 132 kV Transfer Bay and 2 nos. Tower for ionstruction of GIS Building under ERSS-IV package awared to M/s L&T.  ### Additional Company of the American Properties of the America	WBSETCL
108   108   109	R-II CC	construction of GIS Building under ERSS-IV package awared to M/s L&T.  Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	WBSETCL
132kV Siliguri -Melli Line  09/03/2015 06:00 09/03/2015 20:00  ODB ER-  ODB ER-	R-II fo	Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	
132kV Siliguri -Melli Line	R-II fo		
108	R-II fo		
100MVA ICT-1 of Siliguri	Co	or dismontling of Transfor Pug. 122 kV Transfor Pay and 2 non-Toyers for	
109 IOOMVA ICT-1 of Siliguri ODB ER-		or dismanding of fransier bus , 152 kV fransier Bay and 2 nos. Tower for	WBSETCL
100MVA ICT-1 of Siliguri ODB ER-		Construction of GIS Building under ERSS-IV package awared to M/s L&T.	,
109 ODB ER-			
	IM	Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	
			WBSETCL
		construction of GIS Building under ERSS-IV package awared to M/s L&T.	11002102
09/03/2015 06:00 09/03/2015 20:00	CC.	offstruction of GIS Building under ERSS-IV package awared to IVI/S E&T.	
132kV Transfer Bay Siliguri	M	Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	
110 ODB ER			DA/DCETCI
110 ODB ER-			WBSETCL
09/03/2015 06:00 09/03/2015 20:00	Co	construction of GIS Buiding under ERSS-IV package awared to M/s L&T.	
	R-II Iso	solator retrofitting	NLDC
			WBSETCL
		OR AMP WORK	NLDC
		MAINTENANCE WORK	NEDC
		MP Work	OPTCL
115 Z20 KV BUS-1 at KOUIKela 10/03/2013 U9:00 10/03/2013 10:00 UDB EK-		OR ERECTION OF AUXILIARY BUS. SIMULTANEOUS S/D OF 765 KV B/R - I & II AT	
116 765 KV B/R - I AND 765 KV B/R - II AT NEW RANCHI 10/03/2015 11:00 10/03/2015 13:00 ODB ER			NLDC
		IRNC IS REQUIRED	*****
117 765 KV BUS - I AT NEW RANCHI 10/03/2015 08:00 10/03/2015 18:00 ODB ER	R - I FC	OR EXTENSION OF 765 KV BUS - I	NLDC
	FC	OR AMP WORK( DURING THE SAID S/D PERIOD THERE WILL BE COMPLETE S/D	
118   132 KV MAIN BUS AT ARA   10/03/2015   10:00   10/03/2015   15:00   ODB   ER		OF 132 KV S/Y AT ARA. NO POWER FLOW TO BSPTCL THROUGH 132 KV BUS)	BIHAR
		ŕ	
119 400 KV BUS - II AT PATNA S/S 10/03/2015 10:00 10/03/2015 18:00 ODB ER	R - I FC	OR AMP WORK	
160MVA ICT-2 of Siliguri	M	Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	,
120 ODB ER-			WBSETCL
120 OUB ER			WDSETCL
10/03/2015 06:00 10/03/2015 20:00	Co	onstruction of GIS Buiding under ERSS-IV package awared to M/s L&T.	
132kV Siliguri-WBSETCL-1 LINE BAY		A 1/2 1/2 C 1 1/2 A10 400 1 1/2 C 1 1 1 0 10 C 1 1 1	
		Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	DAIDCETOL
121 ODB ER-			WBSETCL
10/03/2015 06:00 10/03/2015 20:00	Co	construction of GIS Buiding under ERSS-IV package awared to M/s L&T.	,
132kV Siliquri-WBSETCL-2 LINE BAY			
		Modification of existing AIS 132kV Swithching Scheme to GIS- Shutdown require	
122 ODB ER-	R-II fo	or dismantling of Transfer Bus, 132 kV Transfer Bay and 2 nos. Tower for	WBSETCL
10/03/2015 06:00 10/03/2015 20:00	Co	Construction of GIS Building under ERSS-IV package awared to M/s L&T.	
			DAIDCETOL
			WBSETCL
124         220 KV TRF BUS AT KANIHA         10/03/2015         09:00         11/03/2015         18:00         OCB         NTI	ITPC AN		OPTCL
		OMPLETE GASKET REPLACEMENT	OPTCL
126 765 KV BUS - II AT GAYA 10/03/2015 10:00 10/03/2015 18:00 ODB ER-	R-I FC	OR AMP WORK.	NLDC
127 132 KV D/C GAYA - SONNAGAR & RAFIGANG - SON NAGAR 10/03/2015 09:00 11/03/2015 18:00 ODB ER-	R-I FO	OR STRINGING OF 765 KV GAYA - VARANASI T/L	BIHAR
T/L OF BSPTCL			
128   220 KV Bus - II at Rourkela   11/03/2015   09:00   11/03/2015   18:00   ODB   ER-	R-II/ OR AN	MP Work	OPTCL
129 Indravati-Jeypore Line 11/03/2015 10:00 11/03/2015 17:00 ODB ER-	R-II/ OR Re	eplacement of R-phase CVT	NLDC
130 765 KV AUXILIARY REACTOR BUS GAYA 11/03/2015 10:00 11/03/2015 18:00 ODB ER	R - I FC	OR AMP WORK	NLDC
Z/F KV/D/D. II AND Z/F KV/I /D. II OFZ/F KV/DNC	FC	OR ERECTION OF AUXILIARY BUS. SIMULTANEOUS S/D OF 765 KV B/R - II & L/R	NU DO
131   135   137		OF DHARAMJAYGARH -2 AT NRNC IS REQUIRED	NLDC
CONSTRUCTION OF THE PROPERTY O			
132 132 KV MAIN BUS AT PSL 11/03/2015 09:00 11/03/2015 17:30 ODB ER		OR AMP WORK( DURING THE SAID S/D PERIOD THERE WILL BE COMPLETE S/D	BIHAR
102 NV MINING DOS OTT 3E 1770372013 07:00 11703/2013 17:30 UDB ER:	., , Ot	OF 132 KV S/S AT PSL. NO POWER FLOW TO BSPTCL THROUGH 132 KV BUS.)	DITTIN
	l l		

133	100 MVA ICT - I AT ARA	11/03/2015	09:00	11/03/2015	15:00	ODB	ER - I	FOR AMP WORK	BIHAR
	400 KV PATNA - BALIA - I AND II	11/03/2015	08:00	12/03/2015	18:00	OCB	ER - I	FOR POWER LINE CROSSING WORK OF 400 KV PATNA - KISHANGANJ D/C LINE	NLDC
		11/03/2015		11/03/2015		ODB		FOR AMP WORK	BIHAR
		11/03/2015	10:00 08:00	12/03/2015	18:00 18:00	ODB	ER - I	FOR STRINGING WORK OF OF 400 KV D/C KISHANGNAJ - PATNA LINE	BIHAR
		11/03/2015	09:30	11/03/2015	17:30	ODB	NTPC	PM works & Relay Testing.	NLDC
	220 KV MTN-DHANBAD-I	11/03/2015	09:00	11/03/2015	17:00	ODB	ER-II	CVT Replacement	DVC
	400 KV Subhasgram – Jeerat Line	11/03/2015	07:00	14/03/2015	18:00	OCB	ER-II	Bph CVT replacement and Breaker rertrofit at Jeerat End	WBSETCL
		11/03/2015	08:00	15/03/2015	17:00	ODB	ER-II	Erection of 220 KV D/C Rangpo-Melli Line	Sikkim
141	220 KV Dalkhola - Malda - I	11/03/2015	12:00	11/03/2015	13:00	ODB	ER-II	Oil sample collection of CT changed under ADDCAP as per DGA schedule.	J. C.
142	220 KV Dalkhola - Malda - II	11/03/2015	13:00	11/03/2015	14:00	ODB	FR-II	Oil sample collection of CT changed under ADDCAP as per DGA schedule.	
	220 KV Bus Coupler at Malda	11/03/2015	14:00	11/03/2015	15:00	ODB	ER-II	Oil sample collection of CT changed under ADDCAP as per DGA schedule.	
	400 KV Biharshariff - Purnea # 1	11/03/2015	14:30	11/03/2015	15:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
		11/03/2015	15:30	11/03/2015	16:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
146	220 KV Purnea- Madhepura # 1	11/03/2015	16:30	11/03/2015	17:30	ODB	ULDC	CT & PT CONNECTION TO RTU	BIHAR
147	220 KV Purnea- Madhepura # 2	11/03/2015	17:30	11/03/2015	18:30	ODB	ULDC	CT & PT CONNECTION TO RTU	BIHAR
148	400 KV Purnea- Biharshariff # 1	11/03/2015	13:30	11/03/2015	14:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
149	400 KV Purnea- Biharshariff # 2	11/03/2015	14:30	11/03/2015	15:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
150	400 KV Purnea # 1 (Line Reactor)	11/03/2015	15:30	11/03/2015	16:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
151	400 KV Purnea # 2 (Line Reactor)	11/03/2015	16:30	11/03/2015	17:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
		11/03/2015	17:30	11/03/2015	18:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
153	315 MVA ICT - I AT BSF	11/03/2015	10:00	11/03/2015	11:00	ODB	ER - I	FOR OIL SAMPLING OF 03 NOS. 420 KV TRANSFORMER CTs AFTER 01 MONTH OF CHARGING.	BIHAR
		11/03/2015	09:00	15/03/2015	17:00	ODB	ER-II	Replacement of insulator strings at crossings	DVC
		11/03/2015 11/03/2015	10:00 08:00	11/03/2015 12/03/2015	18:00 16:00	ODB ODB	ER-I ER-I	FOR AMP WORK.  STRINGING WORK OF 400 KV D/C BARH - GORAKHPUR T/L	NLDC BIHAR
	315 MVA ICT - I at Rourkela	12/03/2015		12/03/2015			ER-II/ OR	AMP Work	
			09:00		18:00	ODB	ER-II/ OR		OPTCL
		12/03/2015	08:00	13/03/2015	17:00	OCB		Fire fighting commissioning work.	NLDC
		12/03/2015	08:00	13/03/2015	18:00	ODB	ER - I	FOR ERECTION OF 145 KV AUXILIARY BUS & JUMPERING WORK	NLDC
		12/03/2015	09:00 10:00	12/03/2015	15:00 18:00	ODB ODB	ER - I ER - I	FOR AMP WORK	BIHAR BIHAR
	220 KV PATNA - SIPARA - I LINE OF BSPTCL	12/03/2015		12/03/2015				FOR AMP WORK	BIHAR
162	3252 BAY CB(MALDA-FARAKKA-II	12/03/2015	08:00	15/04/2015	18:00	OCB	ER-II	FOR CB CHANGE UNDER ERSS-XIII.	
163	400 KV KODERMA - BOKARO - I & II	12/03/2015	08:00	13/03/2015	18:00	ODB	ER - I	FOR ATTENDING DAMAGED INSULATORS & CONDUCTOR DAMAGED BY MISCREANTS.	DVC
	315 MVA ICT - II at Rourkela	13/03/2015	09:00	13/03/2015	18:00	ODB	ER-II/ OR	AMP Work	OPTCL
165	ICT-II(3X105 MVA) at Indravati OHPC S/Y	13/03/2015	10:00	13/03/2015	17:00	ODB	ER-II/ OR	AMP Work	
166	132 KV ARA - JAGDISHPUR LINE	13/03/2015	10:00	13/03/2015	14:00	ODB	ER - I	FOR AMP WORK	BIHAR
167	80 MVAR B/R AT LAKHISARAI	13/03/2015	08:00	13/03/2015	18:00	ODB	ER - I	TO CONDUCT ALL TESTS BEFORE WARRANTY AS PER INSTRUCTION OF MANUFACTURER	
168	220 KV MTN-DHANBAD-II	13/03/2015	09:00	13/03/2015	17:00	ODB	ER-II	WINTER MAINT.	DVC
169		13/03/2015	10:00	13/03/2015	18:00	ODB	ER-I	FOR BAY EXTENSION WORKS.	NLDC
170	220 KV GAYA (PG) - DEHRI (BSPTCL) - I & II	13/03/2015	09:00	14/03/2015	18:00	ODB	ER-I	FOR STRINGING OF 765 KV GAYA - VARANASI T/L	BIHAR
171	220 KV Rourkela - Tarkera # 1	14/03/2015	09:00	14/03/2015	18:00	ODB	ER-II/ OR	AMP Work	OPTCL
		14/03/2015	08:00	15/03/2015	18:00	ODB	ER - I	FOR ERECTION OF 145 KV AUXILIARY BUS & JUMPERING WORK	NLDC
		15/03/2015	08:00	16/03/2015	18:00	ODB	ER - I	FOR STRINGING WORK OF OF 800 KV HVDC ISLAMPUR - SAHARSHA SECTION OF	BIHAR
						ODB	ER - I	BISWANATH CHARIYALI - AGRA LINE	BIHAR
	` '	15/03/2015	08:00	16/03/2015	18:00			FOR STRINGING WORK OF OF 400 KV D/C KISHANGNAJ - PATNA LINE	
	220 KV NPRN-MADHEPURA D/C	15/03/2015	08:00	16/03/2015	18:00	ODB	ER-II	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
176	220 KV Bus-I at Birpara	15/03/2015	09:00	15/03/2015	11:30	ODB	ER-II	for opening iso lator drop-out for Iso retrofitting.	
		15/03/2015	11:45	15/03/2015	14:15	ODB	ER-II	for opening iso lator drop-out for Iso retrofitting.	
		16/03/2015	09:00	16/03/2015	18:00	ODB	ER-II/ OR	AMP Work	OPTCL
		16/03/2015	08:00	17/04/2015	17:00	OCB	ER-II/ OR	Fire fighting commissioning work.	NLDC
		16/03/2015	09:00	17/03/2015	19:00	ODB	ER-II/ OR	Extension of 400 KV Bus-I	
181	400 KV Main Bus-I at Keonjhar	16/03/2015	09:00	17/03/2015	19:00	ODB	ER-II/ OR	Extension of 400 KV Bus-I	
182	765 KV L/R OF 765 KV RNC- DMGRAH - I AT NEW RANCHI	16/03/2015	08:00	17/03/2015	18:00	ODB	ER - I	FOR ERECTION OF AUXILIARY BUS	NLDC
183	400KV MTN-RB-I	16/03/2015	09:00	17/03/2015	17:00	ODB	ER-II	Isolator Arm Replacement and AMP of Line Bay.	MPL
184	220 KV Bus-II at Birpara	16/03/2015	09:00	23/03/2015	17:00	ODB	ER-II	Bus reconductoring	
185		16/03/2015	09:00	18/03/2015	17:00	ODB	ER-II	Replacement of insulator strings at crossings	DVC
		16/03/2015	08:00	17/03/2015	16:00	ODB	ER-I	STRINGING WORK OF 400 KV D/C BARH - GORAKHPUR T/L	BIHAR
187	400 KV Rourkela - Talcher # 1	17/03/2015	09:00	17/03/2015	18:00	ODB	ER-II/ OR	Modification of Line Isolator (Hivelm Make) for converting gang operated mechanism to individual operated mechanism.	
188	400 KV Keonjhar-Baripada Line	17/03/2015	09:00	17/03/2015	19:00	ODB	ER-II/ OR	Extension of 400 KV Bus-I	
		17/03/2015	09:00	17/03/2015	17:00	ODB	ER-II/ OR	AMC works and rectification of construction defects in the line.	NI DC
	400 KV PATNA - BALIA - III AND IV	17/03/2015	08:00	18/03/2015	18:00	OCB	ER - I	FOR POWER LINE CROSSING WORK OF 400 KV PATNA - KISHANGANJ D/C LINE	NLDC
	400 KV LAKHISARAI - BSF -1	17/03/2015	10:00	17/03/2015	15:00	ODB	ER - I	TO CONDUCT ALL TESTS OF MAIN BAY EQUIPMENT BEFORE WARRANTY AS PER	NLDC
	4UU N V LANTIIJAKAI - DOF - I	17/03/2013	10.00	17/03/2013	10.00	ODB	LK - I	INSTRUCTION OF MANUFACTURER	NLDG

								Annual PM works of ICT-1, CTs, LAs, Isolators, CB of main & Tie bay & Relay	
192	400kv ICT-1 AT BARH	17/03/2015	09:30	17/03/2015	17:30	OCB	NTPC	Testing.	
193	220 KV BUS - I AT KANIHA	17/03/2015	09:00	17/03/2015	18:00	ODB	NTPC	AMP WORK	OPTCL
	765 KV S/C RNC - DHARAMJAYGARH LINE ALONGWITH ITS								
194	L/R AT NRNC	17/03/2015	09:00	17/03/2015	17:00	ODB	ER - I	FOR ERECTION OF 145 KV AUX. BUS AND JUMPERING WORKS	NLDC
								TO CONDUCT ALL TESTS OF MAIN BAY EQUIPMENT BEFORE WARRANTY AS PER	
195	400 KV LAKHISARAI - KAHALGOAN -2	18/03/2015	08:00	18/03/2015	18:00	ODB	ER - I/ NTPC	INSTRUCTION OF MANUFACTURER AND TO ATTEND LEAKAGE IN NON-	NLDC
								SWITCHABLE LINE REACTOR	
		18/03/2015	08:00	19/03/2015	18:00	ODB	ER - I	FOR MECHANICAL INTERLOCK MODIFICATION WORK IN ITS ISOLATORS.	
197	400kv Kh-Lakhisarai ckt-2	18/03/2015	09:30	18/03/2015	17:30	ODB	NTPC	PM works & Relay Testing.	NLDC
198	400KV MTN-RB-II	18/03/2015	09:00	19/03/2015	17:00	ODB	ER-II	Isolator Arm Replacement, Strung bus repair,oil sampling of Y-Ph line CT (Alstom make).	MPL
199	MALDA-FARAKKA-II	18/03/2015	08:00	20/03/2015	18:00	ODB	ER-II	FOR CB CHANGE UNDER ERSS-XIII.	NLDC
200	200 KV Hazipur - Muzzaffarpur # 1	18/03/2015	14:30	18/03/2015	15:30	ODB	ULDC	CT & PT CONNECTION TO RTU	BIHAR
201	200 KV Hazipur - Muzzaffarpur # 2	18/03/2015	15:30	18/03/2015	16:30	ODB	ULDC	CT & PT CONNECTION TO RTU	BIHAR
202	400 KV Rourkela - Talcher # 2	19/03/2015	09:00	19/03/2015	18:00	ODB	ER-II/ OR	Modification of Line Isolator (Hivelm Make) for converting gang operated	
202	400 KV Rourkeia - Taicher # 2	19/03/2015	09:00	19/03/2015	18:00	ODB	ER-II/ UK	mechanism to individual operated mechanism.	
203	400KV Bolangir - Jeypore line.	19/03/2015	09:00	19/03/2015	17:00	ODB	ER-II/ OR	AMC works and rectification of construction defects in the line.	NLDC
								FOR STRINGING WORK OF 800 KV HVDC ISLAMPUR - SAHARSHA SECTION OF	
204	132 KV S/C PURNEA - FARBISGANJ LINE OF BSPTCL	19/03/2015	08:00	20/03/2015	18:00	ODB	ER - I	BISWANATH CHARIYALI - AGRA LINE AND FOR STRINGING WORK OF OF 400 KV	BIHAR
								D/C KISHANGNAJ - PATNA LINE	
205	765 KV L/R - II OF 765 KV RNC- DMGRAH - II AT NEW	20/03/2015	08:00	22/03/2015	18:00	ODB	ER - I	FOR CINSTRUCTION WORK OF TIE BAY OF 765 KV RNC - DHARAMJAYGARH - II AT	NI DC
	RANCHI							NRNC.	NEDC
206	220 KV Bus-I at Birpara	20/03/2015	10:00	20/03/2015	12:30	ODB	ER-II	for re-connection of isolator drop-out for Isolator retrofitting.	
	220 KV Bus-II at Birpara	20/03/2015	14:15	20/03/2015	16:45	ODB	ER-II	for re-connection of isolator drop-out for Isolator retrofitting.	
	220 KV BUS - II AT KANIHA	20/03/2015	09:00	20/03/2015	18:00	ODB	NTPC	AMP WORK	OPTCL
	400 KV Bus Reactor # 2 AT ROURKELA	20/03/2015	15:30	20/03/2015	16:30	ODB	ULDC	CT & PT CONNECTION TO RTU	
		20/03/2015	09:00	21/03/2015	17:00	ODB	ER-II	Replacement of insulator strings at crossings	MPL
	1	21/03/2015	09:00	21/03/2015	17:00	ODB	ER-II	Line isolator arm replacement & remote operation checking	DVC
		21/03/2015	09:00	26/03/2015	17:00	OCB	ER-II	Isolator retrofitting	NLDC
	400 KV BSF - LAKHISARAI - 1	21/03/2015	09:00	21/03/2015	13:00	ODB	ER - I	FOR LINE BAY AMP	NLDC
	400KV MAITHON- RIGHT BANK LINE I & II	21/03/2015	09:00	26/03/2015	17:00	ODB	ER-II	Replacement of insulator strings at crossings	MPL
	400 KV BUS - II AT GAYA	22/03/2015	08:30	22/03/2015	18:00	ODB	ER-I	FOR BUS EXTENSION & BUS SIDE ISOLTOR RELACEMENT WORKS.	
216	ICT#1 at Subhasgram	23/03/2015	09:00	25/03/2015	17:00	OCB	ER-II	OLTC oil migration	WBSETCL
217	400 KV BUS - II AT NRNC	23/03/2015	09:00	23/03/2015	18:00	ODB	ER-I	BALANCE ERECTION WORKS FOR BUS BAR EXTENSION & JUMPERING WORKS.	
218	400 KV BUS - I AT GAYA	23/03/2015	10:00	24/03/2015	18:00	ODB	ER-I	FOR BAY EXTENSION WORK.	
219	132 kv Kh-Lalmatia	25/03/2015	09:30	25/03/2015	17:30	ODB	NTPC	PM works & Relay Testing	JHARKHAND
220	400 KV PSL - ALLD LINE	26/03/2015	09:00	26/03/2015	17:30	ODB	ER - I	REPLACEMENT OF BROKEN INSULATOR, BROKEN BY MISCREANTS.	NLDC
221	ICT#4 at Subhasgram	26/03/2015	09:00	28/03/2015	17:00	OCB	ER-II	OLTC oil migration	WBSETCL
222	400 KV PSL - SNT LINE	27/03/2015	09:00	27/03/2015	17:30	ODB	ER - I	REPLACEMENT OF BROKEN INSULATOR, BROKEN BY MISCREANTS.	NLDC
223	220 KV Bus-I at Birpara	27/03/2015	09:00	27/03/2015	11:30	ODB	ER-II	for opening iso lator drop-out for Iso retrofitting.	
		27/03/2015	11:45	27/03/2015	14:15	ODB	ER-II	for opening iso lator drop-out for Iso retrofitting.	
		30/03/2015	09:00	30/03/2015	18:00	ODB	ER - I	FOR MAINTENANCE WORK.	NLDC
		30/03/2015	10:00	30/03/2015	16:00	ODB	ENICL	BALANCE CONSTRUCTION WORK	
	400 KV BSF - BALIA - I	31/03/2015	09:00	31/03/2015	18:00	ODB	ER - I	FOR MAINTENANCE WORK.	NLDC
	400 KV BINAGURI - BONGAIGAON - IV	31/03/2015	10:00	31/03/2015	16:00	ODB	ENICL	BALANCE CONSTRUCTION WORK	
		01/04/2015	09:00	04/04/2015	18:00	OCB	ER-II	400 KV Air Blast Circuit Breaker replacement , LA replacement	NLDC
		01/04/2015	10:00	01/04/2015	12:30	ODB	ER-II	for re-connection of isolator drop-out for Isolator retrofitting.	
		01/04/2015	14:15	01/04/2015	16:45	ODB	ER-II	for re-connection of isolator drop-out for Isolator retrofitting.	
232	220KV BRP-SKT-I	02/04/2015	09:00	07/04/2015	17:00	OCB	ER-II	Isolator retrofitting	NLDC

### Anticipated Power Supply Position for the month of Mar-15

	SL.NO	P A R T I C U LA R S	PEAK DEMAND	ENERGY
	JL.NO		MW	MU
1	i)	BIHAR NET MAX DEMAND	2800	1406
	ii)	NET POWER AVAILABILITY- Own Source	168	60
		- Central Sector	1900	1047
	iii)	SURPLUS(+)/DEFICIT(-)	-732	-299
		HIADKIJAND		
2	i)	JHARKHAND NET MAX DEMAND	1100	700
	ii)	NET POWER AVAILABILITY- Own Source	560	253
	,	- Central Sector	591	370
	iii)	SURPLUS(+)/DEFICIT(-)	51	-77
3	:\	DVC	2700	1745
	i) ii)	NET MAX DEMAND (OWN) NET POWER AVAILABILITY- Own Source	4200	2921
	,	- Central Sector	404	281
		Long term Bi-lateral (Export)	2069	1539
	iii)	SURPLUS(+)/DEFICIT(-)	-165	-82
4	:\	ODISHA NET MAX DEMAND	2000	2414
	i) ii)	NET MAX DEMAND NET POWER AVAILABILITY- Own Source	3900 2900	2416 1608
	,	- Central Sector	1037	635
	iii)	SURPLUS(+)/DEFICIT(-)	37	-173
5		WEST BENGAL		
5.1	i)	WBSEDCL NET MAX DEMAND (OWN)	5400	3145
	ii)	CESC's DRAWAL	670	32
	iii)	TOTAL WBSEDCL'S DEMAND	6070	3177
	iv)	NET POWER AVAILABILITY- Own Source	3960	1871
		- Import from DPL	140	38
		- Central Sector	1758	1156
	v)	SURPLUS(+)/DEFICIT(-)	-211	-112
5.2		DPL		
	i)	NET MAX DEMAND	310	225
	ii)	NET POWER AVAILABILITY	450	263
	iii)	SURPLUS(+)/DEFICIT(-)	140	38
5.3		CESC		
3.3	i)	NET MAX DEMAND	1780	802
	ii)	NET POWER AVAILABILITY - OWN SOURCE	1070	740
		FROM WBSEDCL+HEL	710	62
	iii)	TOTAL AVAILABILITY	1780	802
	iv)	SURPLUS(+)/DEFICIT(-)	0	0
6		WEST BENGAL (WBSEDCL+DPL+CESC)		
		(excluding DVC's supply to WBSEDCL's command area)		
		, ,		
	i)	NET MAX DEMAND	7490	4172
	ii)	NET POWER AVAILABILITY- Own Source	5480 1759	2874
	iii)	- Central Sector SURPLUS(+)/DEFICIT(-)	1758 -252	1156 -142
	,	()	202	172
7		SIKKIM		
	i)	NET MAX DEMAND	90	57
	ii)	NET POWER AVAILABILITY- Own Source	16	4
	iii)	- Central Sector SURPLUS(+)/DEFICIT(-)	111 37	56 4
	,	20 200(1)/ 0211011( )	37	т
8		EASTERN REGION		
		At 1.03 AS DIVERSITY FACTOR		
	i)	NET MAX DEMAND	17553	10496
		Long term Bi-lateral	2069	1539
	ii)	NET TOTAL POWER AVAILABILITY OF ER	16559	9726
		(INCLUDING C/S ALLOCATION)		
	iii)	PEAK SURPLUS(+)/DEFICIT(-) OF ER	-995	-769
$ldsymbol{ldsymbol{ldsymbol{\sqcup}}}$		(ii)-(i)		l

#### Annexure-D4.1

#### Periodical furnishing of information related to generation cost, power / energy shortage etc.

In order to address the problem of energy shortage existing in different parts of the country, and ensure nationwide merit order dispatch, Ministry of Power has recently advised POSOCO to compile the variable cost of thermal power plants and state-wise details of power / energy shortage.

Concerned entities are therefore requested to furnish the following information <u>on a quarterly</u> <u>basis</u>:

<u>Information on variable cost of thermal power stations</u>

Utility	Thermal Power Station	Quarter	Variable Cost (Rs/kWh)
KBUNL	Kanti (Muzaffarpur) TPS	Q4 2014-15	
	•	_	
TVNL	Tenughat TPS	Q4 2014-15	
JUUNL	Patratu TPS	Q4 2014-15	
	Mejia TPS	Q4 2014-15	
	Bokaro 'B'TPS	Q4 2014-15	
	Chandrapura- Á TPS	Q4 2014-15	
DVC	Chandrapura-B TPS	Q4 2014-15	
DVC	Waria TPS	Q4 2014-15	
	DSTPS	Q4 2014-15	
	Mejia-B TPS	Q4 2014-15	
	Koderma TPS	Q4 2014-15	
OPGC	IB TPS	Q4 2014-15	
WBPDCL	Satandih TPS	Q4 2014-15	
	Bandel TPS	Q4 2014-15	
	Kolaghat TPS	Q4 2014-15	
	Bakreswar TPS	Q4 2014-15	
	Sagardighi TPS	Q4 2014-15	
DPL	DPPS	Q4 2014-15	
CESC	Budge-Budge TPS	Q4 2014-15	
	Haldia TPS	Q4 2014-15	
	Southern GS	Q4 2014-15	
	Titagarh GS	Q4 2014-15	
NTPC	FSTPS I & II		
	FSTPS-III		
	KhSTPS-I		
	KhSTPS-II		
	Barh STPS-II		
	TSTPS-I		

T	TSTPS-II	
T	ΓTPS	

Utility	Thermal Power	Quarter-4, 2014-15	Variable Cost
	Station		(Rs/kWh)
SSL	Sterlite TPS	Q4 2014-15	
MPL	Maithon RB TPS	Q4 2014-15	
JITPL	Derang TPS	Q4 2014-15	
GKEL	GMR TPS	Q4 2014-15	
APNRL	Adhunik TPS	Q4 2014-15	

Information related to power restriction / shortage

Utility	Month		Load Shed							
		Avg Peak (17-22	Avg Off- peak (22-17	Avg Daily Energy	Areas affected	Reason				
BSPHCL		Hrs)	Hrs)							
BOTTICE										
JUVNL										
DVC										
GRIDCO										
WBSEDCL+D PL+CESC										
Sikkim										

#### Annexure-D4.2

# Review of PDO conditions of HVDC Gajuwaka

### **Background**

- Power order modulated by NLDC as per security requirements of the National Grid
- Varies widely depending upon network scenario in SR, WR and ER
- Short circuit capacity of Gajuwaka (East) also varies depending on
  - Number of generators synchronised in South Odisha
  - Number of 400kV & 220kV interconnections available from Jeypore / Gajuwaka with the rest of ER grid

### **Background**

- Consequent to LILO of 400kV Meramundali-Jeypore S/C at Angul and Bolangir, outage of any section of this path leads to loss of one 400kV interconnection of Jeypore 400kV (reduction of fault level)
- ❖ Performance of line commutated HVDC converters is highly sensitive to the short-circuit level on the AC side
- ❖ Based on experience gathered during the last few disturbances in South Odisha, (26/8/14, 10/02/15, 23/02/15) it is felt that the run-back (PDO) conditions need review
- The changes proposed, need extensive deliberation / analysis before taking up with Southern Region for final implementation

EXISTING				<b>PROPOSED</b>	
PDO	Contingency	DC Powerli mit / Action	PDO	Contingency	DC Powerli mit / Action
PDO- 2	East Bus AC U/V Relay set at Vs – 87.5 V or 318 kV (on 400 kV side on any phase- phase)	500 MW	PDO- 2	East Bus AC U/V Relay set at Vs – 101.75 V or 370 kV on 400kV side (any phase- phase)	500 MW
	I		NEW PDO 1	East Bus AC U/V Relay set at Vs – 99 V or 360 kV on 400kV side (any phase- phase)	300 MW

PDO	EXISTING Contingency	Action	PDO	PROPOSED Contingency	/
PDO- 4	Tripping of  Jeypore –Indravati 400kV S/C or  Jeypore- meramundali 400kV S/C or  One ckt of Jeypore- Gazuwaka 400kV D/C  Both 400/220kV Jeypore ICTs or  Jeypore-Jeynagar 220kV D/C	500 MW	PDO-4	Iripping of  Jeypore –Indravati 400kV S/C or  Rengali – Indravati 400kV S/C or  Angul – Bolangir 400kV S/C or  Bolangir – Jeypore 400kV S/C or  One ckt of Jeypore-Gazuwaka 400kV D/C or  One or both of the Jeypore 400/220kV ICTs or  One or both ckts of Jeypore-Jeynagar 220kV	i i

EXISTING				PROPOSED			
PDO	Contingency	Action		PDO	Contingency	Action	
PDO-	East Bus frequency at	150		PDO-	East Bus frequency at 49.0	150	
5	49.0 Hz and below. Rate of fall of frequency df/dt – 0.3	MW		5	Hz and below. Rate of fall of frequency df/dt – 0.3 Hz./sec	MW	
	Hz./sec			PDO-	Overload Trip contact of	250	
PDO- 6	Overload Trip contact of Gajuwaka S/s ICT	250 MW		6	Gajuwaka S/s ICT on southern side	MW	
	on southern side			NEW PDO- 2	Tripping of  (Indravati-Jeypur S/C) && (Bolangir-Jeypur S/C) simultaneously or one after the other  Indravati-Jeypur S/C & Angul-Bolangir S/C simultaneously or one after the other	200 MW	

EXISTING			PROPOSED			
PDO	Contingency	Action	PDO	Contingency	Action	
NIL	NIL	NIL	NEW PDO- 2 (cont)	Tripping of  Bolangir-Jeypur S/C & Rengali-Indravati S/C simultaneously or one after the other  Angul-Bolangir S/C & Rengali-Indravati S/C simultaneously or one after the other	200 MW	
			NEW PDO- 3	Tripping of  • (Jeypore –Indravati 400kV S/C) && (one or both ckts of 220kV Jeynagar-Jeypore line)	300 MW	

EXISTING			PROPOSED		
PDO NIL	Contingency NIL	Action NIL	NEW	Contingency      Jeypore – Indravati  400kV \$ (0.8.8. app. or.)	Action
IVIL	IVIL	IVIL	PDO-	400kV S/C && one or both the 400/220kV ICTs at Jeypore	
			(cont)	<ul> <li>Rengali – Indravati 400kV S/C &amp;&amp; one or both the 400/220kV ICTs at Jeypore</li> <li>Rengali – Indravati 400kV S/C &amp;&amp; one or both ckts of 220kV Jeynagar-Jeypore line</li> </ul>	300 MW

EXISTING				PROPOSED	
PDO	Contingency	Action	PDO	Contingency	Action
NIL	NIL	NIL	NEW PDO- 3 (cont)	<ul> <li>Bolangir-Jeypore 400kV S/C &amp;&amp; one or both the ckts of 220kV Jeynagar-Jeypore line</li> <li>Bolangir – Jeypore 400kV S/C &amp;&amp; one or both the 400/220kV ICTs at Jeypore</li> <li>Angul-Bolangir 400kV S/C &amp;&amp; one or both the ckts of 220kV Jeynagar-Jeypore line</li> <li>Angul-Bolangir 400kV S/C &amp;&amp; one or both the 400/220kV ICTs at Jeypore</li> </ul>	300 MW

- DDG	EXISTING	10	PROPOSED					
PDO NIL	NIL NIL	Action NIL	NEW PDO-4	Contingency  (HVDC Gajuwaka power < 600MW) && (Jeypore Bus voltage > 435kV)	Action Trip one preselected ckt of 400kV Jeypore- Gazuwaka D/C with 5 sec delay			