

Eastern Regional Power Committee
Kolkata-33

Salient Decisions taken in 105th OCC meeting held on 22.01.15

1. Constituents should check the UFR enunciation & PT fuse and thereby certify on monthly basis that UFRs are in service.
2. Constituents should certify the healthiness of SPS in every OCC meeting, after carrying out simulated checking of SPS.
3. 132kV downstream lines are not ready at Rangpo S/s, so it is difficult to cater the other hydro stations in Sikkim, if Dikchu power is wheeled through Rangpo S/s. The issue was referred to 29th TCC Meeting for further direction.

Eastern Regional Power Committee

Minutes of 105th OCC Meeting held on 22nd Jan, 2015 at ERPC, Kolkata

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

Item no. A.1: Confirmation of minutes of 104th OCC meeting of ERPC held on 23.12.2014

The minutes were uploaded in ERPC website and circulated vide letter dated 08.01.15 to all the constituents. No comments were received till date.

Members may confirm the minutes.

Deliberation in the meeting

The minutes of 104th OCC Meeting is confirmed with the substitution of the following items on request from ERLDC

Item No. B.7.2 will now read as

Powergrid informed that they could not commission the main bay of 400kV GMR-Angul D/C at Angul and remaining part of the second bus at 400kV Angul S/s because of Hud-Hud cyclone and non-availability of shut down by other constituents.

OCC advised Powergrid to complete the commissioning of remaining part of the second bus as early as possible.

Item No. B.7.12 will now read with deletion of the statement"ERLDC informed that they will study and report in next OCC".

Item No. B.22 (a) will now read as

OCC felt that one reactor at Jamshedpur is necessary to tackle the high voltage problems and decided to place the proposal to standing committee.

Members confirmed the minutes of 104th OCC Meeting with above amendments.

PART B

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

Members may update the latest status on following as circulated in OCC:

1. DR and EL Status
2. Reactors installed and yet to installed
3. Ownership of PLCC System

The latest available status was updated in 104th OCC and subsequently circulated through minutes. It is also available at ERPC web site.

Members may point out status, if any, not properly recorded and finally update.

Deliberation in the meeting

Powergrid, OPTCL, NTPC and JUSNL updated the latest status. Updated status is available in ERPC website. OCC advised rest of the constituents to update the status.

The latest status will be placed in 29th TCC Meeting.

In 104th OCC, OCC advised that all constituents should certify the healthiness of UFRs in their respective control area on monthly basis in every OCC.

Members may update.

Deliberation in the meeting

Constituents informed that it is difficult to test all the UFRs to certify their healthiness in every month.

After detailed deliberation, OCC decided that constituents should check the UFR enunciation & PT fuse and thereby certify on monthly basis that UFRs are in service.

Constituents agreed.

OCC felt it is necessary to monitor the quantum of load connected to the UFR and advised constituents to submit, on quarterly basis, maximum and average load quantum of each feeder with UFRs connected.

During deliberation, ERLDC enquired about the progress of UFR inspection by ERPC team.

ERPC Secretariat informed that UFR audit team comprising members from WBSETCL, DVC, CESC, ERLDC & ERPC inspected the healthiness of UFRs installed at the feeders of 132/33kV Berhampur, Chatrapur, Phulbani, Bhanjanagar, Aska and Balugaon S/s of OPTCL during 13-01-2015 to 16-01-2015. The UFRs were tested by secondary injection test kit and the results are found satisfactory at the set frequencies. It was also suggested for provision of UFR trip of 33kV bus coupler when any such feeder is diverted condition for maintenance etc. Due to loads shifting in 33kV feeders, existing UFRs to be installed at Tangi and Tartarini feeds at the Balugaon & Chatrapur 132/33kV S/s which was compiled by OPTCL vide letter dated 20.01.2015.

Item no. B.2: Healthiness of SPS existing in Eastern Region

Presently there are five (5) nos. of system Special Protection Scheme (SPS) are in operating conditions in Eastern Region for safe and secure operation of grid. These are as mentioned below:

- a) Tripping of Talcher - Kolar HVDC Bipole (s) - SPS at Talcher stage-II, NTPC (SPS 450 & SPS 1000)
- b) Modification in Talcher-Kolar SPS in ER Region due to Synchronisation of SR grid with NEW grid (Additional 600MW Gen Reduction)
- c) SPS for Chuzachen HPS in Sikkim
- d) SPS for Power Export to Bangladesh
- e) SPS for Sesa Sterlite Limited (SSL)

During 101st OCC meeting the OCC felt that a regular maintenance practice should be followed to check the healthiness of SPS. In view of the above in every OCC the healthiness of these SPS needs to be ensured from concerned members.

In 104th OCC, OCC advised ERLDC to prepare a checklist and a schedule for testing the SPS. ERLDC agreed.

OCC advised all the constituents to certify the healthiness of SPS as per checklist in every OCC meeting.

It was also agreed that an ERPC team would check on-site healthiness of SPS twice in a year as per schedule prepared by ERLDC.

Tentative schedule for testing the SPS as follows:

SI	Name of the SPS	Test 1	Test 2
1	SPS at Talcher stage-II, NTPC (SPS 450 & SPS 1000)	July 2015	Nov 2015
2	Modification in Talcher-Kolar SPS in ER Region due to Synchronization of SR grid with NEW grid (Additional 600MW Gen Reduction)	July 2015	Nov 2015
3	SPS for Chuzachen HPS in Sikkim	April 2015	Dec 2015
4	SPS for Power Export to Bangladesh	July 2015	Nov 2015
5	SPS for Sterlite Limited (SSL)	July 2015	Nov 2015

ERLDC may place the checklist for testing the SPS and Members may finalize the schedule.

Deliberation in the meeting

OCC decided that constituents should certify the healthiness of SPS in every OCC meeting, after carrying out simulated checking of SPS on the following aspects:

- *Testing of all logical conditions that are expected to actuate/ trigger the SPS (through CT secondary injection / application of suitable digital input signal etc.)*
- *Testing the healthiness of all power supplies necessary for the SPS action*
- *Testing healthiness of all communication channels for signal transmission (both inputs to and outputs from the SPS)*

However, where the SPS action is expected to trip / reduce generation of a generator, the concerned input to the generator DCS would be kept disabled and only availability of SPS signal would be checked. As an evidence of successful testing, PLCC counter readings and snapshot of station SCADA may be provided.

Further, since commissioning of almost all the SPSs have been done under the supervision of POWERGRID, the latter may take the lead role in conducting the tests.

It was also agreed that an ERPC team would check on-site healthiness of SPS twice in a year as per schedule prepared by ERLDC.

Tentative schedule for testing the SPS is as follows:

SI	Name of the SPS	Test 1	Test 2
1	SPS at Talcher stage-II, NTPC (SPS 450 & SPS 1000)	July 2015	Nov 2015
2	Modification in Talcher-Kolar SPS in ER Region due to Synchronization of SR grid with NEW grid (Additional 600MW Gen Reduction)	July 2015	Nov 2015
3	SPS for Chuzachen HPS in Sikkim	April 2015	Dec 2015
4	SPS for Power Export to Bangladesh	May 2015	Jan 2016
5	SPS for Sterlite Limited (SSL)	June 2015	Feb 2016

Item no. B.3: T-connection in 132kV Lalmatia-Khahalgau line

During deliberation in 25th PCC meeting, it was informed that a T-connection was made in 132kV Lalmatia-Khahalgau line at Tower no. 9 from Lalmatia end and drawing the power from 3rd May, 2014.

PCC advised JSEB to check and explore removing the T-connection immediately in order to maintain protection coordination of the important line like 132kV Lalmatia-Khahalgau S/C.

In 26th PCC, members took serious note on T connection which was made without any prior permission from ERPC forum. A report from JUSNL was received wherein it was clarified that the jumper connection was done to meet the maximum loads in the Lalmatia areas in view of restrictions imposed by BSPTCL.

To assess the actual network modification by JUSNL PCC decided to convene a separate meeting on 12th January, 2015 for detail deliberation on this issue and advised NTPC, DVC, Bihar and JUSNL to attend the meeting.

Respective constituents agreed.

Accordingly, the meeting was held on 12th January, 2015 at ERPC, Kolkata wherein members agreed for the following:

1. Members unanimously recommended that the existing arrangement of supplying Sahebganj load through jumpering of Kahalgau(B)-Lalmatia line should be removed immediately.
2. On removing of T connection 132kV Kahalgau(B)-Lalmatia and 132kV Lalmatia-Sahebganj S/C will be restored as per existing network. Depending upon network constraint Jharkhand should manage their load.
3. Subsequently, JUSNL if needs may
 - i. Keep Lalmatia, Dumka, Sahebganj and Pakur loads on Farakka-Lalmatia 220kV line by keeping 2X100VA, 220/132kV Lalmatia ICTs, 132kV Lalmatia-Sahebganj S/C and 132kV Lalmatia-Dumka D/C on 132kV main bus at Lalmatia.
 - ii. 132kV KhSTPS-Lalmatia S/C would be kept connected at Lalmatia transfer bus, with the TBC in open condition.
4. 132kV Kahalgau(B)-Lalmatia S/C and 132kV Kahalgau(B)-Sultanganj D/C would be kept idle charged from Kahalgau(B) end.
5. In case of (i) above, in the event of loss of 220kV supply from Farakka side, JUSNL would avail restricted power of around 60MW, for the loads at Lalmatia, Dumka, Sahebganj and Pakur. JUSNL would have to further restrict its drawal during shutdown of existing 132kV Banka(PG)-Sabour S/C line (for construction of the 2nd ckt), as BSPTCL would need to draw power through the new 132kV Kahalgau(B)-Sultanganj D/C line, for meeting Sabour, Sultanganj and Jamalpur loads, during that period.
6. This would continue as an interim arrangement, till energization of 220/132kV Dumka(New) S/Stn of JUSNL and interconnection of the existing Dumka 132kV S/Stn with Dumka(New).
7. All efforts would be made from OCC forum to ensure normalization of 220kV Farakka-Lalmatia S/C line, in order that it may cater to 150-160 MW load of JUSNL, at the earliest.

Diagram-I (Present Condition)

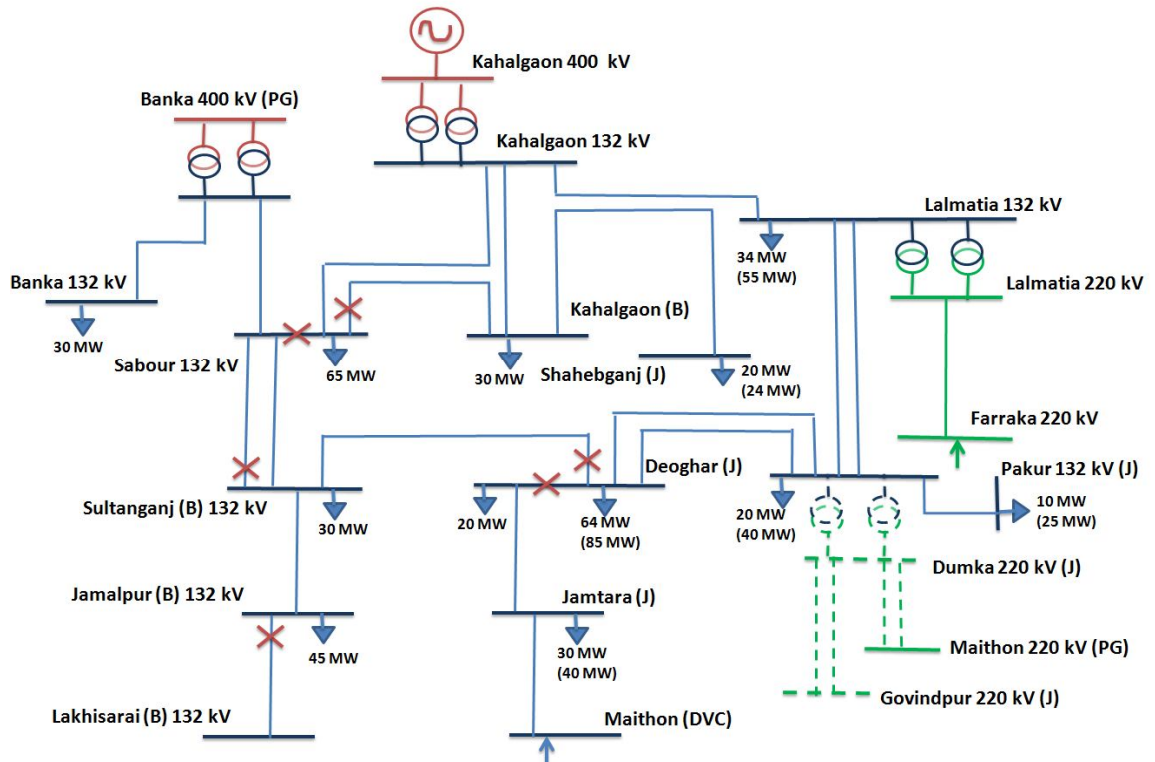
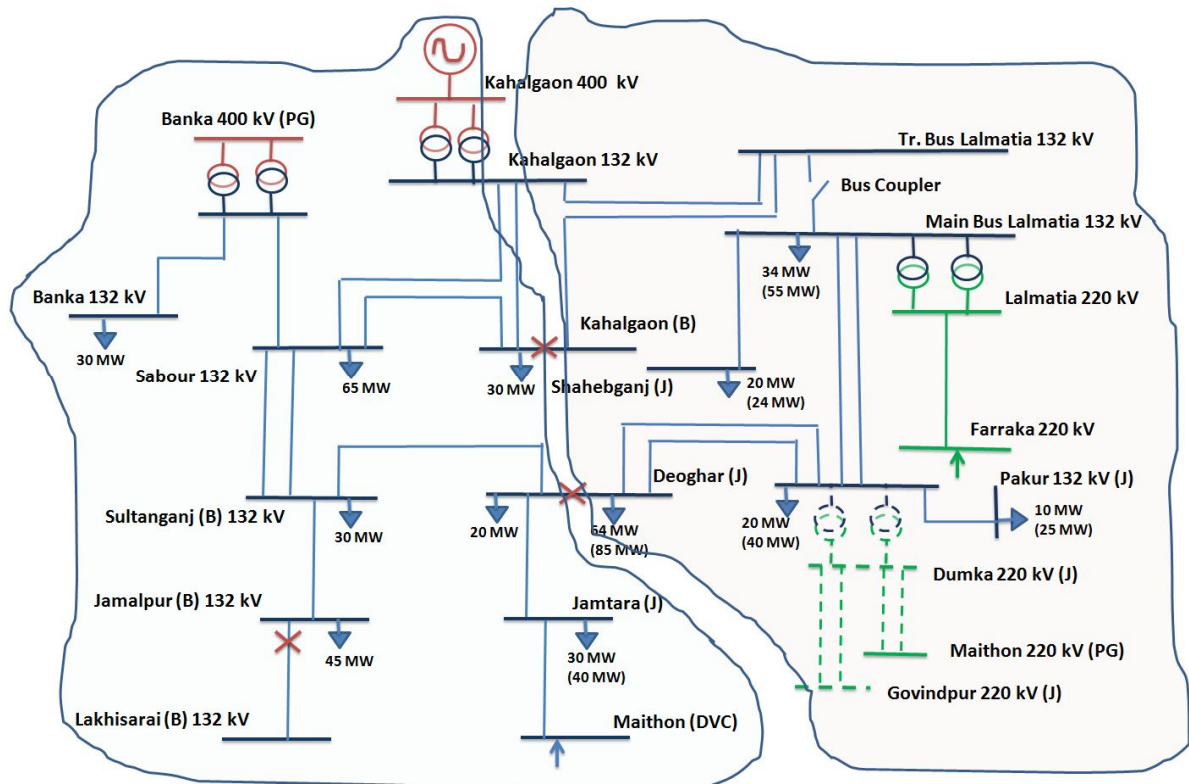


Diagram-II (Proposal-I)



Members may note.

Deliberation in the meeting

JUSNL informed that they will remove the T connection on 27th January, 2015 and agreed to send the report to ERPC Secretariat.

Item no. B.4: Handing over of O & M of 220 kV Farakka –Lalmatia transmission system -- NTPC

In 101st OCC, JUSNL informed that a meeting was held with ECL on 26th & 27th Aug, 2014 wherein ECL and JUSNL agreed in principle and it has been taken up for ECL board approval.

In 103rd OCC, NTPC informed that they are having meeting with ECL on 25th November, 2014, and agreed to communicate the outcome to ERPC Secretariat.

In 104th OCC, NTPC informed that ECL management intends to hand over the line to Powergrid for O&M however, the final outcome is still awaited.

NTPC/ JUSNL may update.

Deliberation in the meeting

NTPC informed that ECL management intends to hand over the line to Powergrid for O&M and it will sit with Powergrid to decide.

After detailed deliberation, OCC felt that since it is an important line for catering the Jharkhand load therefore the issue needs to be placed in 29th TCC Meeting with ECL as a special invitee.

OCC advised secretariat to do the needful.

Item no. B.5: Non availability of important bays at FSTPP end

Presently, the following bays are under outage at FSTPP end:

- a) Main bay of FSTPP-Sagardighi at FSTPP end
- 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).
- c) FSTPP-KhSTPP-IV Tie bay

Considering the recent disturbance at FSTPP it is essential that the bays are commissioned at the earliest.

In 104th OCC, NTPC informed that work is under progress and it will be completed at the earliest.

NTPC may update.

Deliberation in the meeting

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 1st week of February, 2015*
- c) *FSTPP-KhSTPP-IV Tie bay: Will be done in February, 2015.*

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

B.6.1. FSTPS Islanding Scheme, NTPC

98th 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 94th OCC.

In 99th OCC, Powergrid informed that the new estimate for procurement of above items is in approval stage by its appropriate authority but indicated that the amount would be around Rs. 53,41,889/-. It was informed that the final approved estimate will be submitted to JSEB by July, 2014.

In 100th 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. JSEB informed PGCIL to send the details to GM, Dumka for payment of the project estimate/cost incurred for PLCC checking as it comes under jurisdiction of Dumka.

In 28th TCC meeting, JSEB informed that they have received the estimate on 4th September, 2014 and they will release the payment by October, 2014.

Powergrid informed that implementation of the scheme will take five (5) months after receiving the amount. JSEB also assured to provide all the logistics as requested by Powergrid vide its letter to GM, Dumka. NTPC informed that, implementation of the NTPC part will be completed by December, 2014.

In 101st OCC, JUSNL informed that the estimate has been sent to Headquarter for payment.

In 103rd OCC, NTPC informed that, implementation of the NTPC part will be completed by January, 2015.

JUSNL informed that they would settle the payment in December, 2014.

In 104th OCC, JUSNL informed that they would settle the payment by January, 2015.

Powergrid/ JUSNL may update the status.

Deliberation in the meeting

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.

OCC advised JUSNL to settle the payment as early as possible. Representative from JUSNL informed that payment issue is under active consideration of their board.

Considering sensitivity of the project OCC also advised PGCIL to explore possibilities of completion of the installations from their own resources with subsequent reimbursement from JUSNL.

NTPC informed that, implementation of the NTPC part will be delayed to some months and expected to be commissioned by March-April, 2015.

B.6.2. Chandrapura TPS Islanding Scheme, DVC

In 28th TCC meeting, DVC informed that order is yet to be placed for procurement of elements etc. towards execution of the scheme; the vendor did not qualify on certain technicalities and so representative from DVC expressed that it would not be possible to implement the islanding scheme by 30th October, 2014.

TCC stressed that Chandrapura TPS islanding scheme is an important one which was envisaged after grid disturbance of 2012. Discussions were held in last few TCC and ERPC meetings but the scheme is not yet initialized from DVC end.

The 28th ERPC reviewed the progress of the scheme and took serious note on performance of DVC towards execution of the scheme.

However, on request of DVC, 28th ERPC has extended the completion schedule to December, 2014 from 31st October, 2014 as earlier decided by 27th ERPC with specific direction to place the work order latest by 31st October, 2014.

ERPC has also further advised DVC to place the progress report on implementation of the CTPS islanding scheme to ERPC Secretariat in each fortnight.

In 101st OCC, DVC informed that the matter has been taken up with Head Quarter and the work order will be placed shortly on single bid system.

In 102nd OCC, DVC informed that order has been placed to Alstom, India on 16th October, 2014 and the implementation will take six more months (expected by March 2015).

In 103rd OCC, DVC informed that M/s Alstom has submitted the drawings/documents for approval of DVC on 14-11-2014 for implementation of the scheme. The same were under scrutiny by concerned department of DVC and likely to be approved shortly.

In 104th OCC, DVC informed that a meeting was scheduled to be held on 29th December, 2014 to finalize drawings/documents.

DVC may update the status.

Deliberation in the meeting

DVC informed drawings have been approved and the scheme will be implemented by April, 2015.

B.6.3. BkTPS Islanding Scheme, WBDCL

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

In 104th OCC, WBDCL informed that the scheme will be implemented by February, 2015.

WBDCL may update the status.

Deliberation in the meeting

WBDCL informed that islanding scheme has been implemented and simulation test of the scheme with Unit #4 and #5 was successfully done on 15th January, 2015. The scheme will be put in service by end of January, 2015.

OCC appreciated WBDCL on successful implementation of BkTPS Islanding Scheme.

B.6.4. Tata Power Islanding Scheme, Haldia

In 28th TCC meeting, WBSETCL informed that implementation of the scheme may take 2 more months and it will be implemented by January, 2015.

In 101st OCC, WBSETCL informed that order has been placed for relay and other equipment. The fabrication work has been started and the scheme will be completed in schedule.

In 104th OCC, WBSETCL informed that the scheme will be completed by January, 2015.

WBSETCL may update the status.

Deliberation in the meeting

WBSETCL informed that installation part is completed and the scheme will be commissioned by 1st week of February, 2015.

Item no. B.7: PSS tuning at Teesta-V Power Station.

NHPC, Teesta vide letter dated 18.12.2014 informed that, PSS had been installed and has been in service since commissioning. Till date the response is satisfactory. Details are circulated in the meeting.

NHPC requested for feedback on requirement of PSS tuning at present grid requirement and further course of action.

NHPC may explain and members deliberate.

Deliberation in the meeting

OCC felt PSS tuning for Teesta, NHPC is not required at this juncture since no oscillation was reported since installation.

OCC, in line with IEGC, decided that PSS tuning programme for ER should get started for the generators where the PSS were not in service and/or needs tuning. To start with OCC advised CESC to do the PSS tuning for its Budge-Budge unit I and II.

Item no. B.8: Revision of schedule as per IEGC—NTPC

NTPC vide letter dated 13.01.2015 informed that,
The IEGC Clause 6.5.5.20 states “If at any point of time, the RLDC observes that there is need for revision of the schedules in the interest of better system operation, it may do so on its own, and in such cases, the revised schedules shall become effective from the 4th time block, counting the time block in which the revised schedule is issued by the RLDC to be the first one”.

It is observed that most of the time, this time frame is not maintained and at times the revision is made effective from the net time block itself (e.g. SG revision 23 & 24 of 11.01.15 & SG revision 15 of 12.01.15). As the revision in schedule is not uploaded in web on real time basis, so it depends on the time at which the system operator communicates to the generating station (SMS/phone etc). It has commercial implications and even at times results in violation of the grid code (difference between AG & SG exceeding the limits).

NTPC and ERLDC may deliberate.

Deliberation in the meeting

ERLDC assured that it will be looked into.

Item no. B.9: Submission of DPR for R&U of protection and control system for funding from PSDF

1. 28th ERPC advised CTU for place the requisite application before NLDC for availing funding from PSDF for Its STATCOM project.

In 104th OCC, Powergrid informed that DPR for STATCOM would be submitted to NLDC by January, 2015.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that DPR for STATCOM would be submitted to NLDC by February, 2015.

2. In 103rd OCC, NTPC informed that they have submitted the DPR for Kahalgaon bus-splitting scheme to NLDC on 08.10.2014.

Subsequently, NLDC vide letter dated 11.12.2014 communicated that the Appraisal Committee deliberated upon the eligibility of the scheme for funding from PSDF based on para 5 "Utilization of Funds" of the approved procedure & guidelines for funding and it was decided that the scheme did not qualify for funding from PSDF.

In 104th OCC, members felt that this type of scheme as it benefits different regions needs funding from PSDF like URTDSM scheme being implemented by PGCIL.

OCC advised secretariat to refer the issue to appraisal committee of PSDF for reviewing its decision with subsequent referral to TCC/ERPC.

Accordingly, ERPC Secretariat requested PSDF Secretariat vide letter dated 31.12.2014 and to CERC vide letter dated 06.01.2015 for reviewing the decision of funding the scheme from PSDF. Letter is enclosed in **Annexure-B.9**.

Members may update.

Deliberation in the meeting

ERPC Secretariat informed that till date no direction/order was received from CERC.

Item no. B.10: High voltage problem in WBSETCL system

WBSETCL informed that during this winter season they are facing high voltage problem at Subashgram, NJP and Birpara S/s during light load period and requested for changing the Tap Position of respective ICTs.

In 104th OCC, OCC decided to decrease the ICT tap position as follows:

Birpara	100MVA, 220/132kV ATR	10 to 9
Birpara	160MVA, 220/132kV ATR	12 to 11
NJP	315MVA, 400/220kV ATR 1&2	10 to 9

Thereafter, WBSETCL vide letter dated 13.01.2015 informed that their system is suffering with high voltage problem particularly during night lean hours and requested for changing the Tap-position of 315MVA, 400/220kV ICT at Subashgram and 220/132kV ICTs at Birpara. Details are placed in **Annexure-B.10**.

Powergrid and ERLDC may update.

Deliberation in the meeting

WBSETCL informed that in winter they had high voltage problem. But since winter season is almost at its end OCC advised WBSETCL to review and inform ERLDC as well as Powergrid. Requirement of ICT tap change will then be further assessed.

WBSETCL agreed.

For immediate voltage control, WBSETCL requested Powergrid to change the tap position using OLTC.

During deliberation, Powergrid informed that OLTC is available in ICTs but regular operation of OLTC as and when required may not be feasible.

Item no. B.11: Status of “Third Party Protection Audit”

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

Further, OCC decided that as per the recommendations of the enquiry committee the third party audit of the protection system needs to be carried out on periodically.

In 104th OCC, It was decided that the checklist of ERPC used in its 1st third party protection audit would be modified in line with recommendation by the Task Force committee under V. Ramakrishna and on acceptance of the same by 105th OCC the road map for 2nd Protection Audit of ER will be finalized.

Members may decide the road map for carrying out the 2nd third party audit.

Deliberation in the meeting

The house was informed that the checklist for carrying out 2nd Third Party Protection Audit is available in ERPC website. Constituents were advised to send their views for modifications required, if any, positively by mid-week of February, 15. It was decided that on the updated checklist the 2nd third party protection audit for eastern region will be tentatively started from April, 2015 as per road map to be finalized in 106th /107th OCC meeting.

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 101st OCC, Sterlite informed that the order would be placed by this month for line and bay equipments.

In 103rd OCC, Sterlite representative informed that order was placed for construction of bays and the forest clearance needed for construction of the line is still pending.

It was informed that in spite of ERPC decision Sterlite is failing to submit monthly progress report on construction of this line to secretariat.

OCC took serious note of it and advised Sterlite to send the latest status of this line regularly to secretariat on monthly basis under written communication. Sterlite agreed to send the monthly status without fail.

Accordingly status report for the month of January has been placed.

In 104th OCC, Sterlite representative informed that order was placed for construction of bays and it will take 15 months to complete the work. Regarding construction of the line, Sterlite informed that the forest clearance is still pending.

Sterlite may further update.

Deliberation in the meeting

*Sterlite representative was not available for discussion. However, they had communicated the latest status vide letter dated 15th January, 2015. Letter is enclosed at **Annexure-B.12.1**.*

OCC referred the issue to 29th TCC for further deliberation.

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

In 104th 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

Powergrid informed that, 400kV ICT-III & IV bays and 400kV Monnet bays (2 nos) will be completed on shutdown clearance.

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

400kV GMR-Angul D/C line has been commissioned. However it was informed in 104th 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.

OCC advised Powergrid to complete the commissioning of the second bus as early as possible.

Powergrid agreed to complete the work in first week of January, 2015.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that the missing part of Bus-II will be commissioned by January, 2015.

It was informed that Powergrid-HVDC has sent a letter to GMR regarding insufficient clearance of GMR line with Talcher-Meramundali line because of sag.

GMR informed that they would look into it and give feedback.

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

In 100th OCC, Chuzachen informed that the construction of these bays was undertaken by Govt. of Sikkim. Sikkim representative informed that the issue is under consideration of Sikkim Government.

In 102nd OCC, Sikkim representative informed that the proposal has been submitted to cabinet for approval.

In 104th OCC, it was informed that Sikkim Govt. has approved the proposal.

Thereafter, ERPC Secretariat vide letter dated 09.01.2015 had requested Principal Chief Engineer-cum-Secretary, Energy & Power Department of Sikkim to do the needful for early completion of the project and update the status in monthly OCC. Letter is enclosed in **Annexure-B.12.4.**

Sikkim may update.

Deliberation in the meeting

Sikkim representative was not available for discussion. It was informed that Sikkim Govt. is arranging the funding.

OCC referred the issue to 29th TCC Meeting for further discussion.

B.12.5. Status of 400kV Maithon-Gaya and Koderma-Gaya D/C lines.

In 104th OCC, Powergrid informed that 400kV Maithon-Gaya-I and Koderma-Gaya-I will be commissioned by December, 2014.

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that both the lines have been commissioned.

B.12.6. Status of 80MVAR Line reactor of 400kV Meramundali-Angul at Meramundali

In 104th OCC, OPTCL informed that Powergrid has to set the relay settings.

OCC advised OPTCL & Powergrid to co-ordinate and charge the reactor immediately after incorporating the relay settings.

OPTCL and Powergrid may update.

Deliberation in the meeting

OCC advised OPTCL & Powergrid to co-ordinate and charge the reactor immediately after incorporating the relay settings.

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 104th 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)- By January, 2015.
- (iii) Bolangir(PG) –Kesinga S/C line —Tender opened and completion schedule is Dec, 2015.

OPTCL may update the status.

Deliberation in the meeting

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.*

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

In 101st OCC, Powergrid informed the status as follows:

1. 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

2. 220/132/33 kV Chaibasa:

- 400/220kV Chaibasa S/s will be ready by October, 2014.
- Order has been received from JUSNL on 01.09.2014 for construction 220kV Chaibasa(PG)-Chaibasa(JUSNL).
- The construction work of 220/132kV Chaibasa S/s under consultancy project is being delayed due to non-receipt of payment from JUSNL.

In 103rd OCC, Regarding Daltanganj, Powergrid informed that the status is same.

Powergrid informed that 400/220kV ICT will be commissioned at Chaibasa by 26th November, 2014. Regarding downstream system Powergrid informed that they are yet to receive the fund from JSEB.

Thereafter, it was informed that trail run of 400/220kV ICT-II and its associated bays at Chaibasa is successfully completed on 1st December, 2014.

Powergrid and JSEB may update the status.

Deliberation in the meeting

Regarding Daltanganj, Powergrid informed that the status is same.

Regarding Chaibasa, Powergrid informed that 400/220kV ICT-II and its associated bays at Chaibasa were charged.

B.12.9. Status of works related to Implementation of SPS for 500MW round the clock power through HVDC Bheramara

In 104th OCC, Powergrid informed the status as follows:

- Line reactor of Behrampur-Jeerat will be converted into switchable bus reactor: order placed and expected by December, 2015.
- 400 kV Sagardighi-Behrampur D/C (HTLS twin): Expected to be synchronized on 23rd December, 2014.

Powergrid may update the status.

Deliberation in the meeting

Powergrid informed the status as follows:

- *Line reactor of Behrampur-Jeerat will be converted into switchable bus reactor: order placed and expected by December, 2015.*
- *400 kV Sagardighi-Behrampur D/C (HTLS twin): Powergrid informed that the line has been charged on 24th December, 2014.*

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

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

In 104th 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 by July, 2016.

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

In 101st 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 104th OCC, Powergrid informed that the status as follows,

- Muzaffarpur: The order was placed on 20th October, 2014 for augmentation of transformation capacity and it will take 18-24 months for completion.
- Sampatchak(Patna) & Sasaram: will be completed by January, 2016.
- Purnea: One 315 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. Status of construction of 132kV Banka-Deoghar line

In 104th OCC, It was informed that work of construction of this line is yet to be awarded to CTU.

Powergrid may update the status.

Deliberation in the meeting

It was informed that Gazette notification not yet come for construction of this line and actual status is to be confirmed from CEA.

B.12.13. Augmentation of 3rd ICT at 400kV Jeypore s/s.

The 2 nos. of 315 MVA ICT's at Jeypore s/s are getting loaded up to 200 MW each many times. In such a scenario, tripping of any one ICT will lead to tripping of second ICT also. The ICT-I has already completed 25 years and its performance also getting deteriorated. Hence, it is proposed to approve for 3 rd ICT, in view of contingency & reliability.

The issue has been discussed in last few OCC meetings.

In 104th OCC, OPTCL expressed that the overloading of ICTs occurs only during spilling of southern reservoirs which can be addressed:

- By keeping more numbers of Indravati units on 400kV system by bus splitting arrangement.
- Connectivity of JITPL with 400kV Angul-Bolangir-Jeypore ckt. & GMR with Angul sub-station.
- Discussion for export of power to AP in 220kV Balimela-U.Sileru ckt. through bilateral transaction is in progress.
- Augmentation of Jeypore S/S capacity shall not serve any purpose, unless and until 220 kV 2nd DC line is in place.

In view of the above, augmentation of Jeypore sub-station capacity is not required at this juncture.

Further, in conclusion OPTCL opined that:

- Major contribution for overloading 220kV Jayanagar- Jeypore line and ICTs is due to enhancement of power export to SR through Gazuwaka Back to back DC.
- Installation of FSC causes rise in voltage profile at Jeypore 400kV bus as well as increase in power export.
- The State has to boost up its hydro generation to avoid congestion in the State's system due to export of power to SR through open access by other utilities.
- Although, it is not the State's interest for capacity augmentation of Jeypore - Jayanagar ckt; still OPTCL has taken action for construction of 220 kV Jeypore-Jayanagar 2nd D/C line.

- Commissioning ICT at Jeypore shall be considered, provided a separate ATC considering South Odisha hydro stations (for export of power to SR) shall be made by NLDC exclusively for the State's export to SR.

ERLDC informed that they will study and report in next OCC.

ERLDC and OPTCL may update.

Deliberation in the meeting

OPTCL informed that augmentation of Jeypore sub-station capacity is not required at this juncture.

B.12.14. Synchronization of 132 kV Dalkhola(WB)-Kishanganj(BSPTCL) S/C

132 kV Dalkhola-Kishanganj is presently kept in an unutilized condition for a long period of time. Earlier it was kept open to avoid overloading of backward 132 kV system in West Bengal side, however with commissioning of 220/132 kV Substation at Dalkhola (WB) along with 220 kV Dalkhola(PG)-Dalkhola(WB) D/C this issue of loading of backward network is resolved. With closing of the 132kV Dalkhola(WB)-Kishanganj(BSPTCL) S/C line would relieve the loading of Purnea 220/132kV ATRs and enhance reliability of supply to N. Bihar and Nepal. Rejuvenation of this unused tie line will enhance reliability of supply to Purnea and adjoining areas. Therefore this tie needs to be restored at the earliest.

In 102nd OCC, WBSETCL informed that it is very old line and not in service since long. They will check the status of the line from Dalkhola end and intimate the status in next OCC.

BSPTCL informed that the line is already idle charged from their end.

OCC advised to make the line operational for benefit of both WB and Bihar as well as improve the reliability of power supply to N. Bihar.

In 103rd OCC, WBSETCL informed that line condition is OK and the bay is also ready for charging. The protection coordination is to be done with remote end.

OCC advised WBSETCL and Bihar to interact each other for proper protection settings and also advised to charge the line on trail basis in December, 2014.

WBSETCL and Bihar agreed.

In 104th OCC, WBSETCL informed that line protection relay is not functional at Dalkhola end and it will be replaced with new relay by January, 2015.

Further, it was informed that at Dalkhola presently 2x160 MVA transformer is there which were fully loaded during peak and there is no scope of putting additional transformer due to space constraints. So, WBSETCL cannot transfer power to Bihar on continuous basis.

OCC advised WBSETCL and Bihar to charge the line on trail basis first for better connectivity and for utilizing the line under emergency.

Thereafter, ERLDC informed that, at present 132kV Purnea(PG) –Kishengunj line has been taken under shutdown by BSPTCL and load shedding has to be done in Forbisgunj, kataiya and Kishengunj areas. On confirmation of healthiness at Dalkhola end, keeping Kishengunj load radially on Dalkhola end would ease congestion to some extent. Also, the quantum of Kishengunj load not being very high, it is expected that there would be no overloading of 220/132kV ICTs at dalkhola.

Also, BSPHCL may confirm regarding whether it would be possible to put Forbisingunj load radially on Kishengunj by Bus segregation at Forbisingunj. All of these would also help to cater Nepal load with minimal congestion.

WBSETCL may update the status.

Deliberation in the meeting

WBSETCL informed that new relay has been installed at Dalkhola but meter is defective. OCC advised Powergrid to check the meter.

WBSETCL informed that the line will be charged in radial mode after installation of meter.

On telemetry, WBSETCL informed there is no RTU available at Dalkhola and BSPTCL informed that Kishangunj RTU is in ULDC phase-II up gradation scheme. All are requested to bring some solution so that the line on trial basis at least could be charged.

B.12.15. 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 104th 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)

PGCIL may update.

Deliberation in the meeting

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.

B.12.16. Commissioning of Ind-Bharath to Jharsuguda D/C(dedicated line)

The interim LILO of 400kV Jharsuguda-Raigarh-I at Ind-Bharath has been commissioned on 12/11/14. As per decisions taken, it needs to be noted that the above LILO is an interim arrangement for the purpose of drawal of startup power only. As informed Ind-Bharath would be completing the Ind-Bharath-Jharsuguda D/C (dedicated line) by December,2014. Ind-Bharath may confirm the latest status in this regard.

In 103rd OCC, ERLDC informed that LILO of 400 kV Jharsuguda-Rourkela line at Ind-bharat was allowed for 1 month w.e.f. 12th November, 2014 for drawing start up power only.

OCC felt that Ind-Bharath should utilize this LILO only for drawing start up power and not for injection of power. They should bring their dedicated ATS in time for injecting the power into the grid.

Ind-Bharath may update.

Deliberation in the meeting

*Ind-Bharath submitted a letter, which is enclosed in **Annexure-B.12.16**. Ind-Bharat informed that its dedicated line will be commissioned in March, 2015 and therefore start up power will be required from grid through LILO arrangement up to March, 2015. The level of requirement of startup power is also communicated.*

ERLDC informed that Ind-Bharath should keep requisite LC active for continuation/enhancement of startup power.

Item no. B.13: Interim arrangement for Dikchu HEP

Powergrid vide letter dated 07-01-2015 informed that, Hon'ble CERC vide its order dated 03-12-2014 has accorded permission for LILO of one circuit of 400kV Teesta III-Kishanganj D/C line at Dikchu HEP in Sikkim as interim arrangement for connectivity of the generation project with the regional grid. As ordered by CERC the interim arrangement which would be withdrawn when original scheme is commissioned.

In line with above order, Powergrid is going to give the grant of connectivity/LTA.

Members may note & opine if any.

Deliberation in the meeting

ERLDC viewed that that the 400 kV Teesta-V-Binaguri ckt has already been Looped in Looped out (LILO) at 400/220/132 kV Rangpo substation. The 99 MW Chuzachen Hydro Power Station is also evacuating power at 132 kV Rangpo level. This itself is leading to occasional congestion in the 132kV network of Sikkim, particularly during high hydro period. Further, the 1200 MW Teesta III hydro power station of Teesta Urja Ltd. is also expected to be commissioned in 2015, with 400kV Teesta-III – Kisanganj D/C line LILO at Rangpo, as its evacuation path. While no constraint is envisaged for construction of the 400kV Teesta-III-Rangpo 400kV D/C section, any delay in commissioning of the 400 kV Rangpo-Kishanganj portion of the line (under construction by Teesta valley Power Transmission Limited) beyond synchronisation of Teesta-III, would pose serious difficulty in evacuation of power from even Teesta-III/Chuzachen HEPs during the high hydro season. The contingency/interim arrangement at Dikchu in the form of 400 kV LILO line and 400/132 kV transformers, would be of little help in such a situation.

OCC felt since 132kV downstream lines are not ready at Rangpo S/s, it is difficult to cater the other hydro stations in Sikkim, if Dikchu power is wheeled through Rangpo S/s.

OCC decided to communicate the views to CTU.

OCC referred the issue to 29th TCC Meeting for further direction.

Item no. B.14: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

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

NTPC communicated their activity of the preparation of Crisis Management Plan for countering the cyber attacks vide letter dated 2nd August, 2013. In 88th 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.15: 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.16: Certification through BIS as per IS 18001:2007 to all generating/transmission units. (Item No. B9 of 84th OCC meeting)

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

In 85th 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 88th 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 104th OCC, WBPDCI informed that Bandel TPS is certified with IS 18001.

Members may note and update the status.

Deliberation in the meeting

Members noted.

Item no. B.17: Restricted Governor Mode of Operation

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

Members may update.

Deliberation in the meeting

Members noted.

Item no. B.18: Pollution mapping for Eastern Region -- Powergrid

In 103rd OCC, Powergrid updated the status as follows:

Utility	Scope	Dummy Insulators Installed	Balance grids (Pending Location)	Co- coordinators
BSPTCL	59	52	7	Shri Brij Mohan AEE, BSPTCL
JUSNL	67	27	40	Shri Ajay Prasad, ESE, CRITIL, JUSNL
WBSECTL	74	62	12	Shri Ram Prasad Mandal, SE(E), WBSETCL
WBSEDCL				
OPTCL	164	102	62	Shri Jayant Senapati, DGM (Elect.) OPTCL
Sikkim	12	9	3	Jeewan Thapa, EE (EHV)
POWERGRID ER 1	96	96	0	
POWERGRID ER 2	43	43	0	
POWERGRID Odhisa	43	43	0	

Further, Powergrid informed that the Instrument Kits for measurement related to Pollution Mapping were expected to be delivered to the constituents by 30th November, 2014.

OCC advised all constituents to complete the installation of dummy insulators for the Pollution Mapping as early as possible.

In 104th OCC, Powergrid requested JSEB to intimate about the locations where they cannot put the dummy insulators due to non-availability of towers on those locations. JSEB agreed.

Powergrid also informed that the Instrument Kits for measurement related to Pollution Mapping were expected to be delivered to the constituents by December, 2014 and the work on actual measurements may be started from January, 2015.

Powergrid may update the status.

Deliberation in the meeting

Powergrid informed that the Instrument Kits for measurement related to Pollution Mapping were already dispatched to the constituents.

Item no. B.19: Procurement of Emergency Restoration System (ERS Towers) for Eastern Region constituents- Powergrid

In 102nd OCC, Powergrid informed that FR is under approval stage.

A meeting was taken by Member (Power System), CEA on 10.11.2014 at N. Delhi for formulation of plan for procurement and placement of ERS in the country wherein the latest status as well as the future plan was discussed.

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that cost will be around 40cr for 4 ERS, procurement is under process. Methodology for cost sharing will be discussed subsequently.

OCC however felt that the ERS towers should be kept for use of ER constituents only.

Item no. B.20: Mock Black start exercises in Eastern Region – ERLDC

i) The status of black start exercises

Program for conducting black start exercise in 2014-15

Sl no	Name of Hydro Station	Schedule	Actual	Schedule	Tentative Date
		Test-I		Test-II	
1	U.Kolab	Last week of May, 2014	3 rd June 2014	Last Week of January 2015	2 nd or 3 rd week of March, 2015
2	Maithon	1 st week of June 2014	17 th June 2014	1 st Week of October 2014	
3	Rengali	2 nd week of June 2014	19 th September 2014	Last week of November 2014	
4	U. Indarvati	3 rd week of June 2014	16 th December 2014	2 nd week of February 2015	First week of February, 2015
5	Subarnarekha	2 nd week of October 2014		1 st week of January 2015	Water is not available
6	Balimela	1 st week of November 2014	19 th November 2014	1 st week of March 2015	
7	Teesta-V	2 nd week of	16 th	Last week of	Last week of

		November 2014	December 2014	February 2015	March, 2015
8	Chuzachen	--		January 2015	April, 2015
9	Sikidri			4 th week of December, 2014	

Members may update.

Deliberation in the meeting

Members updated tentative date of testing as mentioned above.

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 erldc.cal@gmail.com and erldcoutage@gmail.com.

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

All constituents agreed.

In 104th 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.

ERLDC may update.

Deliberation in the meeting

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.

Item no. B.21: Restoration of SCADA data

Updated latest status is circulated in the meeting. During deliberations in 99th 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 31st July, 2014.

Updated status as updated in 104th OCC meeting is circulated in the meeting.

CTU may update.

Deliberation in the meeting

OCC decided to discuss the issue in SCADA meeting to be held on 28th January, 2015.

Replacement of RTUs at Kahalgaon, NTPC

NTPC in 98th OCC informed that on account of the fire incidence in RTU & SIC panels of the ULDC system at NTPC-Kahalgaon Switchyard control room, the real time data transmission to ERLDC for generation & power flow of various lines have stopped since 18th June, 2014. These RTU & SIC panels are the assets of PGCIL and needs to be made available by PGCIL at the earliest.

In 102nd OCC, Powergrid informed that LOA has been placed to M/s. Deejay. RTU integrated & Unit side data (MW/MVAR) made available at ERLDC as per commitment. Other feeders integration will be done by in phase manner within December 2014.

In 103rd OCC, Powergrid informed that the work will be completed in schedule.

In 104th OCC, Powergrid informed that material has been reached and the work would be completed by 10th Jan, 2015.

Powergrid/NTPC may update.

Deliberation in the meeting

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.

Item no. B.22: Agenda from ULDC -- BSPTCL

1) Delay in Up-gradation Scheme of ULDC of BSPTCL:

As per decision of the ERPC, BSPTCL has entrusted Powergrid vide BSPHCL office letter no.2386 dated 05.12.12, to execute the up-gradation / replacement of data/ voice telemetry of all operating as well as under construction GSS under BSPTCL region. This includes the replacement of RTUs installed under ULDC-ER phase-I project.

44 RTUs were delivered without cable. Now cable for only 20 nos RTUs has been delivered. Installation of these RTUs has been taken up by the contractor from 29th August. But the work is slow. Whatever instillation being taken up is not being commissioned. Power grid has been requested to increase the installation and commissioning team.

Also, hardware for Control Room has been delivered without cable, BSPTCL is pursuing for installation of equipments with Power grid and Chemtrols but outcome is pathetic.

The matter has been reviewed with Powergrid on 05.04.2014, 30.06.2014 and 19.08.2014, BSPTCL has expressed concern over the delay and directed Powergrid to expedite the work on priority to complete by October, 2014.

Communication package consisting of supply installation and commissioning of Fiber Optic Communication, PLCC communication. Auxiliary Power Supply System are not awarded to suitable vendor by Power grid yet. BSPTCL has repeatedly requested Power grid to expedite the work to meet the requirement of RTUs commissioning date to enable RTUs to communicate to SLDC, Patna. But Power grid is unable to confirm the target date and giving the reason of the constraint of installation team of OPGW.

BSPTCL apprehended that after installation of RTUs data cannot be communicated to SLDC, Patna and subsequently to ERLDC, due to non-availability of communication channel. So, BSPTCL has taken forward step to make the RTUs communicated over GPRS. BSPTCL is procuring GPRS devices as an interim arrangement in this regard. However, PGCIL may be requested to furnish target date for supply, installation & commissioning of RTUs along with communication and commissioning of new SLDC Centre.

2) Supply of MUX at Samastipur, BTPS and Jakkanpur site:

It has been requested to Power grid to supply the communication equipment for fiber communication on priority as integration of 5 nos. of GSS under up-gradation scheme of ULDC shall depend on these equipments. It has come to know that 1st lot of equipments is being dispatched but BSPTCL does not find a place in it.

3) Underground laying of Fibre from jakkanpur to SLDC, Patna:

ERPC has declared to FO communication of BSPTCL in commercial operation except Jakkanpur- SLDC UGFO link. The work of critical UGFO link from Jakkanpur to SLDC, Patna is yet to be completed by Power grid. BSPTCL has repeatedly requested Power grid to expedite the work.

4) Final bills of the advance payment already released for AMC charges of Wideband Communication System, Auxiliary Power Supply System and supply of battery bank.

As agreed by PGCIL in the SCADA meeting held on 28.05.2014, the final bill has to be furnished by 15th June, 2014 but final bill of RTU has only been received till now. The final bill of AMC of Wide band communication, Auxiliary Power Supply System and the supply of battery bank is still awaited.

Further payment of APS is also held up for want of final bill of 1st to 5th half yearly advance payment released to Power grid.

In 102nd OCC, BSPTCL informed the following:

- Powergrid is working on to commission the control centre only with the available RTU. Data exchange Between ERLDC and SLDC shall depend on the commissioning of server at ERLDC
- Installation of 20 RTUs are under progress.
- Communication package is still pending with Powergrid.
- Mux has been delivered at Patna and being diverted to site.
- Laying of underground cable and commissioning from Jakkanpur to SLDC Patna under MW replacement scheme is still pending.

ERLDC informed that for server, FAT process is going on and after that the new sever will be installed at ERLDC, Kolkata.

In 103rd OCC, Powergrid agreed to communicate the latest status within a week.

Powergrid submitted the official communication to ERPC Secretariat on latest status of the issue circulated in the meeting.

OCC also advised to discuss the issue bilaterally or in SCADA meeting.

Powergrid and BSPTCL may update the status.

Deliberation in the meeting

OCC decided to discuss the issue in SCADA meeting to be held on 28th January, 2015.

Item no. B.23: High voltage problem at 400kV Jeypore OPTCL Substation—OPTCL

In 101st OCC, OPTCL submitted the voltage data from 01.09.2014 to 21.09.2014 and informed that the maximum voltage recorded as 246kV & minimum is 238kV.

OPTCL proposed lowering of ICT tap position by two taps from existing ICT tap position at 400kV Jeypore S/s which is set at 14.

In 102nd OCC, ERLDC informed that further lowering of ICT tap position would cause some voltage excursion on 400 kV side and informed that it will be reviewed after HVDC Gajuwaka-Jeypore line is available.

In 103rd OCC, OPTCL informed that it is still facing high voltage problem at 400kV Jeypore S/s and requested to resolve the issue.

ERLDC informed that high voltage will be regulated as and when 125 MVAR reactor at Jeypore S/s is commissioned.

OCC felt Powergrid may shift the reactor from some other place for immediate relief.

Since Powergrid ER-II representative was not available for discussion, the issue was referred to next OCC.

Powergrid/OPTCL may update.

Deliberation in the meeting

Powergrid-Odisha projects informed that, earlier it was envisaged to replace the 63 MVAR bus reactor with a 125 MVAR reactor at 400kV Jeypore S/s. Now it has been revised to keep both (63 MVAR & 125 MVAR) bus reactors. Total scheme including space, foundation and switching equipment is getting revised. The expected date of commissioning of new 125 MVAR reactor is May, 2015.

OCC opined that high voltage will be regulated as and when 125 MVAR reactor at Jeypore S/s is commissioned.

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

Data from the following are still pending:

- ER, Powergrid, Bhubhaneshwar, Odisha(newly commissioned lines)
- ER-I(newly commissioned lines) including 765kV lines
- WBSETCL(old & newly commissioned lines)
- GMR/JITPL

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

Members may update.

Deliberation in the meeting

List of lines whose data is not available with ERLDC is presented in the meeting.

OCC advised concerned utilities to update.

Item no. B.25: Unsuccessful backing down at Sterlite and GMR on tripping of HVDC Talcher-Kolar Pole-II on 16/12/14

In the previous meeting it was intimated by Powergrid/NTPC that the signal was generated at HVDC, Talcher end and was received by TSTPP, NTPC and also at Rourkella and Anugul S/S. However, the backing down action due to operation of SPS did not take place. The following need to be confirmed in this regard:

- a) In the last OCC meeting it was confirmed that both the PLCC panels at Anugul and GMR were commissioned and the AND logic was changed to OR logic. Powergrid/GMR may confirm that the SPS for GMR is commissioned and is functioning.
- b) Sterlite had informed non receipt of signal from Rourkella and no increment in PLCC counter was observed and hence Sterlite/Powergrid were requested to jointly re-check and identify the reasons for such non-operation and also carry out rectification of the same. Sterlite/Powergrid may confirm the latest status.
- c) Powergrid/JITPL may confirm commissioning of SPS scheme for JITPL end also and its functional healthiness.

Members may update the status.

Deliberation in the meeting

GMR informed that OR has been implemented at their end.

GMR informed that their units got tripped on receiving trip command from SPS scheme when one pole of HVDC has taken shutdown.

ERLDC informed that SPS should be disabled during shutdown of HVDC system. ERLDC assured that they will pass the information to GMR during HVDC shutdown.

GMR pointed out that unless downstream from Angul S/S is ready, LTOA/MTOA mode of operation from their end may not be possible. On enquiry, Powergrid informed that 400kV Angul-Jharsuguda will be completed by March, 2015 and the downstream lines at 400kV Angul S/s are not ready.

OCC referred the issue to 29th TCC Meeting.

Item no. B.26: Reactive Power performance of Generators and GT tap position optimization

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

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

Power Plant	Max and Min Voltage observed for DEC 14 (KV)	Date for monitoring (DEC 2014)
Farakka STPS	426, 412	11,15,24

Khalgaon STPS	Data not Available	NA
Talcher STPS	417, 410	11,21,29
Teesta	420, 394	23,26
Bakreshwar TPS	416, 396	15,18
Kolaghat TPS	426, 403	15,28,29
Sagardighi TPS	425, 410	4,13
MPL	424, 416	11,15
Mejia-B	428, 417	11,15
DSTPS	433, 423	5,11,17
Adhunik TPS	431, 420	5,11
Sterlite	434, 421	2,7,16

ERLDC may update.

Deliberation in the meeting

ERLDC presented the performance of the generators and informed that

- *MVAR absorption of Kolaghat unit#2 was not adequate needs improvement.*
- *MVAR absorption of Adhunik TPS and Sterlite unit#3 were not satisfactory*

Members noted.

a) Schedule for reactive capability tests

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

- Adhunik TPS
- DSTPS
- 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 97th 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 27th June, 2014. During the meeting following tap position was agreed:

Sl. 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 3rd 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 101st 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 102nd 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 103rd 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.

In 104th 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.

ERLDC and MPL may update the status.

Deliberation in the meeting

Members noted.

PART C:: OPERATIONAL PLANNING

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

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

NHPC vide letter dated 08.01.2015 requested for shutdown of following lines for carrying out annual maintenance of the lines and testing of relays,

Teesta-Rangpo Line-II	7 th Feb, 2015 to 12 th Feb, 2015
Teesta-Rangpo Line-I	17 th Feb, 2015 to 22 th Feb, 2015

Members may confirm.

Deliberation in the meeting

*Approved maintenance programme of generating stations and transmission elements for the month of February, 2015 is at **Annexure-C.1**.*

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

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of Feb'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 February, 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	
MEJIA	3	210	09.01.15	TUBE LEAKAGE	
MEJIA	4	210	09.11.14	GENERATOR PROTECTION	
STERLITE	3	600	06.01.15	DESYNCHRONIZED DUE TO LESS SCHEDULE	
BOKARO B	1	210	02.12.14	LESS DEMAND	
BOKARO B	3	210	18.11.14	LESS DEMAND	
KODERMA	1	500	12.11.14	LESS DEMAND	
DSTPS	2	500	01.12.14	LESS DEMAND	
WARIA	4	210	24.11.14	LESS DEMAND	
BANDEL	5	210	16.11.13	MAINTENANCE	
DPL	7	300	03.12.14	MAINTENACE	23.01.2015
IB THERMAL	2	210	24.11.14	A M P	21.01.2015
JITPL	1	600	16.08.14	LEAKAGE IN STATOR	
APNRL	1	270	25.11.14	TURBINE PROBLEM	
KOLAGHAT	5	210	27.12.14	Capital Overhauling	8 th February, 2015

SEL	1	600	22.11.14	DESYNCHRONIZED DUE TO LESS SCHEDULE	
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(ii) Transmission elements

Name of the Line/Element	Outage Date	Reason	Date of restoration
400 KV TALA-BINAGURI-II	08/01/15	SHUTDOWN AVAILED BY TALA	31 st January, 2015

Members may update.

Deliberation in the meeting

Members updated the latest status.

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

- 01 no. 220 KV Line 1 bay at Chaibasa S/S was first time charged at 16:17 Hrs on 01.12.2014.
- 01 no. 220 KV Line 2 bay at Chaibasa S/S was first time charged at 16:02 Hrs on 01.12.2014.
- 220kV Subhashgram (PG)-Newtown (WBSEB) was charged for the first time at 19:23hrs of 02/12/14. Subsequently 220kV Subhashgram (PG)-Bantala (WBSEB) was charged at 19:57hrs of 02/12/14.
- 400kV main bays 410 and 407 of 400kV Baharampur-Sagardighi-I & II at Baharampur were successfully charged for the first time at 16:46hrs and 16:48hrs of 12/12/14 respectively.
- 200 MVA, 400/132kV ICT-II along with 400kV bays at BRBCL, Nabinagar was charged for the first time at 17:09hrs of 19/12/14.
- 240 MVA L/R of 765kV New Ranchi-Dharamjaygarh-II was charged for the first time as B/R at New Ranchi at 21:31hrs of 19/12/14.
- Main bay of 400kV Sagardighi-Baharampur-II at Sagardighi was charged for the first time at 11:41hrs of 21/12/14.
- 400kv GMR-Angul-I and II were charged for the first time at 17:59hrs and 18:12hrs of 21/12/14.
- Main and Tie bay of 400kV Sagardighi-Baharampur-I at Sagardighi were charged for the first time at 15:37hrs of 23/12/14.
- 400kV Sagardighi-Baharampur-II was charged for the first time at 21:26hrs of 23/12/14.
- 100 MVA, 220/132kV ICT (in parallel with old 160 MVA, 220/132kV ICT-III) at Purnea was charged for the first time at 13:46hrs of 24/12/14.
- 400kV Sagardighi-Baharampur-I was charged for the first time at 17:42hrs of 24/12/14.
- 400kV Biharshariff-Sasaram-IV was charged for the first time at 17:00hrs of 25/12/14.
- 400kV Kolaghat-Kharagpur-I was charged for the first time at 19:55hrs of 25/12/14.
- 400kV Koderma-Bokaro A-I was charged for the first time at 17:26hrs of 26/12/14. Subsequently 400kV Koderma-Bokaro A-II was charged at 17:46hrs of 26/12/14.
- 400kV Subhashgram-Haldia-II was charged for the first time at 18:30hrs of 26/12/14.
- 400kV Gaya-Maithon-I was charged for the first time at 01:38hrs of 28/12/14. Subsequently 400kV Gaya-Koderma-I was charged at 02:18hrs of 28/12/14.
- 132kV Kahalgaon-Sultangunj was charged first time on 9th January, 2015.

Members may update.

Deliberation in the meeting

Members updated the latest status.

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	Koderma Unit#2	2x500MW	
2	Corporate Power Unit#1	2x270MW	
3	Teesta-III Unit#1	1x200MW	

4	Raghunathpur Unit#1	2x600MW	
5	TLDP-IV	1x40MW	

New transmission elements:

Sl No.	Name of Element	Expected date
1	400 kV Maithon-Gaya D/C	
2	400 kV Gaya-Koderma D/C	
3	400kV Sasaram-Daltonganj D/C & Daltonganj S/Stn	
4	400 kV Ranchi-Raghunathpur D/C	
5	400 kV Meramandali-Dubri D/C	
6	400 kV Corporate- Ranchi D/C	
7	400 kV IB-Meramandali D/C	
8	220 kV TLDP-IV – NJP ckt-2	2014
9	220 kV Jeerat-Rishra D/C	
10	220 kV Latehar-Daltonganj D/C	
11	220 kV Lohardaga-Lathehar D/C	
12	220 kV Bidhansai-Cuttack D/C	
13	220 kV Girdih-Koderma D/C	2014
14	400kV Rajarhat-Purnea D/C(with LILO of one circuit each at Farakka and Gokarno)	
15	Augmentation of 400kV Farakka-Malda D/C with HTLS conductor	

Members may update.

Deliberation in the meeting

Members noted.

PART D:: OTHER ISSUES

Item no. D.1: UFR operation during the month of Dec'14

System frequency touched a minimum of 49.54Hz in December'14 on 13/12/14 at 08:40Hrs. Accordingly, no report of operation of UFR has been received from any of the constituents.

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.2: Grid incidences during the month of Dec, 2014

Sl no	Disturbance Place	Date & Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	OPTCL (Meeramundali, GMR)	05/12/14 at 14:01hrs & 19:05hrs.	550	0	Due to bursting of Y-Ø LA of 400kV Meramundali-Angul-II at 14:01hrs and bursting of B-Ø LA of 400kV Meramundali-Mendhasal at 19:05hrs at Meramundali, various 400kV lines, 315MVA ICTs and running units of GMR tripped.	GD-1
2	OPTCL (Meramundali, GMR)	06/12/14 at 17:47hrs.	560	0	Due to bursting of B-Ø LA of 400kV Meramundali-Angul-II at Meramundali, various 400kV lines, 315MVA ICTs and running units of GMR tripped.	GD-1
3	OPTCL (Meramundali)	17/12/14 at 16:43hrs.	0	0	Due to bursting of R-Ø LA of line reactor of 400kV Meramundali-IBTPS-I at Meramundali, various 400kV lines tripped.	-

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.3: Any other items.

1. Operating procedure for GMR units---GMR

GMR vide letter dated 21-01-2015 communicated the operating procedure, which is enclosed at **Annexure-I**. Wherein GMR has proposed operating procedure for three unit operation

Deliberation in the meeting

ERLDC and GMR agreed to interact and study.

2. Availability of DPL unit#7(1x300MW) after overhauling---DPL

DPL vide letter dated 21-01-2015 informed that DPL unit#7 which had several constraints causing outages and low generation time to time went prolonged shutdown w.e.f 03.12.2014 for maintenance. On successful completion of the job unit#7 boiler was scheduled to be lit up on 21.01.2015. After stage wise several activities the boiler TG will be put on stream rolling at around 08:00hrs on 23.01.2015 and on satisfactory completion of TG vibration analysis the unit is expected to be synchronized on 23.01.2015 evening. Any deviation in the schedule and total generation availability schedule will be communicated in due course.

Deliberation in the meeting

Members noted.

Meeting ended with vote of thanks to the chair.

Participants in 105th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 22.01.15 (Thursday)

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

Participants in 105th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 22.01.15 (Thursday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
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Participants in 105th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 22.01.15 (Thursday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
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Fax No-457

Govt. of India
Ministry of Power
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata-700033

No. ERPC/COM-I/GEN/2014/ 5759 - 68

Date: 31.12.2014

To,
The Member Secretary, PSDF Secretariat,
NLDC, POSOCO,
B-9, 1st Floor, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

Sub: Bus Splitting at NTPC Kahalgaon Station—funding from PSDF

Ref: NLDC-PSDF/GENERAL/2014-15/104/12-06 dated-11.12.2014

Sir,

With reference to the above, ERPC Secretariat has the following to submit:

1. Kahalgaon Stage-I STPS (840 MW) and Kahalgaon Stage-II (1500 MW) STPS of NTPC in Eastern Region have separate beneficiaries. Whereas KHSTPP-I has beneficiaries principally in the Eastern Region (63.91%) and Northern Region (31.02%), KHSTPP-II has its major share allocated to Northern Region (56.09%) and Western Region (26.53%). Other beneficiaries of KHSTPP-I are SR and NER and for KHSTPP-II the other beneficiaries are ER and NER. The Scheduling process for these are also separate and ERLDC considers them as separate control areas as per IEGC.

However, the 400 KV bus at Kahalgaon Substation of NTPC is common to both the stations.

The actual generation of Stage-I and Stage-II required for UI/Deviation charges/Transmission deviation/congestion accts is being done by using the GT meter readings to apportion the ex-bus generation between Stage-I and Stage-II, which may not be accurate. *Therefore the bus splitting of Kahalgaon is not a regional issue but involves smooth commercial settlement of other regions also.*

2. The bus splitting at Kahalgaon STPS had been advised in the Standing Committee meeting on Power System planning in ER held on 20.09.2010., wherein it was noted that due to accumulation of generation projects in the eastern region and evolution of the Regional Grid over the years, the Short Circuit Level of 400 kV S/s at Kahalgaon has grown to a large value and would exceed the permissible limits of existing switchgear capacity of 40 kA in near future. The relevant portion of the summary record of discussions is at Annexure-I. *The bus splitting at Kahalgaon will benefit all the regions of the country by reducing the incidence of equipment failure at KHSTPP S/s.*
3. In the 20th TCC/ERPC meeting held on 16-17.12.2011 the issue was deliberated thoroughly. It was agreed that the bus splitting at Kahalgaon S/s of NTPC, would ensure correct UI accounting and would be beneficial to all the other regions since SR, NER, NR and WR were all beneficiaries of Kahalgaon Stage-I & II. Also, it is technically imperative to limit the short circuit levels as recommended by Standing Committee on Power System Planning in ER. This will prevent costly equipment from getting damaged due to high fault current in excess of rating and

For signed
11/1/15

consequently preventable financial loss. (The relevant portion of the minutes is at Annexure-II.)

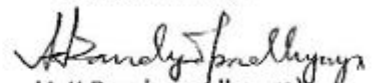
4. The protection audit team that visited Kahalgaon STPS under third party protection audit scheme on 06.02.2013 observed that immediate bus splitting at Kahalgaon STPS was essential for equipment safety and Grid security. (The relevant portion of minutes is at Annexure-III)
5. Section 5 of the "Procedure for Disbursement of funds from Power System Development Fund" has provisions for utilization of fund for scheme benefitting large number of utilities collectively and having far reaching impact on the quality of power system operation. *It may be emphasized that in the backdrop of the grid disturbance on 30-31.07.2012 it is imperative that at least identifiable sources of future disturbances such as equipment failures due to increase in fault levels be rectified at the earliest.*

In consideration of all the above issues it is clear that (a) the bus splitting at Kahalgaon is essential, (b) splitting of Kahalgaon STPS bus will benefit all regions of the country.

Keeping in view the importance of the scheme, ER constituents have already agreed in principle to bear the cost of the project (which comes around 98.95 Cr) through tariff in case no funding is available from PSDF. *However, funding from PSDF in which all constituents have already contributed was emphasized to relieve burden of the constituents of all regions.*

Therefore, ERPC secretariat requests for reviewing of the NTPC proposal for splitting of KHSTPS bus in light of the above submissions. Also, a copy of the minutes of meeting of the appraisal committee meeting held on 25.11.2014 may be forwarded to us for information and record.

Yours faithfully,


(A.K. Bandyopadhyaya)
Member Secretary

Copy:

1. Chairperson, CEA, & Chairperson Appraisal Committee(PSDF), Sewa Bhawan, R.K.Puram, New Delhi-110066.
2. Chairperson, ERPC & Principal Chief Engineer-cum-Secretary, Energy & Power Department, Govt. of Sikkim, Kazi Road, Gangtok - 737101, Sikkim.
3. Chairman-cum-Managing Director, Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar - 75102.
4. Chairman-cum-Managing Director, GRIDCO Ltd., Janpath, Bhubaneswar-75102.
5. Chairman & Managing Director, Jharkhand Urja Vikas Nigam Limited (JUVNL), Engineering Building, HEC, Dhurwa, Ranchi-83404.
6. Chairman & Managing Director, Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna-80021.
7. Chairman & Managing Director, West Bengal State Electricity Distribution Co. Ltd., Vidyut Bhavan, 7th Flor, Block-DJ, Sector-I, Bidhanagar, Kolkata-70091.
8. Chairman, Damodar Valley Corporation, DVC Towers, VIP Road, Kolkata -70054.
9. Director (Commercial), NTPC Ltd., Core-7, SCOPE Complex, Lodhi Road, New Delhi - 110003

BUS VOLTAGE AT WBSETCL SUB-STATION IN KV

Date	Time (Hrs)	At Subasgram PGCIL, Tap of 315MVA ICT's is at 9			At Birpara PGCIL, Tap of 160MVA=10& 100MVA=12
		Bus voltage at KLC, WBSETCL	Bus voltage at 220KV Rajarhat, WBSETCL	Bus voltage at 220KV Subasgram, WBSETCL	Bus voltage at 132KV Birpara, WBSETCL
08/01/2015 (WEDNESDAY)	00.00	228	237	238	138
	01.00	228	237	238	140
	02.00	229	237	239	140
	03.00	229	237	239	140
	04.00	230	237	239	140
	05.00	230	236	239	140
11/01/2015 (SUNDAY)	00.00	234	238	236	140
	01.00	224	238	238	140
	02.00	225	238	238	140
	03.00	223	239	238	140
	04.00	221	238	237	140
	05.00	219	238	236	140

❖ ANDUL ROAD ❖ P.O. DANESH SEIKH LANE ❖ HOWRAH - 711109
❖ TELEPHONE : 2688-7697 ❖ FAX NO.2688-5417 / 2688-6232\
email ID:- wbsldc.hra@gmail.com

MONTHLY REPORT

DATE: 15.01.2015

SESA STERLITE LIMITED, ALUMINIUM & POWER
(Formerly STERLITE ENERGY LIMITED),
JHARSUGUDA, ODISHA

REPORT: - STATUS OF CONSTRUCTION OF 400 kV STERLITE - JHARSUGUDA D / C SECTIONS

Name of Line: Sterlite – Jharsuguda 400 kV D/c line with associated Line Bays

[Interim Arrangement: LILO of one circuit of Rourkela – Raigargh 400 kV D/c (1st line) at Sterlite]
[Interim Arrangement: LILO of one circuit of Rourkela – Raigargh 400 kV D/c (2nd line) at Sterlite]

Status of Line Bay construction at POWERGRID's Jharsuguda Pooling Station	
<ul style="list-style-type: none"> • <u>Order:</u> Bays ref no: 15, 18, 19 & 22: We have placed order for Engineering, Supply, construction & commissioning of 4 (Four) nos 400 kV Bays (Bays ref no: 15, 18, 19 & 22) at POWERGRID's Jharsuguda pooling station on M/s SR Associates Infrastructure Private Limited, S-2/40, Mancheswar Industrial Estate, Bhubaneswar – 751010, Odisha. 	
<ul style="list-style-type: none"> • <u>Design / Drawings:</u> Design and drawings are prepared and submitted on 25.11.2014 to POWERGRID for approval • 2nd set of drawings are submitted to POWERGRID by 07.01.2015 for approval. 	
<ul style="list-style-type: none"> • <u>Supply & Construction:</u> Supply orders placed for Circuit Breaker, CVT, CT, Isolator, Lightning Arrester and Relay & Protection panels 	
<ul style="list-style-type: none"> • <u>Consultancy Services:</u> On 13.01.15, Rs 30 Lakh has been paid to POWERGRID as fee for Post order consultancy services 	

Status of Transmission Line construction	
<ul style="list-style-type: none"> • Line length: LILO 1: 22.5 kM, LILO 2: 21.5 kM 	
<ul style="list-style-type: none"> • Route Survey for the Transmission line has been completed • Tower spotting, Tower schedule with detailed land schedule has been prepared for each tower location • BOQ and technical specification has been prepared 	
<ul style="list-style-type: none"> • Forest Diversion Approval is required for 11.03 Ha • Forest diversion Proposal submitted to PCCF office and state serial number obtained • DGPS survey for forest land completed • Compensatory afforestation land (CA Land) of 30 acres is arranged by us and after site inspection DFO already issued suitability certificate • DGPS survey completed for CA land. • Pillar posting has been completed for all 7 villages. Tree enumeration is under progress. • Preparation of compensatory afforestation scheme under progress at DFO office, Jharsuguda • Obtaining compliance certificate from Collector under forest rights act is in progress. 	



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति
Eastern Regional Power Committee
14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700033
14 Golf Club Road, Tollygunj, Kolkata-700033

Annexure-B.12.4

Tel. No. : 033 24235199, 24235016 FAX No.: 033 24221802, 24171358 Web: www.erpc.gov.in

FILE NO.: ERPC/MS/2014-15/6333-34

DATE: 09.01.2015

FAX MESSAGE NO. 15

To
The Chairperson, ERPC & Principal Chief Engineer-cum- Secretary
Energy & Power Department, Govt. of Sikkim
Kazi Road, Gangtok, Sikkim – 737 101

Subject: Construction of Chuzachen Bay at Rangpo Sub-Station – regarding.

Sir,

On the above mentioned subject this is for your kind information that the issue was put up for discussion in the 28th ERPC meeting held on 13.09.2014 wherein it was mentioned that the process of tendering is going on and it would take around 12 (twelve) months to complete the job.


On subsequent follow up action in OCC forum it is understood that proposal was placed before cabinet for its approval but unfortunately ERPC is not yet updated with present status of the progress on the same..

Chuzachen Bay at Rangpo Sub-Station would not only improve the evacuation of Chuzachen HEP power but also improve the regional grid security. For early completion of the project your intervention is very much needed.

You are therefore requested to advise your concerned officers to do the needful for earliest completion of the scheme and also advise your representative to attend regularly the OCC meetings of ERPC with updated information on the subject.

Regards.

Yours faithfully


(A.K. Bandyopadhyaya)
Member Secretary

o/c

Copy for information to: The AGM (E), Gati Infrastructure Pvt. Ltd., Chuzachen HEP, Lower Bering Karabari, Pakyong, East Sikkim – 737 106.

Annexure-B12.16

STATUS REPORT OF IND-BARATH ENERGY (UTKAL) LIMITED (IBEUL)

1. Expected Commercial Date of Operation (COD)

- UNIT – I : April, 2015
- UNIT – II : July, 2015

2. Target generation for 2015-16 considering 7% auxiliary consumption and 90 % PLF with 12% Odisha State Share

- UNIT – I : 2675 MU
- UNIT – II : 1482 MU

3. As per Drawl of Start-up Power

- ERLDC in 103rd OCC (agenda no. D.3.10) informed that LILO of 400 KV Jharsuguda – Rourkela CKT –I was allowed for 1 month w.e.f 12th November, 2014.

However, Ind- Barath Energy (Utkal) Limited (IBEUL) desire to renew the Start-up power period and has already sent the “Application form Seeking Start-up Power” to GM, ERLDC with a copy to MS, ERPC vide its email dated 3rd January, 2015.

The Start-up Power requirements is as follows:

FROM	TO	REQUIRED (IN MW)
02.01.2015	31.01.2015	10
01.02.2015	28.02.2015	15
01.03.2015	15.03.2015	20
16.03.2015	31.03.2015	4

For opening of Letter of Credit, IBEUL is awaiting bank details from PGCIL, ER- I, Patna. IBEUL assures payment of Deviation Charges as per Deviation Settlement Statement accordingly.

4. Dedicated ATS:

- It was earlier informed that the completion of the work will be done by December, 2014. Now as per the present scenario 102 nos of towers have been completed out of 125 nos. of towers and stringing is going on at 3 places after getting RoW clearances. Expected completion will be *February, 2015*.

5. Formalities for corridor for power-evacuation to Tangedco, Tamil Nadu:

- IBEUL has already requested PGCIL for delivery of 500 MW power to Tangedco and PGCIL have agreed to sign BPTA which is still *under process*.

However, PGCIL may consider power to be transmitted to Tangedco after availability of Transmission Line Capacity of 765 KV Raichur- Solapur Line.

6. IBEUL has signed FSA with MCL with 3.07 million tons of coal per annum for 100 % generation. So for the matter 12% of power for Odisha State Share is considered. Agreement with OPTCL is still *under process*. IBEUL may connect to 400 KV Lapanga S/s of OPTCL, which is about 12-14 kms from plant site, in future for evacuation of power to GRIDCO.

Till then, power will be evacuated through CTU only.

7. Permanent Communication System (PLCC) to ERLDC:

- GM (Electrical) met with Mr. S Barnwal, CM for the above purpose.

8. Month-wise generation target for 2015-16 will be informed to CEA, ERPC and ERLDC very shortly.

Annexure-C.1

Proposed Maintenance Programme of thermal units during February, 2015.

SYSTEM	POWER STATION	Unit NO.	Effective Capacity	Maintenance Programme	Remarks	No.of Days
DVC	DSTPS	Unit No 2	500	15.02.2015 to 12.03.2015	AOH	25
WBDCL	BTPS	Unit No 1	60	01.02.2015 to 12.03.2015	BTG	40
OPGC	IB TPS	Unit No 1	210	01.02.2015 to 20.02.2015	Minor Overhauling	20

**EASTERN REGIONAL LOAD DESPATCH CENTRE
KOLKATA**

TRANSMISSION ELEMENTS OUTAGE APPROVED IN 105TH OCC MEETING OF ERPC

Sr. No	S/D APPROVED IN OCC	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
1	A/R OF 220 KV MALDA-DALKHOLA-I	24/01/2015	09:00	28/02/2015	18:00	ODB	ER-II(KOL)	OPGW STRINGING WORK	
2	A/R OF 220 KV BIRPARA-SALAKATI-D/C	24/01/2015	09:00	28/02/2015	18:00	ODB	ER-II(KOL)	OPGW STRINGING WORK	
3	A/R OF 400 KV BARIPADA-KEONJHAR	24/01/2015	09:00	28/02/2015	18:00	ODB	ER-II(KOL)	OPGW STRINGING WORK	
4	A/R OF 400 KV BINAGURI-RANGPO	24/01/2015	09:00	28/02/2015	18:00	ODB	ER-II(KOL)	OPGW STRINGING WORK	
5	A/R OF 400 KV BINAGURI-RANGPO	25/02/2015	09:00	28/02/2015	18:00	ODB	ER-II(KOL)	OPGW STRINGING WORK	
6	315MVA ICT-II AT Maithon	24/01/2015	09:00	24/01/2015	17:00	ODB	ER-II(KOL)	Testing of LA & 220KV CT Connector replacement work	DVC
7	400 KV BSF-MUZ - I & II	24/01/2015	09:00	25/01/2015	16:00	ODB	ER-I	FOR STRINGING OF 400 KV D/C (QUAD) BARH-GORAKHPUR LINE (AP 6/0 - AP 7/0)	NLDC
8	132 KV SIWAN - GOPALGANJ LINE	24/01/2015	09:00	25/01/2015	16:00	ODB	ER-I	FOR STRINGING OF 400 KV D/C (QUAD) BARH-GORAKHPUR LINE	BIHAR
9	400KV MTN-KHG-II Line with LR	24/01/2015	09:00	24/01/2015	14:00	ODB	ER-II(KOL)	Y-PH CVT Replacement	
10	400 KV BUS - 1 AT MUZ	24/01/2015	09:00	24/01/2015	18:00	ODB	ER-I	FOR COMMISSIONING ACTIVITY OF NEW 125 MVAR B/R - 2 AT MUZ.	
11	400KV MTN-RB-II	24/01/2015	10:00	24/01/2015	11:00	ODB	ER-II(KOL)	CT Oil Sampling	MPL
12	132 KV BSF(BSEB)-HATHIDAH-D/C	24/01/2015	08:00	25/01/2015	18:00	OCB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
13	315MVA ICT-I AT Maithon	25/01/2015	09:00	25/01/2015	17:00	ODB	ER-II(KOL)	Relay retrofitting,42489T (Y-Ph) Isolator arm replacement	
14	63 MVAR B/R AT MUZ S/S	25/01/2015	08:00	10/03/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR DISMANTALLING OF 63 MVAR B/R AND COMMISSIONING OF 125 MVAR B/R -I IN LIU OF THE SAME UNDER ERSS - 8	
15	400 KV BUS - II AT MUZ	25/01/2015	09:00	25/01/2015	18:00	ODB	ER-I	FOR COMMISSIONING ACTIVITY OF NEW 125 MVAR B/R - 2 AT MUZ.	
16	400KV New-Siliquri - Rangpo-I & 400KV Rangpo-Teesta -I	25/01/2015	07:00	28/02/2015	17:00	ODB	PG	OPGW STRINGING WORK	
17	400 KV SEL - Raigarh # 2	26/01/2015	08:00	26/01/2015	17:00	ODB	ER-II(OD)	For tightening of Jumpers, Adjustment of VD, Corona Ring and spacer at various locations	NLDC
18	400KV BHP-SgTPP-I	27/01/2015	08:00	27/01/2015	17:00	ODB	ER-II(KOL)	FOR ATTENDING CONSTRUCTION DEFECT	WBSETCL
19	A/R OF 400KV MLD FKK-D/C	27/01/2015	08:00 hrs	27/02/2015	16:00hrs	ODB	ER-II(KOL)	PID work of Line insulator of both ckts.	PID BY PUTTING A/R OFF MAY BE EXPOLRED
20	220 KV MTN-KALYANESWARY-I	27/01/2015	08:00	28/01/2015	16:00	ODB	DVC	WINTER MAINT.	
21	400 KV RNC - NRNC - III	27/01/2015	07:00	27/01/2015	18:00	ODB	ER-I	FOR CONSTRUCTION OF MULTI CKT TOWER OF 400 KV RNC - CHANDAWA AND RNC - PATRATU	
22	400 KV RNC - NRNC - IV	27/01/2015	07:00	27/01/2015	18:00	ODB	ER-I	FOR CONSTRUCTION OF MULTI CKT TOWER OF 400 KV RNC - CHANDAWA AND RNC - PATRATU	
23	400 KV JSR - DGP LINE	27/01/2015	09:00	27/01/2015	17:00	ODB	ER-I	FOR AMP WORK AT JSR	
24	400 KV BUS-1 AT GAYA S/S	27/01/2015	10:00	27/01/2015	18:00	ODB	ER-I	FOR AMP WORK	
25	MAIN BAY OF 400 KV LKH -BSF - 2 AT LKH	27/01/2015	10:00	27/01/2015	11:30	ODB	ER-I	FOR CT OIL SAMPLING	
26	TIE BAY OF LKH -BSF - 2 AT LKH	27/01/2015	12:00	27/01/2015	13:30	ODB	ER-I	FOR CT OIL SAMPLING	
27	MAIN BAY OF 400 KV LKH -KHLG-1 AT LKH	27/01/2015	14:00	27/01/2015	15:30	ODB	ER-I	FOR CT OIL SAMPLING	
28	TIE BAY OF 400 KV LKH -KHLG-1 AT LKH	27/01/2015	16:00	27/01/2015	17:30	ODB	ER-I	FOR CT OIL SAMPLING	
29	400 KV Rourkela - Talcher # 1	27/01/2015	08:00	27/01/2015	18:00	ODB	ER-II(OD)	For replacement of damaged insulators in Middle and Bottom phase.	NLDC
30	400 KV SASARAM(PG)-NABINAGAR(PG)	27/01/2015	11:00	27/01/2015	15:00	ODB	ER-I	LILO CONNECTION IN 220KV SASARAM-ARA-I	BIHAR
31	220 KV SASARAM-ARA-D/C	28/01/2015	11:00	28/01/2015	15:00	ODB	ER-I	LILO CONNECTION IN 220KV SASARAM-ARA-I	BIHAR
32	400KV BHP-SgTPP-II	28/01/2015	08:00	28/01/2015	17:00	ODB	ER-II(KOL)	FOR ATTENDING CONSTRUCTION DEFECT	WBSETCL
33	400KV MTN-RTPS(DVC)	28/01/2015	09:00	02/02/2015	17:00	ODB	ER-II(KOL)	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
34	400 KV BOKARO - KODERMA D/C	28/01/2015	08:00	29/01/2015	18:00	ODB	ER-I	FOR ATTENDING REPAIR OF DAMAGED CONDUCTOR AND INSULATOR BY MISCREANTS	DVC
35	400 KV BUS-2 AT GAYA S/S	28/01/2015	10:00	28/01/2015	18:00	ODB	ER-I	FOR AMP WORK	
36	132 KV LAKHISARAI (PG)- LAKHISARAI(BSPTCL)	28/01/2015	10:00	28/01/2015	11:30	ODB	ER-I	FOR CT OIL SAMPLING WORK	BIHAR
37	132 KV LAKHISARAI (PG) - JAMUI(BSPTCL)	28/01/2015	12:00	28/01/2015	13:30	ODB	ER-I	FOR CT OIL SAMPLING WORK	BIHAR
38	200 MVA ICT - 2 AT LKH S/S	28/01/2015	14:00	28/01/2015	15:30	ODB	ER-I	FOR CT OIL SAMPLING WORK	BIHAR
39	400KV NSLG-Tala-2 Line	28/01/2015	10:00 AM	28/01/2015	12:00 PM	ODB	ER-II(KOL)	Ntame work for meter connetion	NLDC
40	765 kv Sundergarh - Dharamjaygarh Line-1&2	28/01/2015	08:00:00	29/01/2015	17:00:00	OCB	ER-II(OD)	To attened punch point of Trnsmission Line.	NLDC
41	400 KV Sundergarh - Raigarh # 2	28/01/2015	08:00	28/01/2015	17:00	ODB	ER-II(OD)	For tightening and checking of Jumpers, Adjustment of VD, Corona Ring and spacer at various locations.	NLDC
42	400 KV N. Siliquri- Teesta Ckt-2	28/01/2015	8.00 hrs	28/01/2015	16.00 hrs	ODB	ER-II(KOL)	Attending line defects like replacement of Insulator	

43	400 KV BUS-II AND 400KV BSF-PRN-II AT BSF	28/01/2015	09:00	28/01/2015	18:00	ODB	ER-I	FOR SPLIT BUS ARRANGEMENT AND COMMISSIONING OF 125MVAR B/R AT BSF	
44	401 KV BUS-II AT BSF	29/01/2015	09:00	29/01/2015	18:00	ODB	ER-I	FOR SPLIT BUS ARRANGEMENT AND COMMISSIONING OF 125MVAR B/R AT BSF	
45	400 KV BARH - PATNA - 3&4	29/01/2015	09:00	30/01/2015	16:00	ODB	ER-I	FOR STRINGING OF 400 KV D/C (QUAD) BARH-GORAKHPUR LINE (AP 7/0 - AP 8/0)	NLDC
46	220 KV MTN-KALYANESWARY-II	29/01/2015	08:00	30/01/2015	18:00	ODB	DVC	WINTER MAINT.	
47	50MVA ICT-IV at Malda	29/01/2015	08:00 hrs	29/01/2015	18:00hrs	ODB	ER-II(KOL)	AMP of Bay and ICT	
48	400 KV FSTPP-SAGARDIGHI	29/01/2015	09:30	30/01/2015	17:30	ODB	FSTPP	BALANCE MAIN BAY WORK OF SAGARDIGHI LINE AT FSTPP	WBSETCL
49	400 KV JSR - MTN LINE	29/01/2015	09:00	29/01/2015	17:00	ODB	ER-I	FOR AMP WORK AT JSR	
50	765 KV AUX TRANSFORMER BUS AT GAYA S/S	29/01/2015	10:00	29/01/2015	18:00	ODB	ER-I	FOR AMP WORK	NLDC
51	MAIN BAY OF 80 MVAR B/R AT LKH	29/01/2015	10:00	29/01/2015	18:00	ODB	ER-I	FOR CSD COMMISSIONING WORK.	NLDC
52	80 MVAR B/R AT LKH	29/01/2015	16:00	29/01/2015	18:00	ODB	ER-I	FOR TESTING OF CSD	NLDC
53	220kv Siliguri-New Siliguri Ckt-1	29/01/2015	8.00 hrs	31/01/2015	16.00 hrs	OCB	ER-II(KOL)	Isolator Replacement under Addcap	
54	400 KV NSLG-BONGAIGAON-III & IV	29/01/2015	11:00	30/01/2015	15:00	ODB	ENICL	JUMPER TIGHTENING	NLDC
55	400 KV BSF - LAKHISARAI - 1	30/01/2015	09:00	30/01/2015	13:00	ODB	ER-I	FOR AMP WORK	NLDC
56	TIE BAY OF 80 MVAR B/R AT LKH	30/01/2015	10:00	30/01/2015	18:00	ODB	ER-I	FOR CSD COMMISSIONING WORK.	
57	80 MVAR B/R AT LKH	30/01/2015	16:00	30/01/2015	18:00	ODB	ER-I	FOR TESTING OF CSD	NLDC
58	400 KV Rourkela - SEL # 2	30/01/2015	09:00	30/01/2015	17:00	ODB	ER-II(OD)	AMP Work	NLDC
59	100 MVA ICT-I CB & Isolator AT Birpara	31/01/2015	09:00	06/02/2015	17:00	OCB	ER-II(KOL)	CB & Isolator retrofitting	WBSETCL
60	220 KV Bus-I at Birpara	31/01/2015	09:30	31/01/2015	12:30		ER-II(KOL)	for opening iso lator drop-out for Iso retrofitting.	WBSETCL
61	200 MVA ICT - 1 AT LKH S/S	31/01/2015	10:00	31/01/2015	12:00	ODB	ER-I	FOR CT OIL SAMPLING WORK	BIHAR
62	400KV Rourkela- Sundargarh Ckt-1	31/01/2015	8:00:00 AM	01/02/2015	5:00:00 PM	OCB	ER-II(OD)	For Rectification of Mechanical Interlock in 400 KV Isolator	NLDC
63	A/R OF 400 KV BARH - KAHALGAON -2	01/02/2015	06:30	28/02/2015	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	
64	A/R OF 400 KV KAHALGAON - MTN - 2	01/02/2015	06:30	28/02/2015	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	
65	A/R OF 400 KV BSF - MUZ -2	01/02/2015	06:30	28/02/2015	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	
66	A/R OF 400 KV JSR - BRPD -2	01/02/2015	06:30	28/02/2015	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	
67	132 KV PRN-FARBISHGANJA S/C	01/02/2015	08:00	02/02/2015	18:00	ODB	ER-I	FOR CROSSING WORK OF 400KV PATNA-KISHANGAUNGE LINE	BIHAR
68	400kv KTPP-ARMB	01/02/2015	08:00	02/02/2015	15:00	OCB	WBSETCL	Maintenance work	
69	220 KV MTN-DHANBAD-I	02/02/2015	8.00 hrs	04/02/2015	16.00 hrs	ODB	DVC	WINTER MAINT.	
70	400 KV Bus I at Subhasgram	02/02/2015	07:00 HRS	02/02/2015	17:00 HRS		ER-II(KOL)	Bus Isolator AMP	
71	220 KV BUS -1 AT PURNEA S/S	02/02/2015	08:00	03/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETROFITTING WORK OF OF ICT	BIHAR
72	315 MVA ICT - I AT PATNA	02/02/2015	10:00	02/02/2015	17:00	ODB	ER-I	FOR AMP WORK	
73	765/400KV 1500MVA ICT-1 at Sundargarh	02/02/2015	08:00:00	02/02/2015	17:00:00	OCB	ER-II(OD)	Fire fighting Pylon support erection	NLDC
74	400 KV Rourkela - Sundargarh # 1	02/02/2015	09:00	02/02/2015	17:00	ODB	ER-II(OD)	AMP Work	NLDC
75	220kv Siliguri-New Siliguri Ckt-2	02/02/2015	8.00 hrs	04/02/2015	16.00 hrs	OCB	ER-II(KOL)	Isolator Replacement under Addcap	
76	Bus Reactor-1 at Durgapur	02/02/2015	08:00	07/02/2015	18:00	OCB	ER-II(KOL)	Offline dry out. Moisture content is high	
77	100 MVA ICT-2 AT PRN	02/02/2015	08:00	12/02/2015	18:00	OCB	ER-I	FOR REPLACEMENT OF EXSTING 100MVA TRANSFORMER BY NEW 160MVA TRANSFORMER AND OTHER RETROFITTING WORK OF ICT-1 BAY	BIHAR
78	400 KV Bus II at Subhasgram	03/02/2015	07:00 HRS	03/02/2015	17:00 HRS		ER-II(KOL)	Bus Isolator AMP	
79	220 KV Bus-II at Birpara	03/02/2015	14:00	03/02/2015	17:00		ER-II(KOL)	for opening iso lator drop-out for Iso retrofitting.	WBSETCL
80	220 KV Bus-I at Birpara	03/02/2015	09:00	03/02/2015	12:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
81	400 KV BSF - BANKA - 1	03/02/2015	09:00	03/02/2015	13:00	ODB	ER-I	FOR AMP WORK	NLDC
82	400 KV RANCHI - MAITHAN - I	03/02/2015	10:00	03/02/2015	14:00	ODB	ER-I	FOR AMP WORK	
83	220 KV SSRM - ARA - II	03/02/2015	10:00	03/02/2015	14:00	ODB	ER-I	FOR AMP WORK	
84	400 KV JSR - BRPD LINE	03/02/2015	09:00	03/02/2015	17:00	ODB	ER-I	FOR AMP WORK AT JSR	
85	132 KV BSF(BSPTCL) - NAWADA D/C	03/02/2015	08:00	04/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF - LAKHISARAI - I AT BSF	BIHAR
86	400 KV AUX TRANSFORMER BUS AT GAYA S/S	03/02/2015	10:00	03/02/2015	18:00	ODB	ER-I	FOR AMP WORK	
87	400 KV EAST BUS - II AT SSRM	03/02/2015	09:00	03/02/2015	17:00	ODB	ER-I	FOR AMP WORK	NLDC
88	80MVAR Line Reactor of NSLG - BNG 3	03/02/2015	10:00 AM	03/02/2015	16:00:00 PM	ODB	ER-II(KOL)	AMP Work	
89	400KV Rourkela- Sundargarh Ckt-2	03/02/2015	8:00:00 AM	04/02/2015	5:00:00 PM	OCB	ER-II(OD)	For Rectification of Mechanical Interlock in 400 KV Isolator	NLDC
90	400kv DGP(WB)-Parulia(PG)#1	03/02/2015	09:00	03/02/2015	15:00	ODB	WBSETCL	Maintenance work	
91	220 KV TSTPP - MERAMUNDALI - I	03/02/2015	09:00	05/02/2015	17:00	OCB	NTPC	ANNUAL OVERHAULING	OPTCL
92	400KV Haldia - Subhasgram - I	04/02/2015	09:00 HRS	04/02/2015	18:00 HRS		ER-II(KOL)	AMP and Warranty Test	OPTCL
93	220 KV BUS -2 AT PURNEA S/S	04/02/2015	08:00	06/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETROFITTING WORK OF OF ICT	BIHAR
94	132 KV SIWAN - MASRAKH LINE	04/02/2015	09:00	05/02/2015	16:00	ODB	ER-I	FOR STRINGING OF 400 KV D/C (QUAD) BARH-GORAKHPUR LINE	BIHAR
95	125 MVAR B/R AT RNC	04/02/2015	10:00	04/02/2015	14:00	ODB	ER-I	FOR AMP WORK	
96	220 KV BUS - I AT ARA	04/02/2015	10:00	04/02/2015	16:00	ODB	ER-I	FOR AMP WORK	BIHAR
97	765 KV BUS-1 AT GAYA S/S	04/02/2015	10:00	04/02/2015	18:00	ODB	ER-I	FOR AMP WORK	NLDC
98	400 KV FSTPP-MALDA-II AND 400KV BUS-II AT FSTPP	04/02/2015	09:00	05/02/2015	17:00	ODB	ER-II	FOR ATTENDING CB PROBLEM AT FSTPP	NLDC

99	400 KV EAST BUS - I AT SSRM	04/02/2015	09:00	04/02/2015	17:00	ODB	ER-I	FOR AMP WORK. IT IS TO MENTION THAT OUTAGE OF 400 KV EAST BUS - I AT PSL WILL LEAD TO OUTAGE OF 765 KV 1500 MVA ICT & NO POWER FLOW IN 765 KV PSL -FATEHPUR LINE.	NLDC
100	400 KV SIDE BAY OF 1500 MVA (765 KV) ICT AT SSRM	04/02/2015	09:00	04/02/2015	17:00	ODB	ER-I	FOR AMP WORK. IT IS TO MENTION THAT OUTAGE OF 400 KV EAST BUS - I AT PSL WILL LEAD TO OUTAGE OF 765 KV 1500 MVA ICT & NO POWER FLOW IN 765 KV PSL -FATEHPUR LINE.	
101	400 KV PATNA-BARH-I	04/02/2015	10:00	04/02/2015	16:00	ODB	ER-I	BALANCE DISMNTLING OF REACTOR BAY	NLDC
102	765 KV TIE BAY OF 1500 MVA (765 KV) ICT AND 765 KV PSL - FATEHPUR LINE	04/02/2015	09:00	04/02/2015	17:00	ODB	ER-I	FOR AMP WORK. IT IS TO MENTION THAT OUTAGE OF 400 KV EAST BUS - I AT PSL WILL LEAD TO OUTAGE OF 765 KV 1500 MVA ICT & NO POWER FLOW IN 765 KV PSL -FATEHPUR LINE.	NLDC
103	765kV, 240MVA Bus Reactor-1 at Sundargarh	04/02/2015	08:00:00	09/02/2015	17:00:00	OCB	ER-II(OD)	Fire fighting Pylon support erection	NLDC
104	400 KV Rourkela - Raigarh # 2	04/02/2015	09:00	04/02/2015	17:00	ODB	ER-II(OD)	AMP Work	NLDC
105	400kv DGP(WB)-Parulia(PG)#2	04/02/2015	09:00	04/02/2015	15:00	ODB	WBSETCL	Maintenance work	
106	KTPP:315MVA IBT#1	04/02/2015	09:00	07/02/2015	15:00	OCB	WBSETCL	Maintenance work	
107	400 KV PATNA-BARH-II	05/02/2015	10:00	05/02/2015	16:00	ODB	ER-I	BALANCE DISMNTLING OF REACTOR BAY	NLDC
108	400KV Haldia - Subhasgram - II	05/02/2015	09:00 HRS	05/02/2015	18:00 HRS		ER-II(KOL)	AMP and Warranty Test	WBSETCL
109	220 KV MTN-DHANBAD-I	05/02/2015	08:00	07/02/2015	16:00	ODB	DVC	WINTER MAINT.	
110	400KV MTN-RB-I	05/02/2015	09:00	06/02/2015	17:00	ODB	ER-II(KOL)	Isolator Arm Replacement and AMP of Line Bay.	MPL
111	400 KV BSF - BANKA - 2	06/02/2015	09:00	06/02/2015	13:00	ODB	ER-I	FOR AMP WORK	NLDC
112	220 KV BUS - II AT ARA	05/02/2015	10:00	05/02/2015	16:00	ODB	ER-I	FOR AMP WORK	BIHAR
113	400 KV BUS - I AT JSR	05/02/2015	09:00	05/02/2015	17:00	ODB	ER-I	FOR AMP WORK	
114	765 KV B/R-1 AT GAYA S/S	05/02/2015	10:00	05/02/2015	18:00	ODB	ER-I	FOR AMP WORK	NLDC
115	MAIN BAY OF 765 KV 3*500 MVA ICT AT PSL.	05/02/2015	09:00	05/02/2015	17:00	ODB	ER-I	FOR AMP WORK	NLDC
116	400kv Kh-Barh ckt-1	07/02/2015	09:30	07/02/2015	17:30	ODB	NTPC	PM works & Relay Testing.	NLDC
117	400 KV Subhasgram – Jeerat	06/02/2015	07:00 HRS	09/02/2015	18:00 HRS	OCB	ER-II(KOL)	Bph CVT replacement and Breaker retrofit at Jeerat End	WBSETCL
118	220 KV Bus-II at Birpara	06/02/2015	13:00	06/02/2015	16:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
119	400 KV Bus - I at Rourkela	06/02/2015	09:00	06/02/2015	17:00	ODB	ER-II(OD)	AMP Work	
120	80*3 MVAR L/R OF 765 KV GAYA - FATEHPUR AT GAYA	06/02/2015	10:00	06/02/2015	18:00	ODB	ER-I	FOR AMP WORK	NLDC
121	MAIN BAY OF 765 KV PSL - FATEHPUR AT PSL	06/02/2015	09:00	06/02/2015	17:00	ODB	ER-I	FOR AMP WORK	NLDC
122	400 KV Sundargarh-Indo Bharat Ckt-1	06/02/2015	8:00:00 AM	07/02/2015	5:00:00 PM	OCB	ER-II(OD)	For Rectification of Mechanical Interlock in 400 KV Isolator	NLDC
123	400kv DGP-ARMB	06/02/2015	06:00	07/02/2015	13:00	ODB	WBSETCL	Maintenance work	
124	400kv Fkk-Durgapur ckt-2	06/02/2015	09:30	06/02/2015	17:30	ODB	NTPC	Relay Testing.	
125	220 KV Bus-I at Birpara	07/02/2015	09:30	07/02/2015	12:30		ER-II(KOL)	for opening iso lator drop-out for Iso retrofitting.	WBSETCL
126	400KV MTN-RB-II	07/02/2015	09:00	08/02/2015	17:00	ODB	ER-II(KOL)	Isolator Arm Replacement, Strung bus repair,oil sampling of Y-ph line CT (Alstom make).	MPL
127	220 KV BSF(BSPTCL) - GAYA D/C	07/02/2015	08:00	08/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF -LAKHISARAI -I AT BSF	BIHAR
128	LILO OF 132 KV D/C BIHARSHARIF - HATIDAH AT BARH T/L OF BSPTCL	07/02/2015	08:00	08/02/2015	18:00	OCB	ER-I	FOR STRINGING OF 400 KV D/C KISHANGANJ - PATNA LINE	
129	220kv Siliguri-Dalkhola Ckt-1	07/02/2015	8.00 hrs	09/02/2015	16.00 hrs	OCB	ER-II(KOL)	Isolator Replacement under Addcap	
130	220 KV Bus Coupler at Birpara	07/02/2015	09:00	13/02/2015	17:00	OCB	ER-II(KOL)	CB & Isolator retrofitting	May please suggest feeder segregation on both BUS
131	400kv KTPP-JRT	08/02/2015	08:00	09/02/2015	15:00	OCB	WBSETCL	Maintenance work	
132	132 KV RANGIT-KERSEONG	09/02/2015	08:00	16/02/2015	16:00	ODB	ER-II	INSULATOR REPLACEMENT	WBSETCL
133	220 KV PRN- NPRN -1 LINE AT PRN S/S	09/02/2015	09:00	09/02/2015	17:00	ODB	ER-I	FOR AMP WORK	
134	400 KV BUS - II AT JSR	09/02/2015	09:00	09/02/2015	17:00	ODB	ER-I	FOR AMP WORK	
135	400 KV Bus - II at Rourkela	09/02/2015	09:00	09/02/2015	17:00	ODB	ER-II(OD)	AMP Work	
136	400 KV Sundargarh-Raigarh Ckt-2	09/02/2015	8:00:00 AM	10/02/2015	5:00:00 PM	OCB	ER-II(OD)	For Rectification of Mechanical Interlock in 400 KV Isolator	NLDC
137	400 KV B'Nagar Line-1 reactor (line outage during switching (on/off)	09/02/2015	08:00	14/02/2015	18:00	ODB	ER-II(KOL)	Offline dry out. Moisture content is high	
138	DGP: 400KV BUS-COUPLER	09/02/2015	08:00	09/02/2015	15:00	ODB	WBSETCL	Maintenance work	
139	BKTPP: 400kv M.B.#1	09/02/2015	08:00	12/02/2015	15:00	ODB	WBSETCL	Maintenance work	
140	400kv ICT-1 at Barh	09/02/2015	09:30	11/02/2015	17:30	OCB	NTPC	PM works of ICT-1, CTs, LAs, Isolators, CB of main & Tie bay & Relay Testing.	
141	400 KV Jeerat - Behrampore	10/02/2015	09:00 HRS	13/02/2015	18:00 HRS	OCB	ER-II(KOL)	400 KV Air Blast Circuit Breaker replacement , LA replacement	WBSETCL
142	220 KV Bus-II at Birpara	10/02/2015	14:30	10/02/2015	17:30		ER-II(KOL)	for opening iso lator drop-out for Iso retrofitting.	WBSETCL
143	220 KV Bus-I at Birpara	10/02/2015	09:00	10/02/2015	12:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
144	Maithon Durgapur #2	10/02/2015	10:00	10/02/2015	14:00	ODB	ER-II(KOL)	Bay AMP Line CT AMP	
145	400 KV BSF - SASARAM - 2	10/02/2015	09:00	10/02/2015	17:00	ODB	ER-I	FOR AMP WORK	NLDC
146	220 KV BSF(BSPTCL) - RAJGIR D/C	10/02/2015	08:00	11/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF -LAKHISARAI -I AT BSF	BIHAR
147	110*3 MVAR L/R OF 765 KV PSL - FATEHPUR AT PSL	10/02/2015	09:00	10/02/2015	17:00	ODB	ER-I	FOR AMP WORK	NLDC

148	765/400kV 1500MVA ICT-2 at Sundargarh	10/02/2015	08:00:00	19/02/2015	17:00:00	OCB	ER-II(OD)	Fire fighting Pylon support erection	NLDC
149	160MVA ICT-2 of Siliguri	10/02/2015	8.00 hrs	10/02/2015	16.00 hrs	ODB	ER-II(KOL)	AMP	WBSETCL
150	DGP: 400KV TR.BUS	10/02/2015	08:00	10/02/2015	15:00	ODB	WBSETCL	Maintenance work	
151	220 KV TSTPP - MERAMUNDALI - II	10/02/2015	09:00	12/02/2015	17:00	OCB	NTPC	ANNUAL OVERHAULING	OPTCL
152	315 MVA ICT-I AT BSF S/S	10/02/2015	08:00	10/02/2015	18:00	ODB	ER-I	CT REPLACEMENT WORK	BIHAR
153	400 KV PRN-MZF-D/C	10/02/2015	09:00	11/02/2015	18:00	ODB	ER-I	FOR CROSSING WORK OF 400KV PATNA-KISHANGAUNGE LINE	NLDC
154	220KV MTN-Kalyaneshwari-I	11/02/2015	09:00	11/02/2015	17:00	ODB	ER-II(KOL)	Line Isolator arm replacement & remote operation checking	DVC
155	132KV BSF(BSEB)-BEGUSARAI-D/C	11/02/2015	08:00	12/02/2015	18:00	OCB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
156	132 KV MAIN BUS AT PRN S/S	11/02/2015	08:00	11/02/2015	14:00	ODB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT + SECTIONALISING OF 132 KV BUS WILL BE DONE. THERE WILL BE NO POWERFLOW TO BSEB DURING THE S/D.	BIHAR
157	132 KV PRN (PG)-PRN(BSPTCL)-3	11/02/2015	14:00	16/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -1	BIHAR
158	132 KV PRN (PG)-KISHANGANJ LINE	11/02/2015	14:00	16/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -1	BIHAR
159	100 MVA ICT-1 AT PRN S/S	11/02/2015	14:00	16/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -1	BIHAR
160	765 KV 110°3 MVAR B/R AT PSL	11/02/2015	09:00	11/02/2015	17:00	ODB	ER-I	FOR AMP WORK	NLDC
161	132kV Siliguri-WBSETCL-2 LINE BAY	11/02/2015	8.00 hrs	11/02/2015	16.00 hrs	ODB	ER-II(KOL)	AMP	WBSETCL
162	400 KV Rourkela - Talcher # 1	12/02/2015	09:00	12/02/2015	17:00	ODB	ER-II(OD)	Modification of Line Isolator (Hivelm Make) for converting gang operated mechanism to individual operated mechanism.	NLDC
163	400kV 125MVAR Bus Reactor-1 at Sundargarh	12/02/2015	8:00:00 AM	13/02/2015	5:00:00 PM	OCB	ER-II(OD)	For Rectification of Mechanical Interlock in 400 KV Isolator	
164	220kV Siliguri-Dalkhola Ckt-2	12/02/2015	8.00 hrs	14/02/2015	16.00 hrs	OCB	ER-II(KOL)	Isolator Replacement under Addcap	
165	400kv Fkk-Kahalgaon ckt-4	12/02/2015	09:30	12/02/2015	17:30	ODB	NTPC	Relay & CT Testing.	
166	400kv Kh-Bank ckt-2	12/02/2015	09:30	12/02/2015	17:30	ODB	NTPC	PM works & Relay Testing.	NLDC
167	220 KV Bus-II at Birpara	13/02/2015	13:00	13/02/2015	16:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
168	400KV MLD-PRN-II	13/02/2015	08:00 hrs	14/02/2015	18:00hrs	ODB	ER-II(KOL)	Replacement of insulator damaged by miscreants	NLDC
169	220 KVTBC at Birpara	14/02/2015	09:00	23/02/2015	17:00	OCB	ER-II(KOL)	03 Nos Isolator retrofitting	WBSETCL
170	220 KV Bus-I at Birpara	14/02/2015	09:30	14/02/2015	12:30		ER-II(KOL)	for opening iso lator drop-out for iso retrofitting.	WBSETCL
171	400 KV Subhasgram – Sagardighi	15/02/2015	08:00 HRS	15/02/2015	16:00 HRS		ER-II(KOL)	Line Isolator , CVT AMP and Line AMP	WBSETCL
172	400KV MLD-PRN-I	15/02/2015	08:00 hrs	16/02/2015	18:00hrs	ODB	ER-II(KOL)	Replacement of insulator damaged by miscreants	NLDC
173	400 KV BSF - SSRM - III AND IV	15/02/2015	08:00	16/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF - LAKHISARAI -I AT BSF	NLDC
174	132 KV LAKHISARAI-SEIKHPURA	16/02/2015	8:00:00 AM	17/02/2015	18:00	OCB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
175	400 KV Rourkela - Talcher # 2	16/02/2015	09:00	16/02/2015	17:00	ODB	ER-II(OD)	Modification of Line Isolator (Hivelm Make) for converting gang operated mechanism to individual operated mechanism.	NLDC
176	400 KV Siliguri- Bongaigaon Ckt-2	16/02/2015	8.00 hrs	16/02/2015	16.00 hrs	ODB	ER-II(KOL)	Attending line defects like replacement of Insulator	
177	400kV 125MVAR Bus Reactor-1 at Sundargarh	16/02/2015	8:00:00 AM	17/02/2015	5:00:00 PM	OCB	ER-II(OD)	For Rectification of Mechanical Interlock in 400 KV Isolator	
178	220 KV Durgapur - Waria # 1	16/02/2015	08:00	21/02/2015	18:00	ODB	ER-II(KOL)	CB & Isolator comissioning under ADDCAP	
179	BKTPP: 400kv M.B.#2	16/02/2015	08:00	19/02/2015	15:00	ODB	WBSETCL	Maintenance work	
180	220 KV Bus-II at Birpara	17/02/2015	14:00	17/02/2015	17:00		ER-II(KOL)	for opening iso lator drop-out for iso retrofitting.	WBSETCL
181	220 KV Bus-I at Birpara	17/02/2015	09:00	17/02/2015	12:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
182	132 KV RANGIT-RANGPO	17/02/2015	08:00	21/02/2015	16:00	ODB	ER-II(KOL)	FOR INSULATOR REPLACEMENT	WBSETCL
183	132 KV PRN (PG)-PRN(BSPTCL)-1	17/02/2015	08:00	21/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -2	BIHAR
184	132 KV PRN (PG)-PRN(BSPTCL)-2	17/02/2015	08:00	21/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -2	BIHAR
185	160 MVA ICT-3 AT PRN S/S	17/02/2015	08:00	21/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -2	BIHAR
186	100 MVA ICT-4 AT PRN S/S	17/02/2015	08:00	21/02/2015	18:00	OCB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS SECTION -2	BIHAR
187	132 KV BSF(BSPTCL) - SHEKHPURA S/C	17/02/2015	08:00	18/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPPING OF 400 KV BSF - SSRM 3 & 4 WITH 400 KV BSF PURNEA - I & II AT BSF	BIHAR
188	400 KV BSF - LAKHISARAI- I AND II	17/02/2015	08:00	27/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF - LAKHISARAI -I AT BSF	NLDC
189	220 KV TSTPP - TTPS	17/02/2015	09:00	19/02/2015	17:00	OCB	NTPC	ANNUAL OVERHAULING	OPTCL
190	400 kv Barh-Patna ckt-3	17/02/2015	09:30	18/02/2015	17:30	ODB	NTPC	PM job of CTs, CVTs, LAs, Isolators, CBs of Main & Tie bays And Relays testing	NLDC
191	400 KV BUS-I AT FSTPP	18/02/2015	09:30	18/02/2015	17:30	ODB	FSTPP	BALANCE BAY WORK OF 400KV FSTPP-MALDA-II AT FSTPP	NLDC
192	315 MVA ICT#1 at Subhasgram	18/02/2015	09:00 HRS	20/02/2015	17:00 HRS	OCB	ER-II(KOL)	OLTC oil migration	WBSETCL
193	80 MVAR L/R OF 400 KV RNC - SIPAT - I AT RNC	18/02/2015	10:00	18/02/2015	18:00	ODB	ER-I	FOR JUMPERING OF NGR BYPASS	NLDC
194	400 KV BUS-2 at Sundargarh	18/02/2015	8:00:00 AM	20/02/2015	5:00:00 PM	OCB	ER-II(OD)	For erection of extra BPI and Rectfication of mechanical interlock problem in 400 KV Isolator	

195	220kV Siliguri-Main Bus-1	18/02/2015	8.00 hrs	23/02/2015	16.00 hrs	OCB	ER-II(KOL)	Isolator Replacement under Addcap	WBSETCL
196	220KV MTN-DHN-I	18/02/2015	09:00	18/02/2015	17:00	ODB	ER-II(KOL)	Y & B PH CVT replacement	DVC
197	400 KV JSR - CBS - I	19/02/2015	08:00	19/02/2015	17:00	ODB	ER-I	FOR BUS EXTN. WORK.	
198	400 KV BSF - SSRM - I AND II	19/02/2015	08:00	27/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF - LAKHISARAI - I AT BSF	NLDC
199	132 KV HATIDAH - SHEKHPURA T/L OF BSPTCL	19/02/2015	08:00	20/02/2015	18:00	OCB	ER-I	FOR STRINGING OF 400 KV D/C KISHANGANJ - PATNA LINE	BIHAR
200	50 MVAR L/R OF 400 KV BSF - BANKA - I AT BANKA	19/02/2015	10:00	19/02/2015	16:00	ODB	ER-I	FOR AMP WORK	
201	221KV MTN-DHN-II	19/02/2015	09:00	19/02/2015	17:00	ODB	ER-II(KOL)	Bay AMP work	DVC
202	400kvBus Reactor-2 at FSTPP	19/02/2015	09:30	19/02/2015	17:30	ODB	NTPC	Relay, bay CT & Reactor testing	
203	400/132 kv Kh-Sabour	19/02/2015	09:30	19/02/2015	17:30	ODB	NTPC	PM works & Relay Testing	
204	220 KV Bus-II at Birpara	20/02/2015	13:00	20/02/2015	16:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
205	50 MVAR L/R OF 400 KV BSF - BANKA - II AT BANKA	20/02/2015	10:00	20/02/2015	16:00	ODB	ER-I	FOR AMP WORK	
206	220 KV BUS COUPLER BAY AT PSL	20/02/2015	09:00	20/02/2015	17:00	ODB	ER-I	FOR AMP WORK	BIHAR
207	80 MVAR L/R OF 400 KV RNC - SIPAT - II AT RNC	20/02/2015	10:00	20/02/2015	18:00	ODB	ER-I	FOR JUMPERING OF NGR BYPASS	NLDC
208	765kV, 240MVar Bus Reactor-2 at Sundargarh	20/02/2015	08:00:00	26/02/2015	17:00:00	OCB	ER-II(OD)	Fire fighting Pylon support erection	NLDC
209	400 KV BSF - PRN - I & II	20/02/2015	08:00	27/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPPING OF 400 KV BSF - SSRM 3 & 4 WITH 400 KV BSF PURNEA - I & II AT BSF	NLDC AND SUBJECT TO SYSTEM CONDITIONS
210	132 KV BARH-BSF(BSEB)-D/C	21/02/2015	8:00 AM	22/02/2015	18:00	OCB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
211	132 KV BARH-HATHIDAH-D/C	21/02/2015	8:00 AM	22/02/2015	18:00	OCB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
212	220 KV Bus II at Subhasgram	21/02/2015	07:00 HRS	21/02/2015	17:00 HRS		ER-II(KOL)	Y ph CVT replacement of 220KV Bus-II	WBSETCL
213	400kv Fkk-Kahalgao ckt-1	21/02/2015	09:30	21/02/2015	17:30	ODB	NTPC	Relay & CT Testing.	NLDC
214	315 MVAR ICT#4 at Subhasgram	19/02/2015	09:00 HRS	21/02/2015	17:00 HRS	OCB	ER-II(KOL)	OLTC oil migration	WBSETCL
215	132 KV MAIN BUS AT PRN S/S	22/02/2015	08:00	22/02/2015	14:00	ODB	ER-I	CONSTRUCTION WORK OF ICT -2 BAY AND RETRIFITTING OF ICT, RECONDUCTORING OF 132 KV BUS AND JOINING BOTH SECTION	BIHAR
216	400 KV JSR - RKL - II	22/02/2015	08:00	22/02/2015	17:00	ODB	ER-I	CONSTN. WORK RELATED TO LILO OF SAID LINE AT CHAIBASA	
217	220KV ICT#1 incommer at Durgapur	23/02/2015	08:00	28/02/2015	18:00	ODB	ER-II(KOL)	CB & Isolator comisioning under ADDCAP	
218	220 KV BSF(BSPTCL) - TENUGHAT S/C	23/02/2015	08:00	24/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPING OF 400 KV BSF - SSRM - I WITH 400 KV BSF - LAKHISARAI - I AT BSF	BIHAR / JHARKHAND (AFTER OUTAGE OF ONE UNIT OF TENUGHAT)
219	220 KV D/C BIHARSHARIF - BEGUSARAI T/L OF BSPTCL	23/02/2015	08:00	24/02/2015	18:00	OCB	ER-I	FOR STRINGING OF 400 KV D/C KISHANGANJ - PATNA LINE	
220	132 KV SLG-MELLI	23/02/2015	08:00	27/02/2015	16:00	ODB	ER-II(KOL)	Insulator Replacement	SIKKIM
221	400 KV BUS-1 at Sundargarh	23/02/2015	8:00:00 AM	25/02/2015	5:00:00 PM	OCB	ER-II(OD)	For erection of extra BPI and Rectfication of mechanical interlock problem in 400 KV Isolator	
222	220 KV BRP-CHP-III CB & Isolator	24/02/2015	09:00	02/03/2015	17:00	OCB	ER-II(KOL)	Bus-I& II Isolator retrofitting	NLDC
223	220 KV Bus-I at Birpara	24/02/2015	09:30	24/02/2015	12:30		ER-II(KOL)	for opening iso lator drop-out for Iso retrofitting.	WBSETCL
224	50 MVAR L/R OF RNC - MTN (RB) - I AT RNC	24/02/2015	10:00	24/02/2015	18:00	ODB	ER-I	FOR JUMPERING OF NGR BYPASS	
225	220 KV TSTPP - RENGALI	24/02/2015	09:00	26/02/2015	17:00	OCB	NTPC	ANNUAL OVERHAULING	OPTCL
226	50 MVAR L/R OF RNC - MTN(RB) - II AT RNC	25/02/2015	10:00	25/02/2015	18:00	ODB	ER-I	FOR JUMPERING OF NGR BYPASS	
227	220 KV RAMCHANDRAPUR - JODA S/C	25/02/2015	08:00	25/02/2015	17:00	ODB	ER-I	FOR DIVERSION OF THE MENTIONED LINE WHICH IS CROSSING CHAIBASA SITE.	OPTCL
228	400 KV BSF - SSRM - III AND IV	25/02/2015	08:00	27/02/2015	18:00	OCB	ER-I	S/D IS REQUIRED FOR BAY SWAPPING OF 400 KV BSF - SSRM 3 & 4 WITH 400 KV BSF PURNEA - I & II AT BSF	NLDC
229	220 KV Bus-II at Birpara	27/02/2015	14:00	27/02/2015	17:00		ER-II(KOL)	for opening iso lator drop-out for Iso retrofitting.	WBSETCL
230	220 KV Bus-I at Birpara	27/02/2015	09:00	27/02/2015	12:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
231	132 KV HAJIPUR SHITALPUR LINE	27/02/2015	09:00	28/02/2015	16:00	ODB	ER-I	FOR STRINGING OF 400 KV D/C (QUAD) BARH-GORAKHPUR LINE	BIHAR
232	765kV, 240MVar Angul Line Reactor-2 at Sundargarh	27/02/2015	08:00:00	04/03/2015	17:00:00	OCB	ER-II(OD)	Fire fighting Pylon support erection	NLDC
233	220 KV Bus-II at Birpara	02/03/2015	13:00	02/03/2015	16:00		ER-II(KOL)	for re-connection of Isolator drop-out for Isolator retrofitting.	WBSETCL
234	400 KV PATNA - BALIA - 3 & 4	05/03/2015	08:00	06/03/2015	18:00	OCB	ER-I	FOR STRINGING OF 400 KV D/C KISHANGANJ - PATNA LINE	NLDC
235	400 KV PATNA - BALIA - 1 & 2	10/03/2015	08:00	11/03/2015	18:00	OCB	ER-I	FOR STRINGING OF 400 KV D/C KISHANGANJ - PATNA LINE	NLDC
236	132 KV PRN-SAHARSA S/C	10/03/2015	08:00	11/03/2015	18:00	ODB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR
237	220 KV NPRN-MADHEPURA D/C	15/03/2015	08:00	16/03/2015	18:00	ODB	ER-I	FOR POWER LINE CROSSING WORK OF 400KV PATNA-KISHANGANJA LINE	BIHAR

Annexure-C.2

**Anticipated Power Supply Position for the month of
Feb-15**

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	BIHAR		
	i) NET MAX DEMAND	2700	1247
	ii) NET POWER AVAILABILITY- Own Source	168	53
	- Central Sector	1567	899
	iii) SURPLUS(+)/DEFICIT(-)	-965	-295
2	JHARKHAND		
	i) NET MAX DEMAND	1050	700
	ii) NET POWER AVAILABILITY- Own Source	560	224
	- Central Sector	580	331
	iii) SURPLUS(+)/DEFICIT(-)	90	-145
3	DVC		
	i) NET MAX DEMAND (OWN)	2790	1565
	ii) NET POWER AVAILABILITY- Own Source	4410	2616
	- Central Sector	380	240
	Long term Bi-lateral (Export)	2069	1390
	iii) SURPLUS(+)/DEFICIT(-)	-69	-99
4	ODISHA		
	i) NET MAX DEMAND	3550	1800
	ii) NET POWER AVAILABILITY- Own Source	2700	1300
	- Central Sector	993	553
	iii) SURPLUS(+)/DEFICIT(-)	143	53
5	WEST BENGAL		
5.1	WBSEDCL		
	i) NET MAX DEMAND (OWN)	5015	2534
	ii) CESC's DRAWAL	440	43
	iii) TOTAL WBSEDCL's DEMAND	5455	2577
	iv) NET POWER AVAILABILITY- Own Source	3762	1582
	- Import from DPL	130	50
	- Central Sector	1722	1021
	v) SURPLUS(+)/DEFICIT(-)	160	75
5.2	DPL		
	i) NET MAX DEMAND	230	200
	ii) NET POWER AVAILABILITY	360	250
	iii) SURPLUS(+)/DEFICIT(-)	130	50
5.3	CESC		
	i) NET MAX DEMAND	1550	675
	ii) NET POWER AVAILABILITY - OWN SOURCE	1070	605
	FROM WBSEDCL	480	43
	iii) TOTAL AVAILABILITY	1550	648
	iv) SURPLUS(+)/DEFICIT(-)	0	-27
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
	i) NET MAX DEMAND	6795	3409
	ii) NET POWER AVAILABILITY- Own Source	5192	2436
	- Central Sector	1722	1021
	iii) SURPLUS(+)/DEFICIT(-)	119	48
7	SIKKIM		
	i) NET MAX DEMAND	121	52
	ii) NET POWER AVAILABILITY- Own Source	16	6
	- Central Sector	99	46
	iii) SURPLUS(+)/DEFICIT(-)	-6	0
8	EASTERN REGION At 1.03 AS DIVERSITY FACTOR		
	i) NET MAX DEMAND	16510	8774
	Long term Bi-lateral	2069	1390
	ii) NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	15843	8335
	iii) PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	-668	-439

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Ref: GKEL/BBSR/ERLDC/2014-15/4845
Date: 21-01-2015

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

Sub: Addendum to our Agenda Point of 105th OCC meeting on 22nd January 2015

Dear Sir,

We would like to inform you that our dedicated 400 KV D/C Transmission line from GMR to Angul pooling station has been charged on 21st December 2014. The other 400 KV S/C Transmission line from GMR to the OPTCL sub-station at Meramundali is in advanced stage of construction and is expected to be charged in the last week of January 2015.

We are proposing herewith the Scheme of Operation post charging of 400 KV S/C line. Please find attached herewith GKEL switchyard single line diagram (SLD) and the proposed Scheme as addendum to our proposed agenda for deliberation in the OCC Meeting and allow us charging the 400 KV S/C GMR-Meramundali Transmission line.

Thanking you.

For **GMR Kamalanga Energy Ltd**

Haresh Kumar Satapathy
Haresh Kumar Satapathy
GM- Power Sales & Regulatory



Attachments: Proposed Scheme of Operation & Single Line Diagram (SLD)

Copy to: General Manager, ERLDC – For kind information & needful please.

PREFERRED SCHEME OF OPERATION**A. ALL THREE UNITS IN OPERATION:****NORMAL OPERATING CONDITION:**

- a) Two units (Units# 1 & 2) supplying to CTU ("Angul PGCIL S/s") and one unit (Unit # 3) to STU ("Meramundali S/s")
- b) Bus Isolators No 40-89-A1 and 40-89-B1 are in closed condition.
- c) Bus A1 in charged condition with CBs 4-3-52 & 4-6-52 are in Closed Condition.
- d) Bus B1 in charged condition with CBs 4-1-52 & 4-4-52 are in Closed Condition.
- e) Tie Breakers 4-2-152 & 4-5-152 are in Closed condition & Unit # 1 & 2 are connected to CTU system.
- f) Availing Aux. Power by Unit# 1 & 2 in Case of Unit tripping: From CTU Grid
- g) Circuit Breakers 4-9-52 and 4-7-52 are in open Position. Unit # 3 is connected to STU through the Tie Breaker 4-8-152 in Closed condition.
- h) Availing Aux. Power by Unit # 3
 - in Case of Unit tripping: From STU system
 - Unit Start up: Aux power from STU System
 - in Case of STU Line Tripping: Emergency Aux. Power from Own generation of Unit # 1 & 2 through Closing of Circuit Breaker 4-9-52

COMMERCIAL ARRANGEMENT:

- GRIDCO share of 25% power from Unit # 3
- Other LTOA Customers through CTU Network

B. EMERGENCY OPERATING CONDITIONS (TWO UNITS IN OPERATION)

Either of Unit # 1 or 2 is in running condition & Unit # 3 is in running condition

Option - 1: Unit # 1 or 2 shall be connected to CTU system and Unit # 3 shall be connected to STU System

UNIT # 3 is under Shutdown and Unit # 1 & 2 are in Operation:

Option - 1: One Unit shall be connected to CTU system and the other Unit shall be diverted to STU System

Option - 2: Power supply to GRIDCO can be done through CTU System while both the units unit # 1 & 2 are connected to CTU system and supplying other customers.

C. METERING ARRANGEMENT:

Energy Meters at all the outgoing feeders and GTs shall be used for the purpose of Energy Accounting.

In case of STU feeder, Energy Meter shall be at OPTCL S/s interface point.

ALTERNATE SCHEME OF OPERATION

ALL THREE UNITS IN OPERATION:

A. NORMAL OPERATING CONDITION:

- a) Two units (Units# 1 & 2) supplying to CTU ("Angul PGCIL S/s") and one unit (Unit # 3) to STU ("Meramundali S/s")
- b) Bus Isolators No 40-89-A1 and 40-89-B1 are in Open condition.
- c) All the Breakers 4-3-52 & 4-6-52 and 4-1-52 & 4-4-52 are in Closed Condition
- d) Unit # 1 & 2 are connected to CTU system through Tie Breakers 4-2-152 & 4-5-152 respectively.
- e) Availing Aux. Power by Unit# 1 & 2 in Case of Unit tripping: From CTU Grid
- f) All Isolators and Breakers of Dia 4 in closed condition.
- g) Breakers 4-9-52 & 4-12-52 and 4-7-52 & 4-10-52 are in Closed condition
- h) Unit # 3 is connected to STU system Tie Breaker 4-8-152.
- i) Availing Aux. Power by Unit # 3
 - in Case of Unit tripping: From STU system
 - Unit Start up: Aux power from STU System
 - in Case of STU Line Tripping: Emergency Aux. Power not available **(Critical)**

COMMERCIAL ARRANGEMENT:

- GRIDCO share of 25% power from Unit # 3
- Other LTOA Customers through CTU Network

B. OTHER EMERGENCY OPERATING CONDITIONS: (TWO UNITS IN OPERATION)

Either of Unit # 1 or 2 is in running condition & Unit # 3 is in running condition

Option - 1: Unit # 1 or 2 shall be connected to CTU system and Unit # 3 shall be connected to STU System. No Change in configuration.

UNIT # 3 is under Shutdown and Unit # 1 & 2 are in Operation:

Option - 1: One Unit shall be connected to CTU system (Only Bus-B) and the other Unit shall be connected to STU System through Bus A.

Option - 2: Both Unit # 1 & 2 are connected to CTU system & Power supply to GRIDCO can be done through CTU System.

C. METERING ARRANGEMENT:

Energy Meters at all the outgoing feeders and GTs shall be used for the purpose of Energy Accounting. In case of STU feeder, Energy Meter shall be at OPTCL S/s interface point.

SINGLE LINE DIAGRAM GKEL 400 KV SUBSTATION

