



Minutes of 124th OCC Meeting

Date: 07.09.2016
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata: 700 033

Eastern Regional Power Committee

Minutes of 124th OCC Meeting held on 23rd August, 2016 at ERPC, Kolkata

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

Item no. 1: Confirmation of minutes of 123rd OCC meeting of ERPC held on 26.07.2016

The minutes of 123rd OCC meeting were uploaded in ERPC website and circulated vide letter dated 11.08.2016 to all the constituents.

Members may confirm the minutes.

Deliberation in the meeting

Ind-Bharat requested for amendment of Item No. B7.1,

OCC agreed to amend the third para of Item No. B.7.1 which is as given below—

“As per CERC order and 33rd ERPC decision, IBEUL will not be allowed to inject firm/infirm power through LILO arrangement on and after 31st July 2016.”

ERLDC requested for amendment of item B.31,

OCC agreed to amend the deliberation of Item No. B.31 which is as given below—

“ERLDC informed that frequency response of the ER is poor and needs lot of improvement.

ERLDC added that this is the best time to put all the generators in FGMO/RGMO mode as the grid frequency is stable and almost close to 50 Hz.

OCC decided that all the generators should put FGMO/RGMO in service from 15th August, 2016.

All generators agreed.”

With the above amendments under Item No. B.7.1 and B.31, members confirmed the minutes of 123rd OCC Meeting.

PART A

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

- B.1. Commissioning of new transmission elements in Eastern Region
- B.2. Status of projects funded under PSDF schemes
- B.3. Operational load flow study for Off-peak period
- B.4. Oscillations on 26.07.16 in ER Grid
- B.5. Interruption of real time data due to all control centres in ER
- B.6. Installation of PMUs in Eastern Region under URTDSM project
- B.7. Ratification of projected Demand and generation for POC transmission charges and loss calculations for Q3(2016-17)

- B.8. Signing of O&M agreement between DVC and POWERGRID for O&M of 02 no. 220kV bays at Ranchi S/S for 220kV Ranchi-Gola line of DVC
- B.9. Collapse of Tower in 400KV Patna-Kishengang D/C Line due to river encroachment
- B.10. Status of UFRs healthiness installed in Eastern Region
- B.11. Healthiness of SPS existing in Eastern Region
- B.12. Status of Islanding Schemes of Eastern Region
- B.13. Restoration of PLCC system of important lines
- B.14. Status update of previous decisions/follow up actions
- B.15. Third Party Protection Audit
- B.16. Inspection of UFR relays
- B.17. Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN
- B.18. Certification through BIS as per IS 18001:2007 to all generating/ transmission units
- B.19. Formulation of a Skill Plan for Power Sector based on the assessed skill gap in the sector
- B.20. Energy Generation data management from Renewable Energy Sources
- B.21. Compilation of data for meeting Renewable Energy targets of 175 GW by 2020 -- Reference from MNRE
- B.22. Data of Peak Demand – Submission of hourly power cut data
- B.23. Recovery Procedures of ER Constituents – ERLDC
- B.24. Dynamic data of Generator Models required in PSSE for Simulations
- B.25. Implementation of Automatic Demand Management Scheme (ADMS)
- B.26. Long outage of important transmission lines
- B.27. Transfer capability determination by the states -- Agenda by NPC
- B.28. Reasons for demand –supply gap and its variation -- Agenda by NPC
- B.29. Update on status of telemetry
- B.30. Status of breaker operation at Malbase end during auto-reclose operation of 400 kV Malbase – Binaguri
- B.31. Status of Disturbance Recorder, Stand alone Event Logger and Time Synchronization equipment.
- B.32. Status of Emergency Restoration System (ERS Towers) for Eastern Region constituents
- B.33. Pollution mapping for Eastern Region
- B.34. Mock Black start exercises in Eastern Region
- B.35. Restricted Governor Mode of Operation
- B.36. Reactive Power performance of Generators and GT tap position optimization
- B.37. Erroneous recording/Non-receipt of data by Interface Meters
- B.38. Auxiliary consumption of HVDC Sasaram under Deviation settlement Mechanism

PART B: ITEMS FOR DISCUSSION

(Items to be discussed as listed in “Part A”)

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

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

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

The list of new Transmission Elements commissioned/charged during **July, 2016** as informed by ERLDC is given below:

1. 500MVA, 400/220kV ICT-I at Pandiabibili first time charged at 15:41hrs of 01/07/16 from 400kV side only.
2. 400kV Mendhasal-Pandiabili first time charged at 19:55hrs of 01/07/16.
3. 63MVA L/R of 400kV New Duburi-Pandiabili at Pandiabibili first time charged at 23:49hrs of 01/07/16.
4. 400kV Pandiabibili-New Duburi charged first time at 22:48hrs of 01/07/16.
5. 400kV Ranchi-Chandwa -I and 400kV Bus -I at Chandwa first time charged at 20:45 hrs of 10/07/16.
6. 125MVA B/R-I at Chandwa first time charged at 21:49 hrs of 10/07/16.
7. 400kV Bus-II at Chandwa first time charged at 22:26 hrs of 10/07/16.
8. 400kV Gaya-Chandwa -I first time charged at 22:32 hrs of 10/07/16.
9. 400kV Gaya-Chandwa -II first time charged at 23:05 hrs of 10/07/16.
10. 400kV new Ranchi-Chandwa -II first time charged at 23:11 hrs of 10/07/16.
11. 125MVA B/R-II at Chandwa first time charged at 23:29 hrs of 10/07/16.
12. 500MVA ICT-II at Pandiabibili first time charged at 16:06hrs of 11/07/16 from 400kV side only.
13. 7 no of 220kV GIS bays at Pandiabibili (Bay nos 201,202,203,204,205,207 and 209), 220kV Bus-I and II at Pandiabibili first time charged(on no load) at 18:23hrs of 18/07/16.
14. 400kV Biharsharif-Purneack-I & II with 80MVAR line reactor at Biharshariff (after swapping of bays) first time charged at 13:00hrs and 13:18hrs of 19/07/16 respectively.
15. 400kV Biharsharif-Varansickt-I & II with 50MVAR line reactor at Biharshariff (after swapping of bays) first time charged at 21:05hrs and 21:38hrs of 19/07/16 respectively.
16. 400kV Sarnath – Sasaram line shift from NR Bus to ER Bus at Sasaram sub-station at 16:00hrs of 23/07/16.
17. 220kV Gaya-Sonenagar (through Bodhgaya-I bay at Gaya) first time charged at 16:52hrs of 27/07/16.
18. Bay No-208 i.e. 220kV Line-6 bay and Bay No-206 i.e. 220kV Bus Coupler bay(all on no load) at Pandiabibili first time charged at 20:18hrs and 20:28hrs of 28/07/16 respectively.

Other constituents may update (if any).

Deliberation in the meeting

Members noted.

Item No. B.2: Status of projects funded under PSDF schemes

In the PSDF review meeting held on 29.04.16 at N. Delhi, it was advised to RPCs to monitor the status of all the projects funded by PSDF. Therefore, constituents are requested to update the status of projects which are being funded by PSDF in the desired format. The latest status as updated by WBSETCL, OPTCL & ERPC is as given below:

S N	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	Amount approved (in Rs.)	Amount drawn till date (in Rs.)	Status as updated in 122 nd OCC
1	WBSETCL	Renovation & up-gradation of protection system of 220 kV & 400 kV Substations in West Bengal	31-12-14		120.67 Cr	11.04 Cr.	95 % Supply Completed
2	WBSETCL	Transmission System Improvement of WBSETCL					
3	OPTCL	Renovation & Up-gradation of protection and control systems of Sub-stations in the State of Odisha in order to rectify protection related deficiencies.	11.05.15	10.05.17	162.5 Cr.	4.91 Cr.	Erection work of the already procured equipment is going on. LOA for eight different types of Testing equipment already placed worth about Rs.4

							Cr. Placement of LOA for balance equipment is under process. Tender for Sub-station automation will be floated in July-2016.
4	ERPC	Creation & Maintenance of web based protection database and desktop based protection calculation tool for Eastern Regional Grid	17.03.16		20 Cr.	4.94 Cr.	1 st Milestone completed

Other constituents may update.

Deliberation in the meeting

OHPC informed that they have also applied for PSDF funding for Renovation and up-gradation of protection and control system of OHPC in 2014 and resubmitted again.

It was informed that Bihar has not submitted the details of projects being funded by PSDF. BSPTCL agreed to share the information.

OCC also advised JUSNL to prepare a DPR for renovation and up-gradation of Protection & control system as per the recommendations of ERPC team report and submit their proposals to PSDF appraisal committee.

MS, ERPC informed that the following two DPRs for training of ER constituents is under preparation by ERPC Secretariat for PSDF funding and will be submitted to PSDF Secretariat shortly:

- 1) *Five years training programme at ERPC level (within India)*
- 2) *Training programme in foreign countries*

Members appreciated the initiatives taken by ERPC Secretariat and requested Member Secretary to submit both the DPRs to PSDF secretariat at the earliest for the benefit of ER constituents.

Item No. B.3: OPERATIONAL LOAD FLOW STUDY FOR OFF-PEAK PERIOD

Under PSDF funded project for Creation of protection database M/s PRDC have carried out an operational load flow study based on peak data of 26.05.2016. The report is available in ERPC website. During discussions on the study a need was felt for a similar study based on Off-peak conditions.

Members may please decide a date for Off-peak data collection.

Deliberation in the meeting

*PRDC presented the status of the project. Details of pending data is enclosed at **Annexure-B3**. PRDC informed that they need snap shot of off-peak data of each sub-station for carrying out off-peak load flow analysis similar to peak load analysis.*

After detailed deliberation, OCC decided that all constituents should provide the relevant data as per the format available in ERPC website for two instances:

- 13:00hrs on 27th August, 2016 &
- 03:00hrs on 28th August, 2016

OCC advised all the constituents to update the Network Data format with network augmentation from 31st May 2016 to 31st of August 2016 in the given format.

Constituents noted and assured to provide the requisite information.

Further, MS, ERPC informed that a hands on training program has been scheduled from 05/09/2016 to 09/09/2016 at ERPC Kolkata based on the progress of the implementation of protection database and protection setting calculation tool for Eastern Region, Dr. R. Nagaraja, MD, PRDC would personally conduct the sessions

All the constituents were requested to nominate their young protection / SLDC engineers who would be using the tool in day to day works to attend the five (5) day training programme. For this training programme maximum seating capacity is restricted up to 30 (thirty) @ 3 participants/ constituent. It was further intimated that subsequent training programmes are shortly being arranged for accommodating others. The participants are to carry their own laptops on which the software would be loaded during the training programme.

Constituents noted and assured to nominate their respective engineers for the training.

Item No. B.4: Oscillations on 26.07.16 in ER Grid

At 16:30 hrs of 26.07.16, oscillations were observed in Durgapur and Farakka PMUs. Nearby generating stations were asked to submit data from their unit DCS. Till now ERLDC has received data from KhSTPP, BKTP, Mejia'B', DSTPS, RTPS, MPL, HEL, KTPS. It is requested that other Generating Stations viz. FSTPP, Sagardighi, PPSP, DPL, ANPL, Budge-Budge may also share the details i.r.o the above incident along with unit DCS data.

ERLDC may update.

Deliberation in the meeting

ERLDC explained the oscillations with a presentation (which is enclosed at **Annexure-B4**) and informed that oscillations were observed in voltage as well as MW & MVAR. Further during deliberation OCC felt that for further analysis data on load behavior of industrial loads in and around Durgapur and generators data of Sagardighi, Adhunik and other generators are required..

OCC advised DVC, WB, WBPDC and Adhunik to share the details with ERLDC.

Item No. B.5: Interruption of real time data due to all control centres in ER

There was a total failure of real time SCADA data to all control centres from 05:53 Hrs of 08-August-16. As an interim arrangement, real time SCADA data was restored on 10-August-16 at 03:19Hrs. The root cause is yet to be arrived and fixed. We always talking about the route redundancy in the communication links but it is noticed that redundancy to the communication equipment is also not available.

Presently, with the implementation of new SCADA systems at all the control centres, RTUs has to report to both the control centers i.e. Main as well as Backup control centre.

At a time, only one control centre will act as main and other will be on standby (Hot/Standby architecture)

All communication link i.e. RTU links as well as ICCP data link with constituents may be provided at backup control centre also at the earliest so that real time SCADA data could be available to Backup ERLDC in case of any communication / machine failure at Main Control centre.

It is being requested POWERGRID to provide the redundancy for communication equipment system / route diversity of communication link / redundancy at both the control centres.

POWERGRID may give the status.

Deliberation in the meeting

Powergrid informed that there was some problem in Patna SLDC due to which one ICCP link failed which caused the interruption of data.

OCC advised Powergrid to provide redundancy for communication equipment system / route diversity of communication link / redundancy at both the control centres. Powergrid was also advised to submit a report on the incident and action taken.

Item No. B.6: Installation of PMUs in Eastern Region under URTDSM project

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

POWERGRID may update the status.

Deliberation in the meeting

It was informed that out of 247 PMUs 46 have been installed.

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

Item No. B.7: Ratification of projected Demand and generation for POC transmission charges and loss calculations for Q3(2016-17)

The projected Demand and Generation of ER constituents to be considered in the base case for POC transmission charge and loss calculations for Q3(Oct,16-Dec,16) are attached at **Annexure-B.7** for ratification by the constituents.

Members may kindly go through and confirm the data.

Deliberation in the meeting

It was informed that feedback from DVC and OPTCL have been received and incorporated.

OCC advised all the other constituents to go through the annexure and confirm the data along with modification required (if any).

Item No. B.8: Signing of O&M agreement between DVC and POWERGRID for O&M of 02 no. 220kV bays at Ranchi S/S for 220kV Ranchi-Gola line of DVC-- PGCIL

As informed by Powergrid vide letter dated 10.08.2016 two no. 220kV bays of DVC for 220kV Ranchi-Gola D/C Line of M/S DVC has been commissioned in March'2013 and POWERGRID is maintaining the bays since commissioning. Even after regular follow-up from our Ranchi site, O&M agreement for maintenance of 2 nos. 220 kV bays at Ranchi could not be finalized.

In spite of continuous persuasions and various correspondences made with DVC by POWERGRID regarding signing of O&M agreement of 2 nos. 220kV bays of DVC at POWERGRID Ranchi S/S, DVC has not signed the agreement so far. The said matter has also

been discussed with number of times with various Officials of M/S DVC but the signing of O&M agreement has not been materialised.

Due to non availability of O&M agreement between DVC and POWERGRID, our Management/ Auditor has raised serious audit para for non receipt of payment for carrying out O&M of two no bays of M/S DVC at Ranchi (PG) S/S.

Signing of O&M agreement may be expedited for reliability and better service for maintaining two no. 220KV bays for 220KV Ranchi-Gola D/C line of DVC terminated at Ranchi S/S of POWERGRID

Powergrid and DVC may update.

Deliberation in the meeting

OCC advised DVC to interact with Powergrid and resolve the issue.

Item No. B.9: Collapse of One no Tower in 400KV Patna-Kishengang D/C Line due to river encroachment-- PGCIL

As informed by Powergrid vide letter dated 10.08.2016 due to unprecedented flash flood in Kankai river, one no. Tower at location no. 51(DD+18) of 400 kV Patna - Kishangani D/c Line near village Simalbari. Dist- Kishanganj, Bihar had collapsed on 26.07.2016 at about 12.00 hrs. The site of collapsed tower is fully sub-merged with water and very difficult to reach at the affected site.

Further, the committee constituted to investigate the cause of collapse of tower and to suggest the remedial measures, consisting of expert members from POWERGRID and CEA, Delhi, they are not in a position to even visit the affected site due to severe flow of water in Kankai River. The entire area is inundated with water. The flood situation in that area is worsen due to incessant rain in Nepal. The restoration of the said line shall be taken immediately after receding the water at site.

In view of the above, the said outage period may be treated as force majeure condition i.e beyond the control of POWERGRID and the outage shall be excluded for the purpose of availability.

Members may discuss.

Deliberation in the meeting

OCC accepted the incidents as force majeure and referred the issue to commercial committee meeting for further needful.

Item No. B.10: Status of UFRs healthiness installed in Eastern Region

UFR Healthiness Certification for the month of June, 2016 has been received from West Bengal, CESC and DVC only.

Other constituents (JUSNL, BSPTCL & OPTCL) may submit.

Deliberation in the meeting

UFR healthiness certification for the month of June, 2016 has been received from all constituents.

Item No. B.11: Healthiness of SPS existing in Eastern Region

CESC, JITPL, GMR & Chuzachen have submitted the healthiness certificate for the month of July, 2016.

Vedanta, Powergrid-Odisha & Powergrid ER-II & NTPC may submit the healthiness certificate for July, 2016.

Respective members may update.

Deliberation in the meeting

SPS healthiness certification for the month of June, 2016 has been received from all respective constituents.

Item No. B.12: Status of Islanding Schemes of Eastern Region

B.12.1: Status of commissioned Islanding Schemes in Eastern Region

At present, the following islanding schemes are in service:

1. CESC as a whole Islanding Scheme, CESC
2. BkTPS Islanding Scheme, WBPDC
3. Tata Power Islanding Scheme, Haldia
4. Chandrapura TPS Islanding Scheme, DVC

In 108th OCC meeting, respective constituents agreed to certify that the islanding schemes under their control area are in service on monthly basis.

The healthiness certificate for Islanding Scheme for July, 2016 has been received from BkTPS, Tata Power, CESC and CTPS, DVC.

Members may note.

Deliberation in the meeting

Members noted.

B.12.2: FSTPS Islanding Scheme, NTPC

In 118th OCC, NTPC informed that their part is ready for implementation.

Powergrid informed that the battery charger has been delivered and expected to complete the work by March, 2016.

In 119th OCC, Powergrid informed that the battery charger has been delivered to site and for commissioning with deputation of service engineer JUSNL has to ensure the supply of materials which are in the scope of JUSNL.

OCC advised JUSNL to coordinate with Powergrid and arrange the required materials/works which are in the scope of JUSNL. JUSNL agreed.

In 120th OCC, JUSNL informed that the required materials/works have been arranged, Powergrid may start the commissioning work.

In 121st OCC meeting, Powergrid informed that official confirmation for the readiness of site/material availability by JUSNL is still awaited.

OCC advised JUSNL to give official correspondence regarding their readiness and co-ordinate for early commissioning of the Islanding scheme.

In 122nd OCC, NTPC informed that cable laying completed and interfacing is pending.

JUSNL informed that the required materials/works will be completed within 20 days and Powergrid will be contacted accordingly.

In 33rd TCC, JUSNL informed that the required materials/works will be completed by 1st July 2016 and PGCIL will be informed accordingly.

TCC advised JUSNL to send an official letter to PGCIL confirming their readiness with a copy to ERPC.

PGCIL informed that they would mobilize the vendor within 10 days after receiving the official communication from JUSNL.

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

NTPC/Powergrid may update.

Deliberation in the meeting

Powergrid informed that PLCC installation work is in progress and commissioning will be done after completion of the PLCC installation.

B.12.3: Bandel Islanding Scheme, WBPDC

In 120th OCC, WBPDC informed that the islanding scheme will be implemented by December, 2016.

Subsequently, in the PSDF review meeting held on 29.04.16 in Delhi with Joint Secretary(OM), MOP, GOI in Chair, ERPC placed a proposal for funding the Bandel Islanding scheme from PSDF. The review committee informed that such type of islanding scheme is now being funded by PSDF and therefore Bandel Islanding Scheme also can be included.

Accordingly, WBPDC was requested to place the detail proposal for PSDF funding to nodal agency NLDC with a copy to ERPC at the earliest so that the road map is strictly adhered to.

In 121st OCC, WBPDC informed that DPR for PSDF funding is under preparation.

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

WBPDC may update the latest status.

Deliberation in the meeting

It was informed that PSDF appraisal committee meeting will be held in September, 2016.

Item No. B.13: Restoration of PLCC system of important lines

In 119th OCC, JUSNL informed that the following:

- a) In 220 KV Chandil –Ramchandrapur line auto-reclosure has been enabled and linked

with PLCC panels on 09.03.16.

- b) In 220 KV Chandil –Ranchi line auto-reclosure has been enabled and termination done in PLCC panels (Auto-reclosure will be in service after testing of PLCC scheduled on 22.03.16)
- c) In 220 KV Chandil –Santaldih line auto-reclosure has been enabled and termination done in PLCC panels at Chandil end but due to non-availability of PLCC panels at Santaldih(WBPDCL) end the A/R and PLCC scheme could not be activated.
- d) In 220 KV Ramchandrapur-Joda line auto-reclosure has been enabled and termination done in PLCC panels at Ramchandrapur end but due to non-availability of PLCC panels at Joda (OPTCL) end the A/R and PLCC scheme could not be implemented.

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

In 33rd ERPC Meeting, WBPDCL and OPTCL agreed to settle the issue bilaterally with JUSNL. JUSNL was advised to resolve the AMC related issues with West Bengal & Odissa. All are requested to inform the development to CERC .

However ERPC advised JUSNL, OPTCL and WBPDCL to get the PLCC system restored for both the lines by July 2016 positively.

Subsequently, a special meeting was convened by JUSNL on 11.07.2016 at Ranchi to resolve the issue at the earliest.

In 123rd OCC, OPTCL informed that they received the invoice from BPL and they are charging Rs. 1.8 lacs/year for AMC, which is not reasonable as the AMC charges for 5 years is more than the panel cost of Rs. 5.1 lacs.

WBPDCL informed that they will place the order for PLCC panel to BPL within 2 days.

OCC advised OPTCL to interact with WBPDCL and BPL.

JUSNL may update.

Deliberation in the meeting

WBPDCL informed that PLCC panels will be delivered by BPL in September, 2016.

OPTCL informed that they agreed to the BPL estimate and placing the order.

Item No. B.14: Concerned members may update the latest status.

B.14.1. Commissioning of 400 kV Ind-Bharath to Jharsuguda D/C (dedicated line)

In 121st OCC, IBEUL updated the status as follows:

- All the 125 towers foundations have been completed and 125 have been erected.
- Due to route alignment one tower (i.e. 126th tower) has been increased which is under construction.
- Stringing work of 36.81 km out of 39.74 km line has been completed.
- The bay work at 400 kV Jharsuguda (Kenapalli) S/s has also been completed.
- The line will be commissioned by end of June, 2016.

In 33rd TCC/ERPC it was decided that in line with the direction from CERC (in CERC vide order dated 07.10.2015 on Petition No. 112/TT/2013) the LILO may be removed if the target (i.e. July, 2016) is not adhered by Ind-Bharath on and from 1st August, 2016 IBEUL will not be permitted to do any transaction—Infirm or firm through the LILO.

IBEUL vide mail dated 11.07.16 informed that they have lighted up Boiler #1 at 18.30 hrs on 11.07.16 and they are going to synchronise unit #1 at 04.00 Hrs on 12.07.16 and the tests to be performed along with the schedule of injection of infirm power in 15 min blocks were submitted.

Further, IBEUL vide mail dated 15.07.16, 16.07.16, 17.07.16 & 19.07.16 intimated that they have attained 353 MW at 20.56 hrs of 15.07.16 and are continuing for MCR test at 350 MW load from 15.07.16, to 19.07.16.

In 123rd OCC, Ind-Bharath informed that stringing of around 1 km line is pending due to ROW problem.

OPTCL informed that MCR test of Ind-Bharath generator was not satisfactory and they will communicate their observations.

OCC advised Ind-Bharath to commission the line by 31st July 2016 and the LILO will be removed from 1st August, 2016 as per CERC order.

Subsequently, IBEUL vide letter dated 10.08.16 declare COD of their unit based on the trial run from 15th July to 19th July, 2016 as mentioned above.

However, ERPC vide mail dated 10.08.2016 and letter dated 12.08.16 informed that ERPC will consider the COD of unit #1 of IBEUL only on full compliance of clause 5 of IEGC (4th amendment).

Ind-Bharath may update the latest status.

Deliberation in the meeting

Ind-Bharath informed that ROW problem has been resolved and the stringing of the remaining 1 km stretch of dedicated line is in progress. The dedicated line will be commissioned in another one month after necessary testings and Inspectorate's approval of the line & associated bays.

OCC, in line with the ERPC directions decided that the IBEUL will not be allowed to inject any power though LILO of 400 kV D/C Raigarh-Rourkela Ckt-I

B.14.2. Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

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

32nd TCC advised Vedanta to strictly adhere to the schedule.

In 118th OCC, advised Vedanta to adhere the decision of 32nd TCC/ERPC and complete the line by April, 2016.

In 121st OCC, Vedanta updated that 46 out of 66 foundations and installation of seven towers have been completed. OCC referred the issue to 33rd TCC.

In 122nd OCC, Vedanta updated that 51 out of 66 foundations and installation of nine towers out of 64 have been completed.

33rd ERPC extended the dead line for removal of LILO till November, 2016 as a last extension.

As a final measure, ERPC decided that Vedanta should give an undertaking in affidavit form to CTU and ERPC stating that the dedicated line will be completed by 30.11.2016. Failing which, CTU/ERLDC is authorized to open the LILO with effect from 01.12.2016. No further discussion would be entertained in ERPC forum on extension/disconnection of LILO after 01.12.2016 and then onwards no power transaction will be allowed through LILO on commercial purpose.

In 123rd OCC, Vedanta updated that 56 out of 66 foundations and installation of nine towers out of 64 have been completed.

It was informed that a reminder letter was also issued to Vedanta regarding submission of Affidavit. by ERPC.

OCC noted that Vedanta failed to furnish the affidavit and advised Vedanta to submit the undertaking in affidavit form immediately as agreed in 33rd ERPC meeting.

Vedanta agreed to submit the affidavit within a week.

Vedanta may update.

Deliberation in the meeting

Vedanta updated that 56 out of 66 foundations and installation of 17 towers out of 64 have been completed.

ERLDC informed that Vedanta is not maintaining its schedule and generating 200 MW on continuous basis from last week.

OCC advised Vedanta to maintain the schedule; otherwise, the NOC will be reduced to 200 MW.

Regarding charging of 400kV Meramundali-Vedanta line I&II through one main & tie CB from Vedanta end due to incomplete dia, TCC felt that this is violation of CEA regulations.

Vedanta informed that bay extension work is in progress and dia would complete by November, 2016. TCC advised the Secretariat to review the progress in monthly OCC meetings.

In 123rd OCC, Vedanta informed that the scheme was approved by CEA and bay extension work would be complete by November, 2016.

OCC advised Vedanta to submit a copy of the CEA Inspectorate's approval.

Vedanta vide mail dated 26.07.2016 submitted a copy of CEA approval but without the list of equipment for which the approval was granted.

Vedanta may update the latest status.

Deliberation in the meeting

Vedanta informed that bay extension work is in progress and dia would be completed by October, 2016.

B.14.3. Status of construction of Chuzachen bay at Rangpo S/s.

In 32nd TCC, Sikkim informed that the cost estimate from Powergrid was received recently and therefore after studying the same tendering will be done tentatively within a month.

In 118th OCC, Sikkim informed that tender would be floated by March, 2016 and work award will be issued by April, 2016.

In 33rd TCC/ERPC, Sikkim placed the road map for construction of the bays as follows:

- Tender will be floated by July 2016
- Bid will be opened by August 2016
- Work will be awarded by September 2016
- Bay will be commissioned by December, 2017

ERPC advised Sikkim to strictly follow the schedule and update OCC forum on regular basis.

E&P Department, Sikkim vide mail dated 15.07.16 intimated that vide their letter dated 16/06/2016 had requested POWERGRID to change the format of the bid documents for e-tendering and to insert a clause in the qualifying requirements. Sikkim had also requested POWERGRID to depute their personnel to complete the work on urgent basis. But till dated there is no response from Powergrid.

In 123rd OCC, it was informed that Sikkim is facing problem in floating the e-tender and OCC therefore advised Powergrid to help Sikkim in this regard.

Sikkim/Powergrid may update.

Deliberation in the meeting

Powergrid informed that tender was not yet floated and Sikkim has asked for some modifications in the tender document. The tender will be floated by 15th September, 2016.

B.14.4. Non availability of both line Reactors of 400KV Malda-Purnea D/C

In 120th OCC, Powergrid informed that Reactor-2 has been charged and Reactor-1, will be brought into service by September, 2016.

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

Powergrid may update.

Deliberation in the meeting

Powergrid informed that order has been placed for Reactor-1 and it will be commissioned by September, 2016.

B.14.5. Status of Bus Splitting schemes in Eastern Region

A. Bus Splitting of Powergrid Sub-stations

In 11th SCM held on 20.09.2010 the bus-splitting arrangement with tie line breaker for the following 400kV substations in Eastern Region was agreed to contain the short circuit level below 40kA.

➤ Maithon

- Durgapur
- Biharshariff
- Kahalgaon

In 118th OCC, Powergrid updated the status as follows:

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

In 121st OCC, Powergrid informed that they are not getting shutdown to complete the work at 400kV Biharshariff S/s.

BSPTCL informed that shutdown for 400kV Biharshariff S/s is not possible before September, 2016.

In 33rd TCC, BSPTCL informed that shutdown for 400kV Biharshariff S/s will be given after availability of 220kV Tenughat-Biharshariff D/C line.

JUSNL informed that 220kV Tenughat-Biharshariff D/C line will be in service by 1st week of July 2016.

In 123rd OCC, JUSNL informed that 220kV Tenughat-Biharshariff D/C line has been restored and in service from 12th July 2016.

Powergrid/BSPTCL may update.

Deliberation in the meeting

Bihar informed that Biharshariff shutdown can be given after the argumentation of Patna and Purnea ICTs.

Bihar agreed to allow the shutdown for Patna S/s in 1st week of September, 2016.

In 33rd TCC/ERPC, ERLDC informed that the bus splitting schemes were planned in 2011-12 considering 400kV Durgapur-Jamshedpur and 400kV Durgapur-Maithon connectivity but these lines are getting delayed.

On query, PGCIL informed that the implemented bus splitting schemes could be made operational with immediate effect.

ERLDC requested CTU to carryout detailed study on bus splitting schemes to verify operational constraint with the present connectivity.

TCC advised CTU to carry out a final study post bus-splitting and inform ERLDC and ERPC.

In 123rd OCC, PGCIL informed that the study as per the 33rd TCC/ERPC decision may be done as soon as minutes of 33rd TCC/ERPC meeting is issued.

CTU/Powergrid may update.

Deliberation in the meeting

Powergrid informed that CTU has done the study and they will submit the report soon.

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

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

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

In 33rd TCC, NTPC has given the present status as follows:

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

In 123rd OCC, NTPC updated that transformer package and Shunt reactor will be awarded within 10 to 15 days.

NTPC may update.

Deliberation in the meeting

NTPC updated that transformer package and Shunt reactor have been awarded.

B.14.6. 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

PGCIL has already commissioned the 2x315MVA 400/220kV Bolangir S/s by LILoing of 400kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

In 123rd OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x315MVA 400/220kV Bolangir S/s	
a.	LILo of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S	Only 7 towers left (Severe ROW problem). By Dec, 2016.
b.	LILo of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S	Charged on 04.05.16
2.	400/220 kV Keonjhar S/S	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	By 2017.
b.	Keonjhar (PG)-Turumunga (OPTCL) 220kV D/C line	By 2019.
3.	400/220kV Pandiabil Grid S/s: Expected by June'16	
a.	Pratapsasan (OPTCL)-Pandiabil (PG) 220 kV D/C line	Dec, 2017.
b.	LILo of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	September, 2016

OPTCL may update.

Deliberation in the meeting

OPTCL updated the completion schedule of LILo of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG) as December, 2016.

B.14.7. 220 kV inter-connecting lines of JUSNL with 2x315 MVA, 400/220 kV sub-stations at Chaibasa, Daltonganj & Dhanbad

In 123rd OCC, JUSNL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	Chaibasa 400/220kV S/s	
a.	Chaibasa (POWERGRID) – Chaibasa (JUSNL) 220kV D/c	Completed.
b.	Chaibasa (POWERGRID) – Ramchandrapur (JUSNL) 220kV D/c	September, 2016
2.	Daltonganj 400/220/132kV S/s: Expected by Mar'17	
a.	Daltonganj (POWERGRID) – Latehar 220kV D/c	By 2017.
b.	Daltonganj (POWERGRID) – Garhwa 220kV D/c	Matching with S/s
c.	Daltonganj (POWERGRID) – Daltonganj (JUSNL) 132kV D/c	Matching with S/s
d.	Daltonganj (POWERGRID) – Chatarpur/Lesliganj 132kV D/c	Matching with S/s
3.	Dhanbad 400/220 kV S/s: Awarded under TBCB	
a.	Dhanbad – Dhanbad (Govindpur) (JUSNL) 220kV D/c	Matching with S/s

JUSNL may update.

Deliberation in the meeting

JUSNL updated that construction of Chaibasa (POWERGRID) – Ramchandrapur (JUSNL) 220kV D/c is getting delayed due to forest clearance and the latest completion target is December, 2016.

B.14.8. 220 kV inter-connecting lines of WBSETCL with 400/220 kV, 2x315 MVA Alipurduar & 2x500 MVA Rajarhat sub-stations

In 123rd OCC, WBSETCL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x315MVA, 400/220kV Alipurduar sub-station	
a.	Alipurduar (POWERGRID) – Alipurduar (WBSETCL) 220kV D/c (HTLS)	<i>8 out of 25 towers erected. Line would complete by March, 2017.</i>
2.	2x500MVA, 400/220kV Rajarhat West Bengal S/S- Expected by Oct, 2016	
a.	Rajarhat-N. Town-3 (WBSETCL) 220 kV D/C line	Matching
b.	Rajarhat-N. Town-2 (WBSETCL) 220 kV D/C line	<i>June, 2018</i>
c.	Rajarhat- Barasat (WBSETCL) 220 kV D/C line	<i>June, 2018</i>

WBSETCL may update.

Deliberation in the meeting

WBSETCL updated that Alipurduar (POWERGRID) – Alipurduar (WBSETCL) 220kV D/c (HTLS) would be completed by end of October, 2016.

Item No. B.15: Third Party Protection Audit

1. Status of 1st Third Party Protection Audit:

The compliance status of 1st Third Party Protection Audit observations is as follows:

Name of Constituents	Total Observations	Complied	% of Compliance
Powergrid	54	37	68.52
NTPC	16	14	87.50
NHPC	1	1	100.00
DVC	40	26	65.00
WB	68	27	39.71
Odisha	59	38	64.41
JUSNL	34	16	47.06
BSPTCL	16	5	31.25
IPP (GMR, Sterlite and MPL)	5	5	100.00

The substation wise status of compliance are available at ERPC website (Observations include PLCC rectification/activation which needs a comprehensive plan).

In 118th OCC, all the constituents were advised to comply the pending observations at the earliest. All the STUs informed that most of the observations are related to funding from PSDF. DPRs have been submitted to PSDF committee.

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

Members may comply.

Deliberation in the meeting

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

2. Schedule for 2nd Third Party Protection Audit:

The latest status of 2nd Third Party Protection audit is as follows:

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

The list of observations for the above sub-stations is already available at ERPC website (www.erpc.gov.in). Respective constituents are requested to comply and submit the report to ERPC for regular update. The tentative plan for August/September, 2016 is as given below:

Date of Audit	Substations	Lodging and Boarding	Transport
	PPSP (WBSETCL) & Maithon (PG)	Stay at Maithon PGCIL guest house	Transportation will be arranged by Powergrid
	Maithon RB (MPL) & Raghunathpur (DVC)	Stay at Santaldih(WBPDCL) guest house	
	Santaldih(WBPDCL) & Arambagh (WBSETCL)	If required, stay at Santaldih(WBPDCL) guest house	

Members may decide the schedule for Aug/Sept, 2016.

Deliberation in the meeting

Members noted.

Item No. B.16: Inspection of Under Frequency Relays (UFR)

119th OCC advised to carry out the UFR audit for JUSNL & BSPTCL along with the Protection site visit which is scheduled in April, 2016.

The status for first quarter of 2016-17 is as given below:

Sl No	Proposed Date	Substation/feeder inspected by the sub-group	Status of audit
1	May, 2016	132/33 KV Hatia of JUSNL	12.05.2016
2		132/33 KV Namkum of JUSNL	12.05.2016
3	May, 2016	132/33 KV Adityapur of JUSNL	11.05.2016
4	May, 2016	220/132/33 KV Ramgarh of DVC	13.05.2016

In 121st OCC, the UFR audit report was presented before the house. It was informed that during UFR testing of Ramgarh (DVC) S/s it was found that the feeders were tripped at 48.52 Hz instead of 48.6 Hz (set frequency). Therefore, it was recommended that the present EM Under Frequency relays of Ramgarh (DVC) S/s should be replaced with Numerical UF relays to get the desired UFR load shedding at the set frequency (i.e. 48.6 Hz).

In 123rd OCC, DVC informed that the procurement of numerical UFR relay is under process and the UFRs at 220/132/33 KV Ramgarh S/s will be replaced by next month.

DVC may update the status.

Deliberation in the meeting

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

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

Sl No	Proposed Date	Substation/feeder inspected by the sub-group
1	July/ August,	132/33 KV Bari Pahari (Bihar Sharif) of BSPTCL

2	2016	132/33 KV Purnea of BSPTCL
3		220/132/33 KV Sampatchak of BSPTCL
4	August, 2016	220/132/33 KV Kalyaneswari of DVC
5	September, 2016	220/132/33 KV New Bishnupur of WBSETCL
6		132/33 KV Old Bishnupur of WBSETCL
7	October, 2016	BRS (Liluah S/Stn.) of CESC
8		Ritchie D/S & Canal D/S of CESC

Members may decide the schedule for August/September, 2016.

Deliberation in the meeting

*CESC informed that they have changed some feeders in the UFR load shedding scheme. CESC submitted the updated list of feeders under UFR scheme list along with the quantum of load which is given at **Annexure-B.16**.*

Item No. B.17: 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 113th OCC, Member Secretary informed that during interaction with consultants of Grid Study Committee, NLDC agreed that they will plan for conducting workshops on crisis management plan for Cyber Security and few workshops will also be held in Eastern Region.

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

Members may note and comply.

Deliberation in the meeting

Members noted.

Item No. B.18: Certification through BIS as per IS 18001:2007 to all generating/transmission units.

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, WBPDCCL informed that Bandel TPS is certified with IS 18001.

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

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

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

Members may note and update the status.

Deliberation in the meeting

WBPDCCL informed that Bakreswar Generating station is also received certification of IS 18001:2007 from BIS.

Item No. B.19: FORMULATION OF A SKILL PLAN FOR POWER SECTOR BASED ON THE ASSESSED SKILL GAP IN THE SECTOR

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

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

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

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

Further to this, MoP vide their letter No.7/5/2015-T&R dated 01.07.2016 have sought information in the matter. Based on the letter of MoP a proforma has been prepared. It is requested that the relevant information pertaining to the sector/sub-sector as per the attached proforma (Attached at **Annexure-B.19**) may please be sent to CEA (by mail: ceahrd@gmail.com).

123rd OCC advised all the constituents to send the relevant information as per the proforma.

Constituents may note and comply.

Deliberation in the meeting

OCC advised all the constituents to send the relevant information as per the proforma.

Item No. B.20: Energy Generation data management from Renewable Energy Sources

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

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

In 120th OCC, all the SLDCs were advised to submit the data to CEA as per the format given in **Annexure- B.20** with a copy to ERPC Secretariat.

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

SLDCs may update.

Deliberation in the meeting

Members noted.

Item No. B.21: Compilation of data for meeting Renewable Energy targets of 175 GW by 2020 -- Reference from MNRE

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

In 120th OCC, Concerned State Utilities /Generating companies are requested to submit data of their respective control areas by 1st week of May, 2016.

Members may update.

Deliberation in the meeting

Members noted.

Item No. B.22: Data of Peak Demand – Submission of hourly power cut data

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

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

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

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

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

For the month of July, 2016 data has been received from WBSETCL, CESC, & OPTCL.

BSPTCL, DVC, JUSNL may furnish the data.

Deliberation in the meeting

Members noted.

Item No. B.23: Recovery Procedures of ER Constituents – ERLDC

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

In 117th OCC, ERLDC informed that all STUs have to develop their own restoration plan and procedure of their state in coordination with ERLDC/ERPC.

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

The restoration procedure received from DVC, JUSNL and WBPDCCL.

In 122nd OCC, ERLDC requested DVC & West Bengal to include restoration plan for priority loads mentioning quantum of load and restoration procedure.

In 123rd OCC, *West Bengal, OPTCL and BSPTCL agreed to submit the restoration procedure within 15 days.*

ERLDC may update.

Deliberation in the meeting

ERLDC informed that OPTCL has submitted the restoration procedure.

Bihar informed that they are preparing the restoration procedure.

Item No. B.24: Dynamic data of Generator Models required in PSSE for Simulations -- ERLDC

Requisite data received only from NTPC Kahalgaon & Barh, NHPC Teesta-V, GMR, CESC NTPC Farakka, WBPDCCL, JITPL and Vedanta Ltd.

In 119th OCC, it was informed that DVC, JUSNL and OPTCL were yet to submit the data.

OCC advised the above constituents to submit the requisite data at the earliest.

Latest status is enclosed at **Annexure-B24**.

Other Generators may ensure submitting the data.

Deliberation in the meeting

*ERLDC updated the latest status. Latest status is enclosed at **Annexure-B24**.*

OCC advised to submit the pending information.

Item No. B.25: Implementation of Automatic Demand Management Scheme (ADMS)

Regulation 5.4.2 (d) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (Grid Code) provides for implementation of demand management schemes by State Load Despatch Centre through their respective State Electricity Boards/Distribution Licensees. This is a basic measure towards ensuring grid security. Due to non-implementation of this scheme so far, CERC vide order dated 31-12-15 on **Petition No. 5/SM/2014** had directed all constituents as follows:

*“However, considering the request of the respondents to grant time to implement ADMS, we grant time till **30.6.2016** to the respondents to implement ADMS, failing which they will be liable for action under Section 142 of the Act for noncompliance of the Regulation 5.4.2 (d) of the Grid Code and order of the Commission. RLDCs are directed to submit the report in this regard by 31.8.2016.”*

In 120th OCC meeting, Powergrid informed that it is possible to implement in new SCADA system. After detailed deliberation, OCC referred the issue to 7th PRM meeting for further course of action.

In 7th PRM meeting, member Secretary, ERPC briefed the members about the need for compliance of the CERC directive for implementing Automatic Demand Management scheme (ADMS) in their respective systems.

While discussing the issue in detail, it emerged that this feature can be implemented in ER constituent systems (WB, DVC, BSPTCL, JUSNL and Sikkim), upto 33 kV side as the telemetry of 33kV side has also been included in the SCADA project just implemented.

Regarding implementation of the ADMS in OPTCL, OPTCL informed that they will discuss the matter with appropriate management and will intimate the same at the earliest.

In special PRM held on 7th June, 2016, Chemtrols provided the following status of DO implementation:

Constituent	Target by June end	Actual
Bihar	50	67
DVC	12	17
WBSETCL	10	65**
Jharkhand	2	2

(**As per the WB instruction, In all RTUs of WB the DO cable has been terminated in the C&R Panel TBs. WBSETCL testing Team to further extend the connections to the trip relays)

In 123rd OCC, OPTCL informed that they are interacting with Gujarat and also contacted Chemtrol. Chemtrol is ready to provide hardware and software for additional cost.

Members may update.

Deliberation in the meeting

OCC advised all the utilities to give the latest status to ERLDC so that a report could be submitted to CERC.

Item No. B.26: Long outage of important transmission elements

a) Prolonged shutdown of 220kV TTPS-Joda-I

220kv TTPS-Joda-I was taken under shutdown for replacement of old Sheep conductor by ACSR Zebra conductor w.e.f 13/02/16 to 15/04/16. However, the shutdown has not been returned till date. The above line is important specially in context of feeding Joda loads during s/d of 220kv Joda-Ramchandrapur during which redundancy of feed to Joda/Jindal/ Jamshedpur (DVC) is affected.

OPTCL may furnish the day wise schedule of the pending works indicating the completion time as there has already been significant time over-run.

In 123rd OCC, *OPTCL informed that the line was charged on 1st July 2016.*

OPTCL may update.

Deliberation in the meeting

Members noted.

b) 400kV Meramundali-Mendhasal S/C

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

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

OPTCL may update.

Deliberation in the meeting

OPTCL informed that restoration of tower 180 will take time due to water logging and the tower would be restored by December, 2016.

c) 400kV Sterlite-Meramundali D/c

Tower at Loc.No35 twisted(near Sterlite).

In 123rd OCC, *OPTCL informed that the line would be charged by 10th August, 2016.*

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the line would be charged by 15th October, 2016.

d) 220kV Gaya-Dehri

Tower collapsed at loc. No275 from Gaya end.

In 122nd OCC, *BSPTCL informed that the line will be in service after 4 months.*

In 123rd OCC, *BSPTCL informed that the line will be in service by November 2016.*

BSPTCL may update.

Deliberation in the meeting

BSPTCL informed that the line will be in service by November 2016.

e) 400kV Patna-Kishengunj D/C

Tower collapsed at Loc.51. Powergrid may update.

Powergrid may update.

Deliberation in the meeting

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

Item No. B.27: Transfer capability determination by the states -- Agenda by NPC

In order to ensure, safe and secure operation of the grid, the states should carry out the power system study for operational planning and power transfer capability through their respective transmission links with the rest of the grid.

It was decided in the NPC meeting that to begin with, power system study for assessment of operational limits / power transfer capability for each state will be done by the concerned RLDC in association with concerned SLDC. Monthly TTC /ATC will be uploaded by the SLDCs at their respective websites and also communicated to concerned RLDC & NLDC subsequently.

In 120th OCC, DVC informed that they are providing the monthly TTC/ATC on their website.

WBSETCL informed that they are calculating the TTC/ATC but their website is under construction.

Bihar and OPTCL agreed to implement.

JUSNL informed that they are unable to compute the TTC/ATC for their state.

OCC advised JUSNL to interact with ERLDC to get acquainted with the ATC/TTC calculation.

ERLDC informed that, Import / Export TTC for DVC for April 2016 are available in the website of DVC. But the underlying assumptions, limiting constraints etc. are not mentioned. It is therefore suggested that all load-serving control areas in Eastern Region may please endeavor to publish their respective TTC/ATC figures as follows:

Format for TTC declaration:

Import TTC (example)

S.No	Control Area	TTC	RM	ATC	Limiting contingency & loading of the limiting equipment under that contingency
1	W. Bengal				
2	Odisha				
Etc.	Etc.				

Assumptions : W. Bengal (example)

Station-wise MW generation considered (132kV & above)	Injection(+)/Withdrawal(-) considered (MW) for each embedded IPP at 132kV and above (if any)	S/Stn-wise demand (MW) considered (132kV above)	Lines / elements considered to be normally switched off or under forced outage (if any)	Generating units under forced outage (if any)	SPS considered (if any)

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Export TTC (example)

S.No	Control Area	TTC	RM	ATC	Limiting contingency & loading of the limiting equipment under that contingency
1	W. Bengal				
2	Odisha				
3	Bihar				
4	Jharkhand				
5	DVC				

In 33rd TCC Meeting, respective members updated the status as follows:

- All the states are computing TTC/ATC except Sikkim and JUSNL.
- DVC is calculating and uploading in DVC website.
- BSPTCL is calculating and uploading through a link in BSPHCL website.
- WBSLDC is calculating but they could not upload due to non-readiness of website.
- OPTCL is calculating and uploading in website.

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

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

TCC advised JUSNL to send their representatives to ERLDC so that they could get acquainted with the ATC/TTC calculation procedure. Representative from JUSNL informed that they are ready to send three officers to ERLDC, the names of officers would be shared in tomorrow's ERPC meeting.

123rd OCC advised all the SLDCs to mention the constraints along with ATC/TCC figures.

Members may note and update.

Deliberation in the meeting

OCC advised all the SLDCs to mention the constraints along with ATC/TCC figures.

Item No. B.28: Reasons for demand –supply gap and its variation -- Agenda by NPC

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

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

119th OCC advised all the constituents to comply.

Members may update.

Deliberation in the meeting

OCC advised all the constituents to comply.

Item No. B.29: Update on status of telemetry

CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed NLDC and respective RLDCs to update the status of telemetry every month at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action.

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

It was informed that JUSNL, Sikkim and MPL have not yet replied to CERC on non-availability of telemetry.

OCC advised JUSNL, Sikkim and MPL to submit their reply to CERC at the earliest.

In 123rd OCC, ERLDC presented the updated telemetry status and informed that every month they were posting the updated status at ERLDC website. The updated status is enclosed at **Annexure-B.29**.

OCC advised all the respective constituents to ensure the availability of telemetry data to ERLDC.

Members may update.

Deliberation in the meeting

OCC advised all the respective constituents to ensure the availability of telemetry data to ERLDC.

Item No. B.30: Status of breaker operation at Malbase end during auto-reclose operation of 400 kV Malbase – Binaguri at 18:40 hrs on 23-06-16

On 23rd June 2016 at 18:40 hrs, R-N fault occurred in 400 kV Malbase-Binaguri line and it was successfully auto reclosed at both ends. As per DR data provided by POWERGRID, only R phase breaker opened at Binaguri end during auto-reclose operation which is in line with practice followed throughout the grid. However from Binaguri PMU data, it is suspected all three phase breakers opened during auto-reclose operation at Malbase end. The matter was informed to Bhutan and as per information received from them, single phase auto reclose scheme has been configured at Malbase end although, current in Y & B phases was zero during pre-fault and post-fault condition. DR & EL data from Malbase are yet to be received.

In 123rd OCC, *Bhutan representative agreed to communicate the issue to respective division.*

Bhutan may explain the breaker operation at Malbase end.

Deliberation in the meeting

DGPC representative agreed to communicate the issue to respective division.

Item No. B.31: Status of Disturbance Recorder, Stand alone Event Logger and Time Synchronization equipment.

The status of DR/EL and GPS as updated in previous OCCs is enclosed at **Annexure-B.31**.

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

Members may update.

Deliberation in the meeting

Members noted.

Item No. B.32: Status of Emergency Restoration System (ERS Towers) for Eastern Region constituents

The latest status of Emergency Restoration System (ERS towers) as well as the future plan of procurement was given at **Annexure- B.32**.

Members may update the latest status.

Deliberation in the meeting

Members noted.

Item No. B.33: Pollution mapping for Eastern Region

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

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

In 123rd OCC, members updated the latest status as follows:

Utility	Scope	Installed Locations	Number of locations where 1 st set of Measurements Completed	Number of locations where 2 nd set of Measurements Completed
JUSNL	67	27	21	19
BSPTCL	59	52	52	40
WBSETCL	73	70	43	
OPTCL	164	102	102	42
Sikkim	12	9	6	6
Powergrid ER 1	99	99	99	47
Powergrid ER 2	40	40	40	40
Powergrid Odisha	42	42	42	42

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

Members may update.

Deliberation in the meeting

Members noted.

Item No. B.34: Mock Black start exercises in Eastern Region – ERLDC**i) The status of black start exercises**

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

Sl no	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	U.Kolab	Last week of May, 2016	Completed on 16th July 2016	Last Week of January 2017	
2	Maithon (To be tested in islanded mode)	1 st week of June 2016	<i>July 2016</i>	1 st Week of February 2017	
3	Rengali	2 nd week of June 2016	<i>28th August 2016</i>	Last week of November 2016	
4	U. Indarvati	3 rd week of June 2016	Completed on 16th July 2016	2 nd week of February 2017	
5	Subarnarekha	1 st week of October 2016	<i>Sep, 2016</i>	1 st week of January 2017	
6	Balimela	3 rd week of October 2016		1 st week of March 2017	
7	Teesta-V	2 nd week of Nov 2016		Last week of February 2017	
8	Chuzachen	Last Week of May 2016		January 2017	
9	Burla	Last Week of June 2016	<i>28th August 2016</i>	Last week of February 2017	
10	TLDP-III	1 st Week of June 2016	Nov, 2016	2 nd Week of January 2017	
11	TLDP-IV	Last Week of June 2016	Nov, 2016	1 st Week of February 2017	

Members may update.

Deliberation in the meeting

JUSNL was advised to conduct the black start exercise for Subarnarekha in September, 2016.

ii) Testing of DG sets meant for Black start

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

Constituents may kindly ensure compliance.

Deliberation in the meeting

Members noted.

Item No. B.35: Restricted Governor /Free Governor Mode Operation of generators in ER

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

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

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

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

Coordinators from all the concerned generating stations would post the unit wise MW response as recorded at their respective ends, for a period +/- half-an-hour of the instant, within two days of posting by ERLDC. For the purpose of analysis, wherever significant variation would be observed w.r.t. to SCADA data, generator's data would be adopted for detailed analysis.

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

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

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

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

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

https://in.groups.yahoo.com/neo/groups/er_gov_respons/info

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

In 117th OCC, ERLDC informed that the performances of the governor response are being uploaded in the yahoo group. It was also informed that DVC, CESC and Odisha were already added in the web-group.

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

In 118th OCC, it was informed that WBSETCL, JUSNL, Bihar, NTPC and NHPC are yet to join the group.

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

In 123rd OCC, ERLDC added that this is the best time to put all the generators in RGMO/FGMO mode as the grid frequency is stable and almost close to 50 Hz.

OCC decided that all the generators should put RGMO/FGMO in service from 15th August, 2016.

All generators agreed.

Members may update.

Deliberation in the meeting

DVC informed that all units are in RGMO.

WBPDCCL informed that Santaldih U#5 is in RGMO from 16th Aug 2016 and U#6 will be kept in RGMO after overhauling. WBPDCCL added that other units are old and not capable to run in RGMO.

In such cases, OCC advised the respective generators to approach CERC for exemption.

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

Generating stations have been monitored for sample dates in the month of July, 2016:

Power Plant	Max and Min Voltage observed for July, 16 (KV)	Date for monitoring (July, 16)
Farakka STPS	425,401	10,12
Khalgaon STPS	419,399	11,12
Talcher STPS	401,393	13,24
Teesta	418,402	12,22
Bakreshwar TPS	415,393	11,14
Kolaghat TPS	421,396	7,16
Sagardighi TPS	434,411	23,5
MPL	424,404	21,9
Mejia-B	426,412	11,12
DSTPS	423,410	13,20
Adhunik TPS	424,404	2,17
Sterlite	422,413	14,19
Barh	--	
JITPL	--	
GMR	414,396	9,24
HEL	--	
Kodarma	423,395	14,20

In 123rd OCC, ERLDC informed that the performance of DSTPS, Koderma, Mejia-B, GMR and APNRL need improvement.

ERLDC may update.

Deliberation in the meeting

ERLDC informed that the performance of DSTPS, Mejia-B, JITPL, GMR and APNRL need improvement.

a) Schedule for reactive capability tests

The following was status of regarding reactive capability testing:

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

Members may update.

Deliberation in the meeting

DVC updated that reactive capacity test for Koderma TPS Unit#1 was carried out on 08.08.2016.

Item No. B.37: Erroneous recording/Non-receipt of data by Interface Meters

A. Erroneous recording of data by Interface Meters

i. Patratu(DVC)

SEM data received from Patratu(DVC)of 132 KV Patratu(DVC) – Patratu (JUVNL) line showing erroneous(around 50% recording Less as compared to JUVNL end) since charging of the line on 16.05.16. Accounting of DVC is being done by Standby meter at JUVNL end. The above matter was last discussed in 33rd TCC/ERPC. The said line is Idle charged since last one and half months and the necessary rectification if any done can't be checked until Power flow through the line.

In 123rd OCC, it was informed that appropriate correction has been done and meter will be checked when the line is in service.

Powergrid and DVC may update the status if any rectification done at their end.

Deliberation in the meeting

It was informed that appropriate correction has been done and meter will be checked when the line is in service.

ii. Joda(OPTCL)

SEM data received from Joda(OPTCL)endof 220 KV Joda(OPTCL) – Ramchandarpur (JUVNL) line is showing erroneous(15-20% Less recording as compared to Ramchandarpur end) since 14.01.16. Matter was intimated to official of Joda OPTCL. In 119th OCC, OPTCL informed that SEM at Joda end needs to be checked and corrected. OPTCL informed that there is no line CT, so 2 nos SEM for the bus-coupler at Joda end is required. In 121st OCC, ERLDC suggested to place one meter at B/C and to check healthiness of existing SEM at Joda end of Ramchandarpur Line. In the last Commercial Sub Committee meeting, PGCIL informed that SEMs have been arranged and the metering at B/C of Joda would be completed subject to S/D allowed by

OPTCL. OPTCL may confirm the S/D of 220 KV Joda-Jindal Line so that the meter of the said line may be shifted at B/C.

In 123rd OCC, OPTCL informed that they allowed the shutdown.

PGCIL and OPTCL may please respond.

Deliberation in the meeting

It was informed that the meter is yet to be replaced.

OPTCL informed that the shutdown will be allowed in this week.

B. By passing of SEMs of Tie Lines

i. Kendiposi at JUSNL

SEM is installed at both end of 132 KV Kendiposi(JUSNL)-Joda (OPTCL) Line. As per the SEM data received from 132 KV Kendiposi(JUSNL), readings of meter (Serial No. NP-6117-A) installed at Kendiposi end of 132 KV Kendiposi-Joda Line is not recording any flow compared to Joda end since long. It was gathered from Kendiposi that line is feeding load to Naumundi (JUSNL) regularly through Transfer Bus of Kendiposi by passing the SEM at Kendiposi.

Further Power from Joda is occasionally received at Main Bus of Kendiposi. In that case Meter installed at Kendiposi end of Joda Line records the energy flow through the line. In absence of non-recording of data by SEM installed at Kendiposi end of the aforesaid Tie line, data validation and energy accounting is being affected. Presently energy accounting is being done considering Joda OPTCL end meter.

Bypassing of SEM installed at Tie line is violation of CEA metering regulation 2006 and the same is needed to be restored. One meter at Transfer Bus is required to be installed to record energy flow through the line. The above matter was last discussed in 33rd TCC/ERPC. Till now the details of SEM installed at Transfer Bus is not received by ERLDC.

In 123rd OCC, It was informed that one meter is to be installed at transfer bus and PGCIL informed that they will install the meter by 31st July 2016.

Powergrid/JUSNL may update the status.

Deliberation in the meeting

It was informed that JUSNL has to install CVT.

OCC advised JUSNL to install CVT at the earliest.

C. Non Receipt of SEM data from Various Locations

i. Forbisganj at BSPTCL

Kishanganj(BSPTCL) end meter of 132 KV Purnea(PG) Line is not recording any flow compared to Purnea PGCIL end since 14:00 hrs of 29th June 2015. It was gathered that line is feeding load to Farbisganj at BSPTCL regularly through Transfer Bus of Kishanganj bypassing the SEM at Kishanganj. It was decided to place 02 nos of SEM at Forbesganj. In 31st CCM, BSPHCL representative informed that meter has been placed at Farbesgunj on 03.02.2016. In 121st OCC PGCIL informed that DCD for downloading the data has been handed over to BSPHCL. The matter was last discussed in 33rd TCC/ERPC and it was assured that the matter would be resolved at the earliest. However ERLDC has not received the SEM data till now.

In 123rd OCC, BSPHCL informed that software was not updated and they are not able to collect the meter data.

OCC advised PGCIL to look into.

BSPHCL may update.

Deliberation in the meeting

PGCIL agreed to look into.

Item No. B.38: Auxiliary consumption of HVDC Sasaram under Deviation settlement Mechanism

HVDC SASARAM has a share allocation of 0.15 % (i.e 1.26 MW) from NTPC Kahalgaon STG-I and the same is being scheduled by ERLDC as a separate entity. HVDC SASARAM is a user of ERLDC and pays Fees and Charges under Distribution Licensee / Buyer Category. The energy consumption of HVDC station at Sasaram is also considered in the REA from the month of April 2004 onwards and the same is borne by POWERGRID in addition to the corresponding capacity charge.

Each physical regional entity should be bounded by meter and separate schedule and DSM for each entity should be applicable. It is felt that the allocation towards auxiliary power consumption of HVDC stations may also be subjected to Deviation settlement mechanism like other regional entity. In NER, WR, SR and NR also, HVDC is a DSM Pool member.

In order to account for the Actual Drawl for HVDC Sasaram Auxiliary consumption, 04 nos of meter is required to be placed. The location where meter is required to be placed is as under:

1. HV side of 2.5 MVA 33/0.415 Transformer-1 & 2 (one SEM on HV side)
2. LV side of 2.5 MVA 33/0.415 Transformer -1 & 2 (one SEM on LV side)

In 123rd OCC, it was decided that HVDC Sasaram will be under the DSM mechanism and has to become a DSM pool member.

Member Secretary, ERPC informed that for becoming DSM pool member, HVDC Sasaram has to become a member of ERPC and has to pay participation fee for ERPC fund.

Subsequently, for HVDC accounting, Powergrid has installed total 02 nos of meter i.e 01 meter each on HV side of Transformer 1 & 2 and SEM data is also being received by ERLDC since 25.07.16

Members may please discuss.

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 September'16

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

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

Deliberation in the meeting

*Approved maintenance programme of generators and transmission elements for the month of September, 2016 is given at **Annexure-C.1**.*

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

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of September'16 were prepared by ERPC Secretariat on the basis of Provisional LGBR for 2015-16 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc. is at **Annexure-C.2**.

Members may confirm.

Deliberation in the meeting

*Modified anticipated power supply position for the month of September, 2016 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	CAP(MW)	REASONS FOR OUTAGE	OUTAGE DATE
STERLITE	2	600	SCARCITY OF WATER	23-Jun-16
MEJIA	4	210	LOW DEMAND	24-Mar-16
MEJIA	3	210	BOILER TUBE LEAKAGE	2-Aug-16
BOKARO B*	2	210	LOW DEMAND	3-Jul-16
BOKARO B*	3	210	LOW DEMAND	10-Aug-16
WARIA	4	210	ROTOR PROBLEM	30-Apr-16
RAGHUNATHPUR	2	600	ROTOR PROBLEM	14-Feb-16
RAGHUNATHPUR	1	600	COAL MILL PROBLEM	11-Aug-16
CHANDRAPURA	7	250	ROTOR EARTH FAULT	24-Jul-16
DPL	8	250	BOILER TUBE LEAKAGE	28-Jun-16
TENUGHAT	1	210	LOW VACUUM	9-Jul-16
MUZAFFARPUR	1	110	BOILER TUBE LEAKAGE	25-Jul-16
MUZAFFARPUR	2	110	COAL SHORTAGE	4-Aug-16
DSTPS(ANDAL)	1	500	OVER HAULING	30-Jul-16
KODERMA	2	500	BOILER TUBE LEAKAGE	26-Jul-16
SAGARDIGHI	3	500	FLAME FAILURE	7-Aug-16
TENUGHAT	2	210	TUBE LEAKAGE	10-Aug-16

(ii) Transmission elements

Name of the Line/Element	Outage	Reason
400 KV STERLITE-MERAMANDLI-II	25/05/16	TOWER NO 34 TWISTED (NEAR TO SEL

400 KV STERLITE-MERAMANDLI-I	27/05/16	TOWER NO 34 TWISTED (NEAR TO SEL
400 KV MEERAMANDALI-	23/05/16	TOWER COLLAPSED NEAR TO
220 KV GAYA-DEHRI-D/C	27/05/16	TOWER COLLAPSED AT LOC NO 275 FROM
400 KV PATNA-KISHANGANJ D/C	26/07/16	TOWER COLLAPSED AT LOC NO 51

Members may update.

Deliberation in the meeting

Members noted.

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

New generating units:

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

New transmission elements:

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

Members may update.

Deliberation in the meeting

Members noted.

PART D:: OTHER ISSUES

Item no. D.1: UFR operation during the month of July'16

System frequency touched a maximum of 50.35Hz at 07:59Hrs of 02/07/16 and a minimum of 49.69Hz at 21:42Hrs of 07/07/16. Accordingly, no report of operation of UFR has been received from any of the constituents.

Members may note.

Deliberation in the meeting

Members noted.

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

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

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

No report from any constituent has yet received. Hence, ERLDC would be considering 'Nil' report for all constituents for July'16.

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.3: Grid incidences during the month of July, 2016

Sl no	Disturbance Place	Date	Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	Meramundali (OPTCL)	11-07-16	6:21	NIL	90	On 11-07-16 at 06:21 hrs, all 220kV feeders, 400/220kV ICTs and 220/132kV ATRs at Meramundali tripped due to bursting of 'Y' phase LA of 220kV Meramundali – Bhusan – II at Bhusan S/Y. The faulted line tripped on operation of Z-I protection and other elements tripped on bus bar protection	GI-1
2	Budhipadar (OPTCL)	14-07-16	16:33	623	142	At 16:33 hrs, 220kV Budhipadar – Tarkera – I tripped on D/P at both end. Simultaneously all the feeders connected to 220kV Budhipadar Bus II along with B/C tripped on Bus Bar differential protection. At the same time, 220/132kV ATR I & II, IBTPS U#1 & #2 tripped and Vedanta unit went to house load which resulted 220 kV bus dead at Budhipadar.	GD-I
3	Purnea (BSPTCL & PG)	31-07-16	9:45	NIL	210	At 09:45 hrs, 132KV Purnea(PG)-Kishanganj tripped from Purnea end only. At the same time, 132KV Madhepura-Supaul D/c tripped (On Earth Fault). Consequently, 132kVPurnea (BSEB)-Faurbisganj tripped due to operation of O/c relay. Power flow to Nepal got interrupted.	GD-I

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.4: Any other issues.**1) Day-ahead load forecasting by SLDCs**

Load forecasting in different time horizons (daily/weekly/monthly/yearly basis) is extremely important for reliable operation of the power system. It enables the system operator to assess utility-wise and region-wise surplus / deficits besides giving an indication of the expected hour to

hour changes in demand and consequent ramping required by the generators at the hourly boundaries.

As per the detailed procedure for implementation of Ancillary Service Framework, forecasting of day-ahead demand by SLDCs in intervals of 15-minute time block is one of the important inputs for timely triggering of regulation up or regulation down instructions to the Ancillary Service Providers, with the objective of matching generation as closely as possible with load at every instant, so that frequency deviations are minimized to the extent possible. Forecasting of load is also important considering the high level of Renewable Energy (RE) penetration expected in the coming years.

In this connection ERLDC letters dated 7/7/16 and 2/8/16 may be referred to, vide which all SLDCs were requested to start furnishing their respective 15-min block-wise demand projections on day-ahead basis, as per format AS-4. While SLDC, BSPHCL has started the process, other SLDCs are yet to follow.

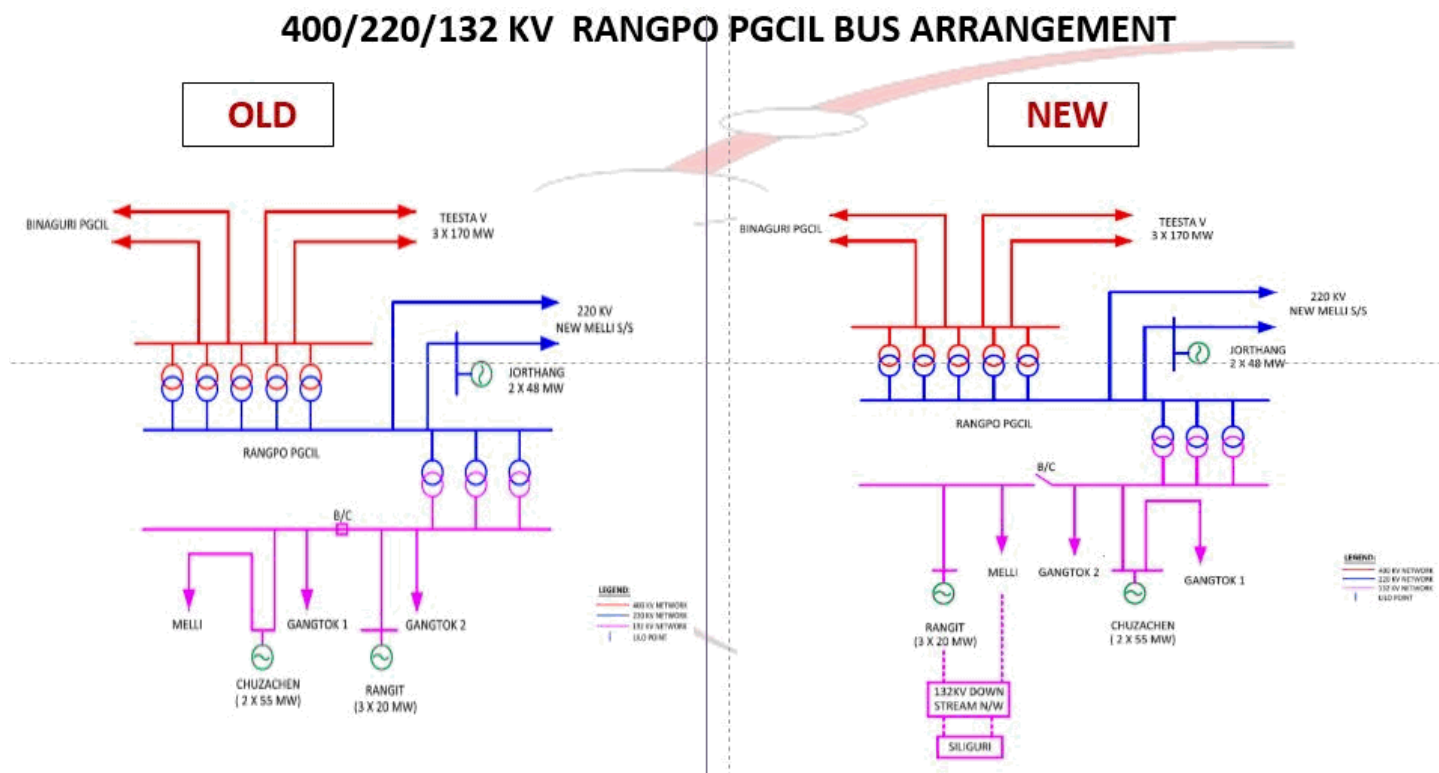
Members may please discuss.

Deliberation in the meeting

Members noted for compliance.

2) Review of Chuzachen SPS

- Post rearrangement of 132KV bays & bus of 132KV/220KV/400KV Rangpo substation PGCIL in February 2016, the direct risk of overloading of the 132KV downstream network of North Bengal subsystem have been successfully mitigated. and the present configuration is as detailed herewith :



- However, the existing Chuzachen SPS still retains the conditions of tripping of one unit (whichever is on higher generation) under situations listed below :

1. POWER FLOW > 70 MW OR LINE CURRENT > 320 AMPS IN RANGIT-RAMMAM FEEDER

2. POWER FLOW > 70 MW OR LINE CURRENT > 320 AMPS IN RANGIT-KURSEONG FEEDER
 3. POWER FLOW > 75 MW IN CHUZACHEN – MELLI FEEDER (Presently **ChuzachenGangtokfeeder**)
- At present, after the 132KV Rangpo bus coupler is being kept in open condition, power flow in the Rangit&Melli bus and their downstream network do not experience any direct influence from Chuzachen generation or from the upstream 400 KV / 220 KV network of Rangpo substation, under any contingency situation. No instances of cascade tripping of Sikkim - North Bengal system has also been noted so far till date.
 - In view of above, it is requested to review the Chuzachen SPS in favour of the following :

OPERATIONAL SIGNAL in SPS	PROPOSAL
POWER FLOW > 70 MW OR LINE CURRENT > 320 AMPS ---- RANGIT-RAMMAM Feeder	Waiver requested
POWER FLOW > 70 MW OR LINE CURRENT > 320 AMPS ---- RANGIT-KURSEONG Feeder	Waiver requested
POWER FLOW > 75 MW ---- CHUZACHEN – GANGTOK (Earlier Melli) Feeder	To be retained

ERLDC / ERPC and the OCC forum is requested to review the above and if deemed fit on technical grounds, modify the Chuzachen SPS scheme accordingly.

Deliberation in the meeting

The proposal was discussed in detail and it was decided that the presently the SPS signals for 132 kV Rangit-Rammam & Rangit-Kurseong may be kept in disabled conditions but should not be removed. As this SPS signals may be required when the 132 kV bus-coupler is in closed condition for relieving the overload in Rangpo-Binaguri line.

Meeting ended with vote of thanks to the chair.

Participants in 124th OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 23.08.2016 (Tuesday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
1	A.K. Bandyopadhyay	MS / ERPC	9433068531	mseofpc-power@nie.in	A.K. Bandyopadhyay
2	U.K. Verma	GM (ERLDC)	8902496220	ujwal Kumar Verma@gmail.com	U.K. Verma
3	P.P. BANDYOPADHYAY	DGM (SO), ERLDC	7044083323	porth_bandyopadhyay@gmail.com	P.P. Bandyopadhyay
4	P.S. Das	Asst GM (SO), ERLDC	9433041837	psdas1972@gmail.com	P.S. Das
5	S. BANERJEE	DGM	9433041823	sureshjitb@gmail.com	S. Banerjee
6	S.K. SINGH	DGM (AM)	8544401030	sksinghps@gmail.com	S.K. Singh
7	B. Pan	CE/SLDC/DRC	9903247102	bpan.drc@gmail.com	B. Pan
8	S. Nayak	AGM / NTPC	9437041581	Snayak@ntpc.co.in	S. Nayak
9	S.K. Sharma	AGM (OS), NTPC	9471008259	sksharma86@ntpc.co.in	S.K. Sharma
10	R.K. Mandal	AGM / NTPC KARHALGAON	9431600132	rkmandal@ntpc.co.in	R.K. Mandal
11	S. Nay	CM POWER FID	987391439	Sndip@Ponnyindia.com	S. Nay
12	T.P. Sharma	EE / DGPC / THP	+91 517603422	tpsharma.777@gmail.com	T.P. Sharma
13	S.R. Saldar	AGM / MPL	9223553151	sr.saldar@tatapower.com	S.R. Saldar
14	P.K. Shrivastava	Manager / APNRL	9771415731	Pradeepshrivastava@adhinikgroup.co.in	P.K. Shrivastava
15	Dr. D.K. Singh	AGM / VL	9777451531	singh.deepak@vedanta.co.in	Dr. D.K. Singh
16	Deharak Bar	Head ER / PRDC	9903010107	deharak.barua@prodeltechno.com	Deharak Bar
17	Akash Singh	PRDC	9066807351	akashsingh@prodeltechno.com	Akash Singh
18	Saurav K Sahay	ERLDC / Engg	9432013173	Sahay.Saurav@gmail.com	Saurav K Sahay
19	R. P. Kumar	Engg / ERLDC	9903329591	raj.proun@gmail.com	R. P. Kumar
20	M.K. Thakur	Asst Mgr / ERLDC	943251832	mkt elect @ gmail . com	M.K. Thakur


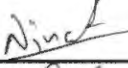

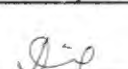


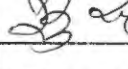
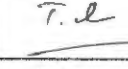
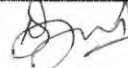
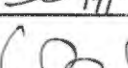
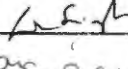
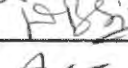
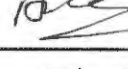
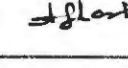
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Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
21	RAHUL MAJUMDAR	PRDC	8428953596	rahul.m@pudinfo.net	
22	Ninad Nigam	Asst. Mgr. Vedanta Ltd.	999300757	ninad.nigam@vedanta.co.in	
23	Gopi Maya Gungu	S.O./DGPC	0097577574740	gmguing4990@gmail.com	
24	Debi Wangma	J.E./DGPC	0098517634920	debiluckystar10@gmail.com	
25	Tenzin Wangda	Sr. SO/DGPC	0097577574740	tenzinwangdaklep@gmail.com	
26	Debijyoti Sinha	Asst. Mgr. Alstom	9748705106	debijyoti.sinha@alstom.com	
27	Ujjwal Sinha	Asst. Mgr. COMPTON	983006556	ujjwale@comptel.com	
28	B.K. Nalle	PG-Odisha	9437962169	onmodisha@gmail.com	
29	PARTHA GHOSH	ER-II	9434748263	partha.ghosh@powergridindia.in	
30	T.R. Mohapatra	ERLDC	9133041873	tulsi.mohapatra@gmail.com	
31	S.P. BARNWAL	ERLDC	9433041812	spbarawal@gmail.com	
32	D. R. Bauri	EE, ERPC	9883617236	eeofp.erpc@gov.in	
33	J.G. Rao	EE, ERPC	9547891353	ereb-lea@yahoo.co.in	
34	V. Kalyanaswami	SE, EXPC	8902495969	vkalyanaswami@reli.in	
35	D.K. Singh	ESE, SLDC, BSPTCL	7763817716	slde.bsptcl@gmail.com	
36	Dharmbeer Singh	AEE/SLDC JUSNL	9771850485	sldecranchi@gmail.com	
37	Arundhati Ghosh	ESG/JUSNL	7070816370	arundhati.ghosh@wbsetcl.in	
38	A. Ghosh	C.E (CPD) WBSETCL	9434910019	arundhati.ghosh@wbsetcl.in	
39	RAFIKUL ISLAM	CE: SLDC WBSETCL	9434910030	rafikul.islam@wbsetcl.in	
40	MAHITOSH MAJI	Gm, Corp. WBPDCL	8336903760	m-maji@wbpdcl.co.in	

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Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
41	R. Biswas	SM/DPZ	9434735985	bslde.dpps@gmail.com	
42	RC DAKRA VARTY	CFL DGM	98310524619	v.vahel.chakravarty@rp-sg.in	
43	U.N. Mishra	CGM GMDCO	9438907774	sgm.pp@gridco.co.in	
44	P.K. Mishra	GM, SLDC, Odisha	9438907402	ele.pkmishra@slcon'ssg.org.in	
45	PRASHANT KUNAR DAS	DGM, SLDC, odisha	9438907108	prashant.k.das@gnha.co.in	
46	H.P. Mahapatra	Mgr, OHPL, BBSR	9861164943	hpm.ohpl@gmail.com	
47	Jitendra Malik	ADM, GMR	9777456737	jitendra.malik@gmrgm	
48	R.C. Mahapatra	Adviser IBEUL	9437044660	rcmahapatra1@gmail.com	
49	N. Mandal	SrGM Gati	8016082299	niladri.mandal@gatiinfra.com	
50	P. Banerjee	SE/WBSECL	9432140711	preeban72@gmail.com	
51	N. B. Saha	SM (OS) WBPDCL	8336903700	nbsaha@wbpdcl.co.in	
52	ARUNAVA SEN GUPTA	DGM (SE) CBSECL	9831802682	arunava.gupta@rp-sg.in	
53	P. HALDER	DGM (OS) WBPDCL	8336903685	p.halder@wbpdcl.co.in	
54	C. K. Halder	ACE WB'SLDC	9432209503	—	
55	P. K. Kundu	ACE, WB'SLDC	9434910263	p.kundu_1961@yahoo.co.in	
56	S. K. ETRIAL	EE, ERPC	9831919509	shyam.ies11@gmail.com	
57	Pranav K. Gupta	DGM (O)/KTPS	8336903960	pgupta@wbpdcl.co.in	
58	Uday Verma	DPM/PKTCL	9163547108	uday.verma@sterlite.com	
59	Dinesh Mehta	AM/APNRL	8376903919	dineshmehta@adshnikgroup.co.in	
60	Lenin N	ACE/ERPC	8335905973	lenin.nitc@gmail.com	

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Annexure-B3

Sl no.	Station	Owner	Voltage level	Relay Data Status	contact details
1	Bhushan steel	Bhshan steel		All relay data pending	ARVIND KUMAR SACHDEVA- 9437059668 , aksachdeva@bpsl.net
2	Chaipal	OPTCL	132	All MICOM relay data pending	SRI AMIYA KUMAR RATH- 9438907179 emrt.sd.chp@optcl.co.in
3	OPCL	OPCL	132	All relay data pending	G P MAHAPATRA- 09437128756-
4	BRG	BRG	132	All relay data pending	SANJIB MUKHERJEE- 7682847132,
5	Burla	OPTCL	132	Relay data and generator data pending (for few relays data was collected manually)	SRI GYANA RANJAN DAS- 9437051197,testing team contact-Abani Mishra-ele.amishra@optcl.co.in
6	Bargarh	OPTCL	132	All SEL relay data pending	MILKIYOR KERKETTA- 9438907136,testing team contact-Abani Mishra-ele.amishra@optcl.co.in
7	Hindalco	Hindalco	132	ALL RELAY AND GENARATOR DATA PENEING.	tapan.panda@adityabirla.com. nimai.mahapatro@adityabirla.com, tapan panda- 9090966597
8	Action ISPAT	Action ISPAT	132	1. 132 KV I/C-1 MULTILIN L30,F650, 2. 132 KV I/C-2 MULTILIN L30, F650, 3. 132/11 KV TRF MICOM P642, 4. 11 KV INCOMIG MICOM P122, 5. 132 KV B/C 7SJ8042, 6. 132 KV LINEI/C-2 SIPROTEC 7SA611,7SJ8042, 7. 132KV LINE I/C-17SA611,7SJ8042, MICOM P341.	7894462361- Mr. Rajni Kanta Das electrical@actionispac.com
9	Shayam dri	Shayam dri	132	ALL RELAY AND GENARATOR DATA PENEING.	MR. M .K. Prusty PH-9437057785, e-mail:- m.prusty@rediffmail.com
10	Brajanagar	OPTCL	132	RELAY DATA PENDING 1. TRF-1 MICOM P643 & P141, 2. TRF-2 P141, 3. TRF-4 SIPROTECH 7UT61, MICOM P141, 4. TRF-5 MICOM P643	ele.ssasari@optcl.co.in, SDO- ele.smajhi@optcl.co.in
11	Sundargarh	OPTCL	132	ALL RELAY DATA PENDING.	(SDO) Mr. D. K. Mohanty- 9438907453 ele.dkmohanta@optcl.co.in, emrt.sd.rkl@optcl.co.in
12	sri ganesh	sri ganesh	132	GENERATOR DATA & RELAY DATA PENDING (TG PROTECTION (GENARERATOR) - REM545)	V.B REDDY- 8763302212 reddy_vancha@yahoo.com/
13	Aryan ISPAT	Aryan ISPAT		1. 132 MVA TRANSFORMER FEEDER MICOM P632 & P341, 2. VIRAJ FEEDER MICOM P632, P341, 3. 132 KV ARYAN FEEDER REF 615. ALL GENARATOR DATA AND GENARETOR RELAY SETTING.	Kolapalli Padmakar-DGM-09937022792 K.PADMAKAR@ARYANISPAT.COM ALOK CHANDRA- 07894420348, alok.chandra@aryanispac.com
14	IND bharat	IND bharat		ALL RELAY DATA AND GANERATOR DATA PENDING	(SDO) Mr. D. K. Mohanty- 9438907453 ele.dkmohanta@optcl.co.in, emrt.sd.rkl@optcl.co.in
15	Kuchinda	OPTCL		RELAY DATA PENDING.	ele.ssasari@optcl.co.in, SDO- ele.smajhi@optcl.co.in
16	Rourkela 132kV	OPTCL	132	PARTIAL DATA RECEIVED	(SDO) Mr. D. K. Mohanty- 9438907453 ele.dkmohanta@optcl.co.in, emrt.sd.rkl@optcl.co.in
17	Chend	OPTCL	132	PARTIAL DATA RECEIVED	(SDO) Mr. D. K. Mohanty- 9438907453 ele.dkmohanta@optcl.co.in, emrt.sd.rkl@optcl.co.in
18	Tarkera	OPTCL	220	1. RSP-1 MICOM P442,P141, 2. RSP-2 MICOM P442,P141, 3. PGCIL-1 P14DB16A7C0510A 4. PGCIL-2 P14DB16A7C0510A 5. RENGALI 1 P14DB16A7C0510A, 6. RENGALI 2 P14DB16A7C0510A 7. BUDHIPADAR -1 P14DB16A7C0510A, 8. BUDHIPADAR -2 P14DB16A7C0510A, 9. BUDHUPADAR-2 REL670, 10.AUTO-IV SIPROTEC 7UT61, 11.AUTO-III 81DV-L4F-2D0ED62NU, 12.B/C P14DB16A7C0510A, 13.AUTO-II MICOM P643, 14.AUTO-I DOUBIAS-M, 15.132KV SIDE AUTO-III P14DB16A7C0510A, 16.HSL-II MICOM P441, P127, 17.HSL-I MICOM P441,P127, 18.RAJGANGPUR-I 7SJ62, 19.RAJGANGPUR-II REL670, 20.BUDHIPADAR-I(KALUNGA) REL670	(SDO) Mr. D. K. Mohanty- 9438907453 ele.dkmohanta@optcl.co.in, emrt.sd.rkl@optcl.co.in
19	Adhunik metals	Adhunik metals	132	1.132 FEEDR PROTECTION PANEL MICOM P430, 2.132 KV MAIN INCOMING MICOM P341.	9178454188 Mr. Bijay Panda bijaypanda@adhunikgroup.co.in
20	JODA	OPTCL	220	RELAY DATA PENDING	(DGM)S.S. Nanda 9438907803 emrt.div.jjp@optcl.co.in, (SDO) Gourhari Behera

21	Barbil	OPTCL	132	RELAY DATA PENDING	(DGM)S.S. Nanda 9438907803 emrt.div.jjp@optcl.co.in, (SDO) Gourhari Behera
22	Bolani	OPTCL	132	RELAY DATA PENDING	(DGM)S.S. Nanda 9438907803 emrt.div.jjp@optcl.co.in, (SDO) Gourhari Behera
23	Arya	Arya	132	RELAY DATA PENDING	PRADEEP BISWAL 9583000315 er.debiprasadnayak@gmail.com
24	TSIL	TSIL	132	ALL RELAY AND GENARETOR DATA REQUIRED	PRATYUSHA KR. NANDA 9238883280 e-mail- pknanda@tatasponge.com
25	P ponga	OPTCL	132	RELAY DATA PENDING	(DGM)S.S. Nanda 9438907803 emrt.div.jjp@optcl.co.in, (SDO) Gourhari Behera
26	BRPL	BRPL	132	1. 132 KV I/C LINE MICOM P127 , 2. 20 MVA TRANSFORMER MICOM P632, P127	BIKASH RANJAN- 9937290926 bikas.panda@brplind.com
27	ESSAR	ESSAR	132	ALL RELAY DATA RECIVED EXCEPT 1. 132 KV I/C LINE MICOM P442.	DIRENDRA SINGH- 9437058410 dhirendrasingh@essar.com
28	MSP	MSP	132	ALL RELAY DATA RECIVED EXCEPT REF PROTECTION SCHEM	D. DASS- 9776193996 dibyajotidass55@gmail.com
29	sri ganesh switching	optcl		RELAY DATA PENDING	(SDO) Mr. D. K. Mohanty- 9438907453 ele.dkmohanta@optcl.co.in, emrt.sd.rkl@optcl.co.in
30	VIRAJ	VIRAJ		RELAY DATA PENDING	WI SINGH- 9238082029 e-mail-prithvipal2012@gmail

31	Tata Steel, Kalinganagar	Tata Group	220/132KV CPP	Generator Protection-Main1 (7UM62)	Budhan Chandra Maji Mob- +91 9040040536 E-Mail- bcmaji@tatapower.com
				Generator Protection-Main2 (7UM62)	
				Rotor Earth Fault- (7XT7100)	
				Stator Earth Fault- (7XT3300)	
				Overall Differential- (7UT63)	
				Differential Protection- (7UT61)	
				O/C & E/F- (7SJ8041-5EB96-3FC0/CC)	Ranjit Kumar- Mob- +91 9040097687 E-Mail- ranjit.kumar1@tatasteel.com
				Distance Main1- (7SD5)	
				Distance Main2- (7SD5)	
				Grid Islanding- (7SJ8031)	
				Differential Main1- (7UT61)	
				Differential Main2- (7UT61)	
				O/C & E/F- (7SJ62)	
				O/C & E/F- (7SJ62)	
				Muster Control Unit- (7SS52)	
32	Dhenkanal	OPTCL	132/33KV	Distance- SEL321	M Z Huda, EMR DGM Mob- +91 9438907491 e.mail-
				Differential- 7UT61	
				Differential- 7UT61	
				Differential- MICOM P632	
				Distance- MICOM P442	

33	Bhawanipatna	OPTCL	132	1.TRANSFORMER 1 DIFFERENTIAL MICOM P632, 2.TRANSFORMER 1 DIR O/C & E/F MICOM P141 3.TRANSFORMER 1 HV REF MICOM P141 4.TRANSFORMER 2 DIFFERENTIAL MICOM P632, 5.TRANSFORMER 2 DIR O/C & E/F MICOM P141 6.TRANSFORMER 2 HV REF MICOM P141 7.BUSCOUPLER & TRANSFER BUS COUPLER MICOM P141	BENUHAR PARIDA(E&MR)-9438907367 e-mail- ele.bparida@optcl.co.in
34	Junagarh	OPTCL	132	1. KESINGHA DISTANCE RELAY ALSTOM PD521.	BENUHAR PARIDA(E&MR)-9438907367 e-mail- ele.bparida@optcl.co.in
35	Kesinga	OPTCL	132	1. BHAWANIPATNA DISTANCE RELAY REL670 2. TRANSFORMER DIR O/C & E/F MULTILIN650 3. KHARIAR DISTANCE RELAY 670.	BENUHAR PARIDA(E&MR)-9438907367 e-mail- ele.bparida@optcl.co.in
36	Sonepur	OPTCL	132	1.TRANSFORMER '3' DIRECTIONAL O/C & E/F SEL751A	ABANI MISHRA(E&MR)-9438907827 e-mail-
37	Bhubaneshwar	OPTCL	132	1. CHANDAKA - O/C - MICOM CDG31FF0035DCH 2. CHANDAKA - E/F MICOM CDG31FF0035DCH 2. TRANSFORMER 1 - DIFFREANTIAL MICOM P633	GURUPRASAD MISHRA(E&MR)- 9438907866,elegpmishra@optcl.co.in
38	kesura	OPTCL	132	1. TRANSFORMER 1- DIFFRENTIAL SIPROTEC 7UT5131 2. TRANSFORMER 1- OVER FLUXING SIPROTEC 7RW6000 3. TRANSFORMER 2- DIFFRENTIAL SIPROTEC 7UT5131 4. TRANSFORMER 2- OVER FLUXING SIPROTEC 7RW6000	GURUPRASAD MISHRA(E&MR)- 9438907866,elegpmishra@optcl.co.in
39	nimapara	OPTCL	132	ALL RELAY DATA'S ARE PENDING OF THOSE SUBSTATION	GURUPRASAD MISHRA(E&MR)- 9438907866,elegpmishra@optcl.co.in
40	Konark	OPTCL	132		
41	samangara	OPTCL	220		
42	puri	OPTCL	132		
43	SAMUKA	OPTCL	132		
44	Kharag prasad	OPTCL	132	NEED TO FIND E & M R TEAM FOR DOWLOAD	NEED TO FIND E & M R TEAM FOR DOWLOAD

				Distance Main-1 - 7SA52	
				Distance Main-2 - 7SA52	
				Dir O/C & E/F- 7SJ62	
				Distance Main-I - 7SA52	
				Distance Main-II - 7SA52	
				Dir O/C & E/F- 7SJ62	
				Tie LBB - 7SV5121	
				Distance Main-I - 7SA52	
				Distance Main-II - 7SA52	

45	Meramundali	OPTCL	400KV	Dir O/C & E/F- 7Sj62	M Z Huda, EMR DGM 9438907491	Mob- +91
				Tie LBB - 7SV5121		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Tie LBB - 7SV5121		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Tie LBB - 7SV5121		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Tie LBB - 7SV5121		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Tie LBB - 7SV5121		
				Distance Main-I - 7SA52		
				Distance Main-II - 7SA52		
				Dir O/C & E/F- 7Sj62		
				Differential - 7UT5131		
				Dir O/C & E/F- 7Sj62		
				Tie LBB - 7SV5121		
				Differential - 7UT5131		
				Dir O/C & E/F- 7Sj62		
				Tie LBB - 7SV5121		
				Bus Bar Diffn- 7SA6010		
46	Bidanasi	OPTCL	220KV	Distance Protection- ALSTOM- PD 571	Satya Narayana Sahoo, EMR Engg. Mob-+91 9438907844	Ajay Das, EMR AGM Mob- +91 9438907495 e.mail-
				Distance Protection- ALSTOM- PD 571		
				Distance Protection- ABB- REL-670		
47	Angul	OPTCL	132KV	Differential- ALSTOM- Micom P643	M.Z.Huda 9438907491	Mob- e.mail-
				Differential- ALSTOM- Micom P643		
				Differential - SEL - 787		

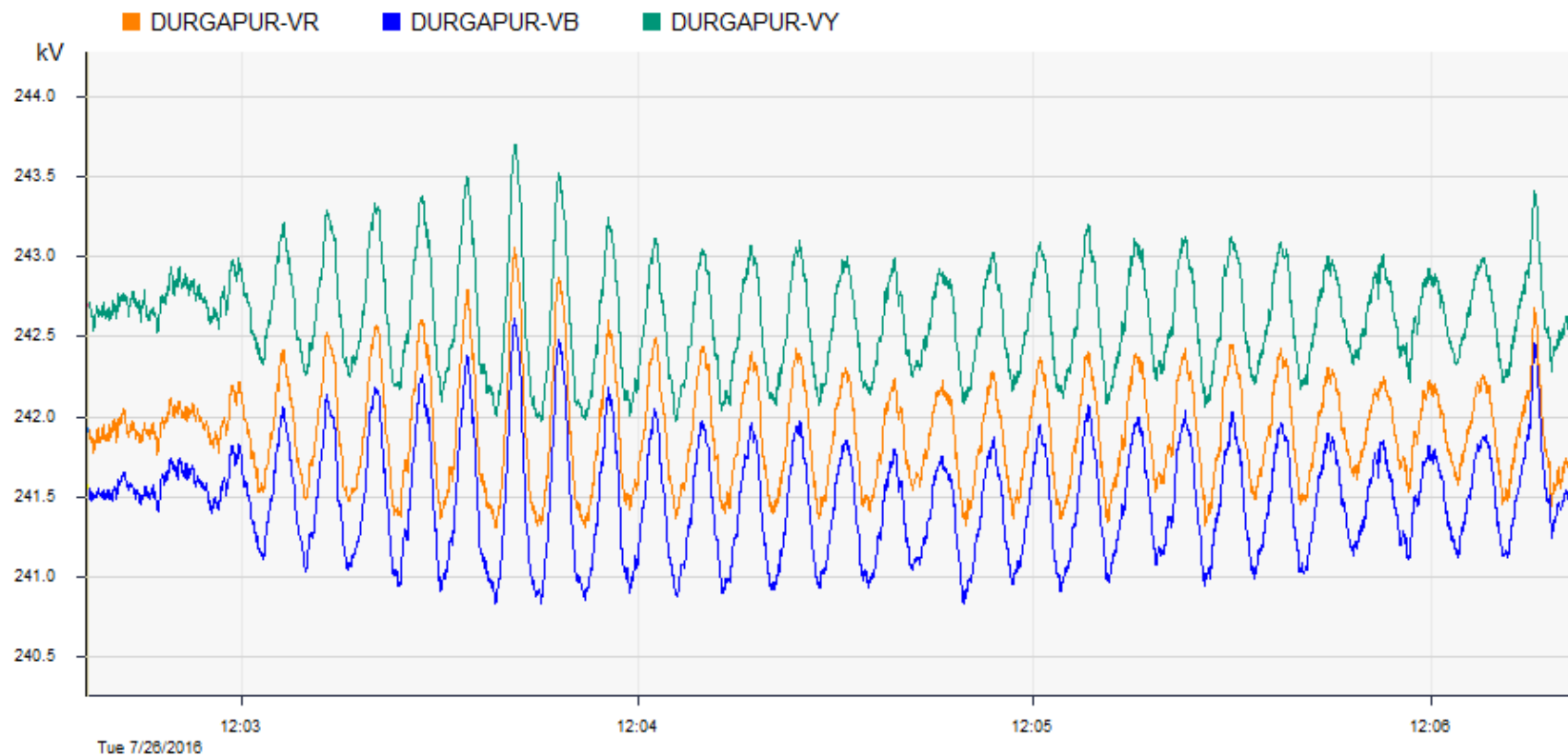
Annexure-B4

**PMU observation regarding voltage
oscillation at Durgapur on 26-07-16**

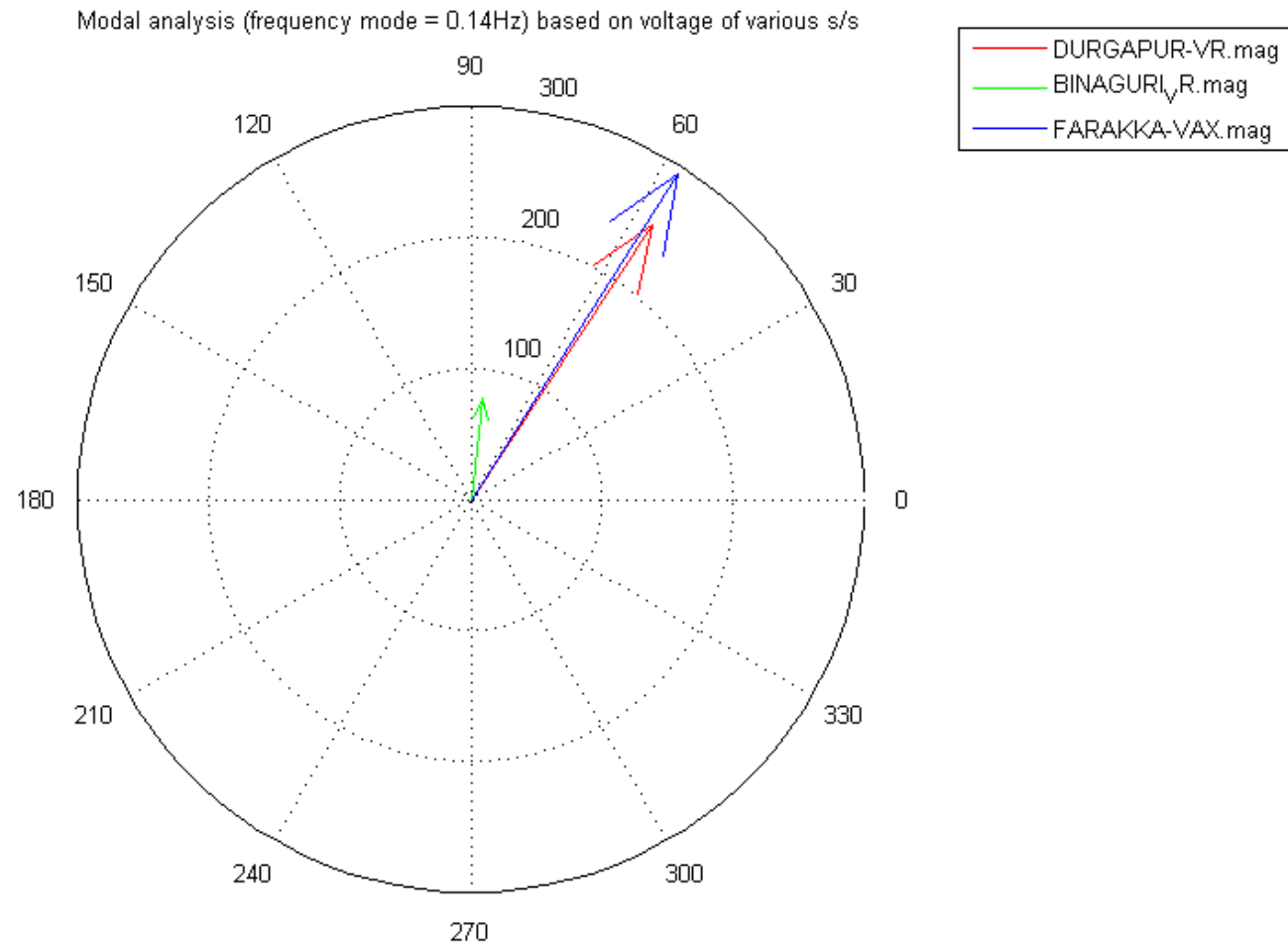
Summary

- On 26-07-16, oscillation has been observed in the voltage data measured by Durgapur & Farakka PMU in the duration of 12:03-12:06 hrs & 16:31-16:34 hrs
 - It has been reported CTPS U#2 tripped on tube leakage at 12:02 hrs. & Sagardighi U#3 tripped at 12:06 hrs. due to DC problem.
 - No event has been reported during the oscillation of 16:31-16:34 hrs.
- Oscillation has been observed in voltage data (Not in frequency or angle difference between PMU installed buses)
- Oscillation was mostly observed in 400 kV Farakka Kahalgaon I current & MW flow, 400 kV Durgapur – Maithon I current, MW & MVAR flow, 400 kV Durgapur – Jamshedpur MVAR flow

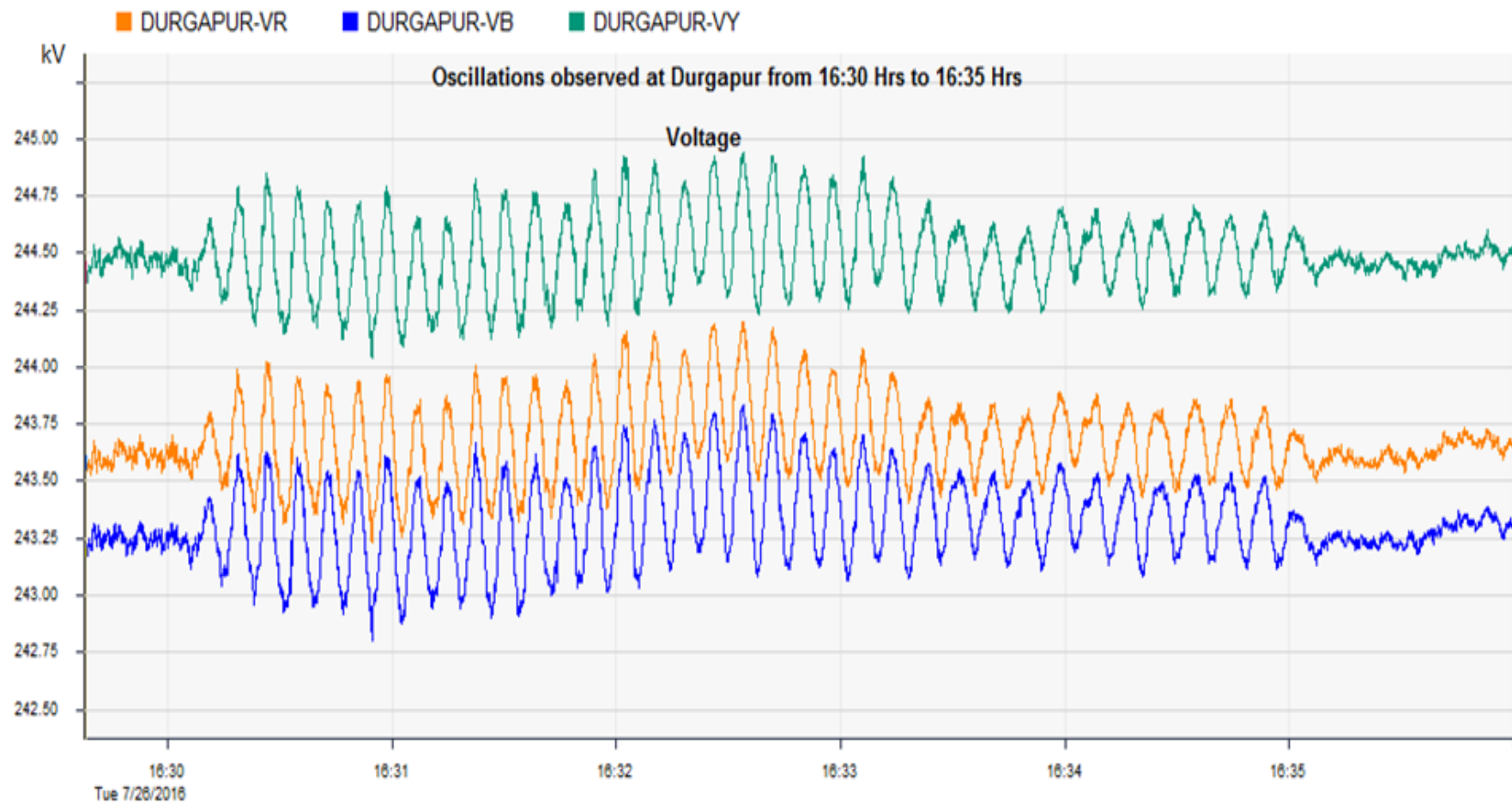
Voltage at Durgapur during 12:03-12:06 hrs



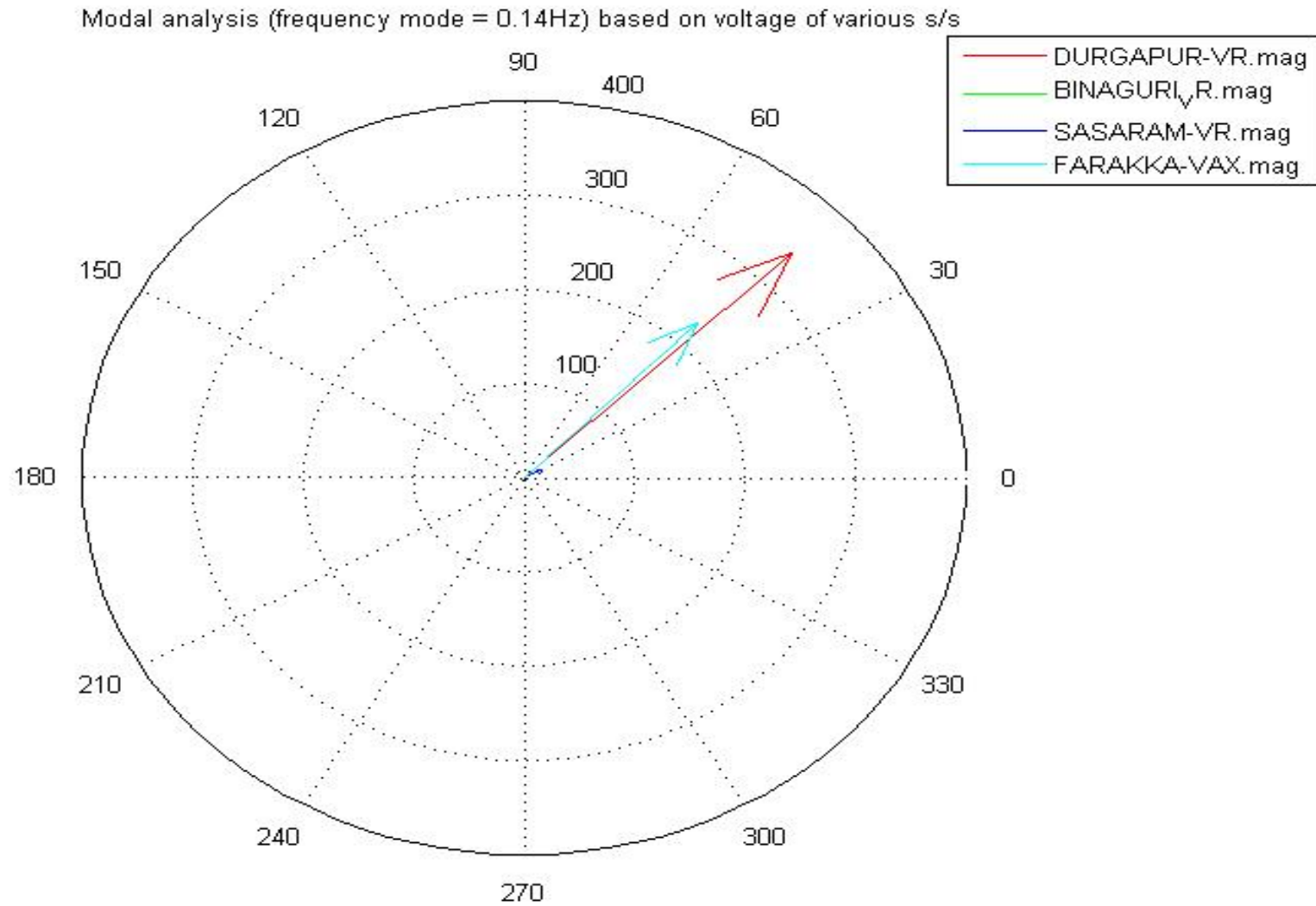
Modal analysis of voltage oscillation of various S/S during 12:03-12:06 hrs



Voltage at Durgapur during 16:31-16:36 Hrs



Modal analysis of voltage oscillation of various S/S during 16:31-16:36 hrs



Status of data received

- Data received from
 - HEL
 - MPL,
 - DVC (for DSTPS, Mejia-B, Raghunathpur taken from CLD SCADA instead of unit DCS),
 - WBPDCCL (for Bakreawar TPS and Kolaghat TPS)
 - Kahalgaon STPS

- Data not received from
 - Farraka,
 - Sagardighi,
 - PPSP,
 - DPL,
 - Adhunik TPS,
 - Budge Budge

Discussion with expert

- The matter was also discussed with Professor Mani V. Venkatasubramanian of Washington State University who visited WRLDC, Mumbai on 12th August 2016
- Prof suggested to also examine MW and MVAR output of DPL units. However later DPL informed that their local SCADA archival system was out of service during the period due to which machine MW/MVAR/kV for the concerned period was not stored.
- In the opinion of Prof Mani, as the oscillation was not sinusoidal and resembled more like a saw tooth waveform, harmonic components are quite significant, which is an indication of forced oscillation rather than system generated, although the mode is well damped.

Conclusion & Recommendation

- As large number of industrial loads like smelter, furnaces, steel mills etc are supplied in the neighbourhood of Durgapur, Maithon and Jamshedpur, their switching/operation may affect the EHV voltage in case the local dynamic reactive compensation is unable to respond satisfactorily.
- STUs and CTU may insure that suitable compensation is provided by their large consumers
- All generation plants should insure that their local SCADA/DCS is working properly so that historical archival of data can be maintained and extracted when ever necessary

Generation Projection (Oct'16 - Dec'16)																	
				Generation declared Commercial from 1st Jan '16 to 30th June '16					Generation declared/expected to be declared Commercial from 1st July'16 to 30th Sep'16								
Sl. No.	Entities	Region	Projections based on 3 Years Data	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	TOTAL	Comments From DICs /Others (if any)	Figure as per Comment s/PoC Data	Projected Generation before normalization w.r.t projected All India Peak Demand
			(MW)			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)	(MW)			(MW)
1	West Bengal	ER	4663											4663			4663
2	Odisha	ER	2659											2659	As per GRIDCO	3197	3197
3	Bihar	ER	153											153			153
4	Jharkhand	ER	503											503			503
5	Sikkim	ER	0											0			0
6	Chujachan	ER	110											110			110
7	DVC	ER	3144											3144			3144
8	Durgapur Steel	ER															
9	Koderma TPP	ER															
10	MPL	ER	1004											1004			1004
11	Sterlite	ER	777											777			777
12	Teesta	ER	533											533	As per NHPC	510	510
13	Kahalgaon	ER	2175											2175	As per NTPC	2298	2298
14	Farakka	ER	1920											1920		2075	2075
15	Talcher	ER	942											942			942
16	Rangeet	ER	72											72	As per NHPC	63	63
17	Corporate Power	ER												0			0
18	Adhunik Power	ER	420											420			420
19	Barh	ER	877	Barh	5	660	432	432						1309	As per NTPC	1308	1308
20	Kamalanga TPP (GMR)	ER	661											661			661
21	JITPL	ER	1050											1050			1050
22	Jorethang	ER	83											83			83
23	Bhutan	ER	814											814			814
24	Raghunathpur			Raghunathpur TPP	1	600	393	785						785			785
				Raghunathpur TPP	2	600	393										
25	Bokaro TPS Extn.	ER		Bokaro A TPS Extn	1	500	327	327						327			327
	TOTAL		22561					1545					0	24106			24889

Note:

1. Projections are based on monthly maximum injection in the last 3 years from actual metered data.
2. Generation forecast has been done based on the following criteria

(i) If there is an increasing trend then last year average generation has been considered

(ii) Otherwise average of past three year average generation has been considered
3. In case of new generators where past data was not available following has been assumed

(i) 0.8 plf for hydro generators

(ii) 0.7 plf for thermal generators.

(iii) 0.3 plf for gas stations
4. In case of the re-organized states of Andhra Pradesh and Telangana Generation is divided in the ratio 53.89% for Telangana and 46.11% for Andhra Pradesh for FY 2012-13 and 2013-14. This is as per letter No.CE/COMML./APPCC/DE-COMML/POC-DATA-15-16/D.No/15 dtd. 09.10.15 as received from APTRANSCO.

DEMAND FORECAST USING PAST 3 YEARS DATA October 2016 - December 2016)															
										1	2	3	4	Data given by DICs	Comments
	2013-14			2014-15			2015-16								
	Oct-13	Nov-13	Dec-13	Oct-14	Nov-14	Dec-14	Oct-15	Nov-15	Dec-15	2013-14 Average	2014-15 Average	2015-16 Average	Projected Demand for (October 2016 - Dec2016) before normalization		
Bihar□	2,221	2,312	1,938	2,792	2,754	2,558	3,435	3,313	3,407	2,157	2,701	3,385	3,976		
DVC□	2,390	2,253	2,303	2,443	2,483	2,142	2,324	2,310	2,321	2,315	2,356	2,318	2,333		
Jharkhand□	995	986	936	1,035	1,055	1,047	1,103	1,127	1,101	972	1,046	1,110	1,181		
Odisha	3,586	3,319	3,130	3,707	3,620	3,504	4,015	3,884	3,759	3,345	3,610	3,886	4,155	4150	As per data submitted by GRIDCO
West Bengal□	6,630	6,366	6,059	7,086	6,290	5,818	7,755	6,935	6,478	6,352	6,398	7,056	7,306		
Sikkim□	90	85	80	82	78	78	95	95	108	85	79	99	102		
Bhutan															
Eastern Region□	14,870	14,318	13,501	16,566	15,684	14,593	17,972	17,068	16,592						

Notes

- Projections are based on the past 3 years' monthly Peak Demand Met data available on the website of CEA
- The above projections are being done for financial year 2016-2017 (Q3) i.e Oct 2016 to Dec 2016
- Projections are being done based on the forecast function available in MS Office Excel
- In case of the re-organized states of Andhra Pradesh and Telangana Maximum Demand is divided in the ratio 53.89% for Telangana and 46.11% for Andhra Pradesh for FY 2012-13 and 2013-14. This is as per letter No.CE/COMML./APPCC/DE-COMML/POC-DATA-15-16/D.No/15 dtd. 09.10.15 as received from APTRANSCO.
- CEA Reports can be accessed from the following links:
http://www.cea.nic.in/reports/monthly/powersupply/2015/psp_peak-12.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2015/psp_peak-11.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2015/psp_peak-10.pdf
http://www.cea.nic.in/reports/monthly/gm_div_rep/power_supply_position_rep/peak/Peak_2014_12.pdf
http://www.cea.nic.in/reports/monthly/gm_div_rep/power_supply_position_rep/peak/Peak_2014_11.pdf
http://www.cea.nic.in/reports/monthly/gm_div_rep/power_supply_position_rep/peak/Peak_2014_10.pdf
http://www.cea.nic.in/reports/monthly/gm_div_rep/power_supply_position_rep/peak/Peak_2013_12.pdf
http://www.cea.nic.in/reports/monthly/gm_div_rep/power_supply_position_rep/peak/Peak_2013_11.pdf
http://www.cea.nic.in/reports/monthly/gm_div_rep/power_supply_position_rep/peak/Peak_2013_10.pdf

	U/F & O/F SCHEME in CESC (modified on 05.08.2013)	SUMMER LOAD (MW)	WINTER LOAD (MW)
Stage-1 (49.2 c/s, 0.1 s)	Chakmir S/S :		
	55 MVA T1 & T2	47	29
	NCGS:		
	Kamarhati T1	8	6
	Kutighat T3	10	8
	TOTAL	65	43
Stage-2 (49.0 c/s, 0.1 s)	Dum Dum S/S:		
	New Dum Dum T1	15	11
	New Dum Dum T2	14	9
	South Dum Dum T1	15	8
	Dum Dum T3	12	7
	BGS:		
	BAURIA 1&3	18	12
	Fore Shore Rd D/S (6 KV Fdrs)	9	5
	Shalimar D/S (6 KV Fdrs)	7	3
	TOTAL	90	55
Stage-3 (48.8 c/s, 0.1 s)	Majerhat S/S :		
	Diamond City(W) D/S	13	7
	Thakurpukur T1	10	4
	Thakurpukur T-2 // Behala (N) T-1	24	14
	Jadavpore S/S :		
	South City D/S T2	13	8
	Tollygunge(N) D/S T-1/South city T1	23	15
	KRS		
	Ballygunge(E) D/S (6 kv T1)	8	5
	PRS:		
	Princep St D/S (6 kv Fdrs.)	16	10
	NCGS:		
	Kutighat T1	6	4
	Kutighat T2	6	4
	Kutighat T4	6	4
	TOTAL	125	75
Stage-4 (48.6 c/s, 0.1 s)	132 kV Liluah-CESC(BRS) 1, 2 & 3 at WBSETCL Liluah S/S	120	70

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

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

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Details Regarding No. of Consumers and Connected Load etc.

(A) Utilities

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

(B) Non Utilities

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

(C) Utilities + Non Utilities

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

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

(A) Installed Capacity (MW) - Utilities

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

(B) Installed Capacity (MW) - Non Utilities

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

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

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

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

1. State/Centre :

2. Month :

3. Year :

[illegible]

Dynamic data of Generator Models required in PSSE for Simulations

- **Data received from**
 - NTPC Kahalgaon & Barh, Farakka, Talcher STPS, TTPS
 - NHPC Teesta-V,
 - WBPDC, CESC
 - GMR, JITPL, MPL and Vedanta Ltd. Including Vedanta (135 MW units)
 - DVC
 - OHPC, OPGC
 - IMFA CPP Odisha
- **Data not received from**
 - Kanti TPS
 - NHPC Rangit
 - JUVNL,
 - DVC
 - Maithon, Panchet HEP
 - Adunik TPS
 - Jorthang HEP, Chujachen HEP

Generating Station

- Nabinagar NTPC : No telemetry and voice communication.
- Sterlite IPP : No data from New switch yard since 3rd Feb 2016. No VOIP/Express voice. Alternate Data channel yet to be provided.
- MPL : Data is highly intermittent.
- TLDP (III) & (IV) : No telemetry data
- Haldia (2 x 300MW) : Bus Voltage, Isolator Status, SOE, LV side data.
- GMR (3 x 350 MW) : Express voice and VOIP integration with ERLDC.
- JITPL (2 x 600MW) – Express voice and VOIP yet to be provided. Alternate Data channel yet to be provided.

Contd...

Generating Station:

- IBEUL (2 x 350 MW) – VOIP/Express Voice. Alternate Channel. Unit Side data not available. Alternate Data channel yet to be provided.
- Farakka NTPC: Unit #4 and Unit # 6 LV side not available.
- Sagardighi : Unit 3 HV side (GT) data not available.
- Patratu and Tenughat : data is highly unstable due to communication link instability.
- TISCO: Highly intermittent.
- JSPL(Meeramundali) : CB and Isolator status not available since last 2 years.

Sub Station (data not available at ERLDC):

- POWERGRID :Arrah 220 (not reporting since May 2016).
- NTPC: Lalmatia (No data since Jan 2016).
- BSPTCL : Sonenagar , Darbhanga, Valmikinagar and koshi (Connected with Nepal)
- JUSNL : Hatia New 220, Dumka 220.
- OPTCL : Paradeep and Bolangir (GR), Vedanta.

Sub Station (highly intermittent data):

- POWERGRID : RANCHI, Purnea 400, Baripada, Gaya, Biharshariff, Angul, Muzaffarpur.
- WBSETCL: Bantala , Laxmikantapur , New Town , Subhasgram.
- BSPHCL : Dumraon, Khagaul , Darbhanga , Dehri , sultangaunj , Lakhisarai, Karmanasa, Kahalgaon , Jamaui , Banka , Gopalganj, Kisanganj, Arrah , Rajgir , Sipara , Hajipur (New), Pusauli
- JUSNL : Entire data is highly intermittent due to communication link instability.
- DVC : Parulia , Barhi.

VOIP/Express Voice not available

- GMR
- JITPL
- Sterlite
- IBEUL
- Nabinagar
- Bolangir
- Indravati
- Jeypore
- Kalabadia
- Keonjhar
- Gazuwaka HVDC
- Unit Control of ISGS and IPP/MPP.

Details of Eastern Region

A. Telemetry not provided

A.1 Generating Stations

Sl. No.	User Name	Name of Generation Stations	Date of first synchronisation	Total Generation Capacity (in MW)	Remarks by constituentes / ERLDC 26.07.16
1	WBSETCL	Haldia (2 x 300)	Jan-15	600	ERLDC is not getting any real time ISOLATOR status ,SOE from HEL except Line, Unit site MW /MVAR. No response.
2		Sagardighi			Unit 3 HV side not available
1	IPP	400 KV GMR (3X 350 MW)	Apr-13	1050	As per ERLDC guidelines no express voice /VOIP phones.
2		400 JITPL (600 x 2)		1200	Data Are highly instable . No alternate data channel and express voice commuincation integrated with ERLDC New Exchange
3		IBEUL (2 x 350 MW)		700	No alternate data channel and as per ERLDC guidelines no express voice /VOIP phones provided . LV side data not available
		Total (Non-telemetered stations)	4	3550	

A.2 Sub - Stations (765 & 400 kv)

Sl. No.	User Name	Name of sub-Stations	Voltage level	Date of first synchronisation	Remarks by constituentes / ERLDC 26.07.16
1	OPTCL	JSPL (Meramundali -400)	400 kv	Sep'10	Status are not reporting.

A.3 Sub - Stations (220 kv & 132 kv)

Sl. No.	User Name	Name of sub-Stations	Voltage level	Target date as per User	Remarks by constituentes / ERLDC 26.07.16
1	OPTCL	OPTCL CPP : 220 KV BPSL,CONCAST,BSL,JSL,TSIL,VISSA	220 / 132 kv	Dec-13	CONCAST NO DATA , JSL NO KV/HZ. BSL NO HZ .BPSL NO Bus Kv .
1	WBSETCL	Foundary Park	220		data not integrated
2		Hura	220		data not integrated
1	BSEB	Darbhanga	220 kv		RTU under commissioning under upgradation project.
2		Jagdishpur	132 KV		RTU under commissioning under upgradation project.
1	JSEB	Hatia New	220 kv	No Time Schedule	No Data available .No response .
2		Japla	132 KV		No Data available .No response .
3		Dumka	220 KV		No Data available .No response .

B. Telemetry provided but not working / working intermittently

B.1 Generating Stations

Sl. No.	User Name	Name of Generation Stations	Total Generation Capacity (in MW)	Target date as per User	Remarks by constituentes / ERLDC 26.07.16
1	OPTCL	220 KV Vedanta (9X 135 MW)	1215	Dec-13	Some CB / Isolators and KV / HZ point yet to be provided.No response .
	WBSETCL	TLDP (III)			Data not available
		TLDP (IV)			Data not available
1	JSEB	220 KV Tenughat (2X 210 MW)	420	Time Schedule not submitted	Data highly intermittent
2		220 KV Patratu (4x 50 + 2x100 + 4x110)	840	Time Schedule not submitted	Data highly intermittent
1	NTPC	400 kv Farakka : (3x 200 + 2 x 500 MW + 600) Unit-6 and Unit -4 LV side MW/MVAR not available	2100	Time Schedule not submitted	No response .
2		BRBCL/Nabinagar TPP (4x250 MW)	1000	Time Schedule not submitted	No data available. As per ERLDC guidelines no express voice /VOIP phones provided .
1	Vedanta	SEL (4 x550 MW)	2200		All data stopped reporting since March 2016

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B.2 Sub - Stations

Remarks by constituentes / ERLDC 26.07.16

Sl. No.	User Name	Name of sub-Stations	Voltage level	Target date as per User	Data not reporting
1	BSPTCL	Barauni	132 kV		Under rennovation and modernization . Target July 2016
2		Dumraon	132 kV		Data stopped reporting
3		Khagaul	132 kV		Data intermittent
4		Darbhanga	220 kv &132 kV		RTU under commissioning under upgradation project.
5		Dehri	220 KV		presently not reporting due to RTU problem. M/s chemtrols RTU vendor directed to rectify problem. Target- May-16
6		Sonenagar	220 kV		Under rennovation and modernization . Target July 2016
7		sultangaunj	132 kV		Under rennovation and modernization . Target July 2016
8		Lakhisarai	132 KV		Data Intermittent
9		Karmanasa	132 KV		Under rennovation and modernization . Target July 2016
10		Kahalgaoon	132 kV		Data Intermittent
11		Jamaui	132 KV		Data Intermittent
12		Banka	220 kv		Data Intermittent
13		Valmikinagar	132 kV		Under rennovation and modernization . Target July 2016
14		Koshi	132 kV		Under rennovation and modernization . Target July 2016
15		Gopalganj	220 kV		Data highly intermittent
16		Kisanganj	132 KV		Data highly intermittent
17		Arrah	132 KV		Data highly intermittent
18		Rajgir	132 KV		Data highly intermittent
19		Sipara	220 KV		Data highly intermittent
20		Hajipur (New)	220 KV		Data highly intermittent
21		Pusauli	220 KV		Data highly intermittent
1	GRIDCO	Paradeep	220		Data not Available
2		bolangir new	220		Data not Available
1	JSEB (COMMUNICATION link is highly instable)	Jamtara	132 kV	Time Schedule not submitted	Data not available
2		Deoghar	132 kV	Time Schedule not submitted	Data not available
3		Garwah	132 kV	Time Schedule not submitted	Data not available
4		Goelkera	132 kV	Time Schedule not submitted	Data not available
5		Jaduguda	132 kV	Time Schedule not submitted	Data not available
6		Kendposi	132 kV	Time Schedule not submitted	Highly Intermittent
7		Ramchandrapur	220 KV		Highly Intermittent
		Asansol	220		Highly Intermittent
		Haldia NEW	220		Highly Intermittent
		bantala	220		Highly Intermittent
		Laxmikantapur	220		Highly Intermittent
		New Town	220		Highly Intermittent
		Subhasgram	220		Highly Intermittent
		EM Bypass(CESC)	220		Bus Voltage and Frequency Not Available
1	POWERGRID	RANCHI	400		Highly Intermittent
2		Purnea 400	400 kV		Highly Intermittent
3		Baripada	400 kV		Highly Intermittent
4		Gaya	765 kV		Highly Intermittent
5		Biharshariff	400 KV		Highly Intermittent
6		Angul	765 KV		Highly Intermittent
7		Muzaffarpur	400 KV		RTU is getting Hanged frequently
1	DVC	TISCO	400 KV		DATA HIGHLY INTERMITTENT
		Parulia	220 kV		Data Not available
1	IPP	MTHRB	400 KV		Data highly intermittent
1	NTPC	Lalmatia	220 kV		Data stoppped reporting since Jan 2016

AVAILABILITY STATUS OF EVENT LOGGER, DISTURBANCE RECORDER & GPS

Sl. NO	Substation	Protection & Control System						Remarks
		Availability			Time Synchronization			
		EL	DR	GPS	Relay	DR	EL	
1	Subhasgram	Yes	Yes	Yes	Yes	Yes	Yes	
2	Maithon	Yes	Yes	Yes	Yes	Yes	Yes	
3	Durgapur	Yes	Yes	Yes	Yes	Yes	Yes	
4	Malda	Yes	Yes	Yes	Yes	Yes	Yes	
5	Dalkhola	Yes	Yes	Yes	Yes	Yes	Yes	
6	Siliguri	Yes	Yes	Yes	Yes	Yes	Yes	
7	Binaguri	Yes	Yes	Yes	Yes	Yes	Yes	
8	Birpara	Yes	Yes	Yes	Yes	Yes	Yes	
9	Gangtok	Yes	Yes	Yes	Yes	Yes	Yes	
10	Baripada	Yes	Yes	Yes	Yes	Yes	Yes	
11	Rengali	Yes	Yes	Yes	Yes	Yes	No	New EL would be implemented in BCU under NTAMC project by March'2015
12	Indravati (PGCIL)	Yes	Yes	Yes	Yes	Yes	No	EL is old one(model-PERM 200), provision for time synchronisation is not available. New EL would be implemented in BCU under NTAMC project by March'2015
13	Jeypore	Yes	Yes	Yes	Yes	Yes	Yes	EL is old and not working satisfactorily. New EL would be implemented in BCU under NTAMC project by March, 2015
14	Talcher	Yes	Yes	Yes	Yes	Yes	Yes	
15	Rourkela	Yes	Yes	Yes	Yes	Yes	Yes	
16	Bolangir	Yes	Yes	Yes	Yes	Yes	Yes	
17	Patna	Yes	Yes	Yes	Yes	Yes	Yes	
18	Ranchi	Yes	Yes	Yes	Yes	Yes	Yes	
19	Muzaffarpur	Yes	Yes	Yes	Yes	Yes	Yes	
20	Jamshedpur	Yes	Yes	Yes	Yes	Yes	Yes	
21	New Purnea	Yes	Yes	Yes	Yes	Yes	Yes	
22	Gaya	Yes	Yes	Yes	Yes	Yes	Yes	
23	Banka	Yes	Yes	Yes	Yes	Yes	Yes	
24	Biharsariif	Yes	Yes	Yes	Yes	Yes	Yes	
25	Barh	Yes	Yes	Yes	Yes	Yes	Yes	
26	Sagardighi	No	Yes	Yes	Yes	Yes	No	EL is under process of restoration with help from OEM, China
27	Kahalgaon	Yes	Yes	Yes	Yes	Yes	Yes	
28	Farakka	Yes	Yes	No	No	No	No	Time synchronization available for Farakka-Kahalgaon line-III & IV. The same will be implemented in rest of the lines by December, 2014.
29	Meramundali	Defunct	Yes	Yes	Yes	Yes	Yes	
30	Tisco	Yes	Yes	Yes	Yes	Yes	Yes	
31	Bidhannagar	No	Yes	Yes	No	No	No	Using DR & EL available in Numerical

								relays. GPS will be put in service by January, 2015.
32	Indravati (OHPC)	Yes	Faulty	No	No	No	No	Time synchronization will be done by Feb, 2015. ICT-I feeders using DR & EL available in Numerical relays. 400 kV ICT-II feeder is being maintained by PGCIL, Mukhiguda. Status may confirm from PGCIL
33	Kharagpur	No	Yes	Yes	No	No	No	Using DR & EL available in Numerical relays.
34	DSTPS	Yes	Yes	Yes	Yes	Yes	Yes	
35	Sterlite	Yes	Yes	Yes	Yes	Yes	Yes	
36	Mejia 'B'	Yes	Yes	Yes	Yes	Yes	Yes	
37	Mendhasal	Defunct	Yes	Yes	Yes	Yes	No	EL will be restored by March, 2015.
38	Arambagh	No	Yes	Yes	No	No	No	Using DR & EL available in Numerical relays
39	Jeerat	No	Yes	No	No	No	No	Using DR & EL available in Numerical relays. Procurement of new GPS is in progress.
40	Bakreswar	Yes	Yes	Yes	Yes	Yes	Yes	
41	GMR	Yes	Yes	Yes	Yes	Yes	Yes	
42	Maithon RB	Yes	Yes	Yes	Yes	Yes	Yes	
43	Raghunathpur	Yes	Yes	Yes	Yes	Yes	Yes	
44	Kolaghat	Yes	Yes	Yes	Yes	Yes	Yes	
45	Teesta V	Yes	Yes	Yes	Yes	Yes	Yes	
46	Koderma	Yes	Yes	Yes	Yes	Yes	Yes	
47	Sasaram	Yes	Yes	Yes	Yes	Yes	Yes	
48	Rangpo	Yes	Yes	Yes	Yes	Yes	Yes	
49	Adhunik	Yes	Yes	Yes	Yes	Yes	Yes	
50	JITPL	Yes	Yes	Yes	Yes	Yes	Yes	
51	765kV Angul	Yes	Yes	Yes	Yes	Yes	Yes	
52	Chuzachen	Yes	Yes	Yes	No	Yes	Yes	
53	New Ranchi 765kV	Yes	Yes	Yes	Yes	Yes	Yes	
54	Lakhisarai	Yes	Yes	Yes	Yes	Yes	Yes	
55	Chaibasa							
56	765kV Jharsuguda	Yes	Yes	Yes	Yes	Yes	Yes	All are in working condition. However a dedicated DR for 765KV Lines; make TESLA is not working. M/s Siemens has assured to commission the same by 31.01.15
57	Beharampur	Yes	Yes	Yes	Yes	Yes	Yes	
58	Keonjhar	Yes	Yes	Yes	Yes	Yes	Yes	

Eastern Regional Power Committee

The status of ERS towers in Eastern Region as submitted during ERS meeting held on 10.11.14 taken by Member (Power System), CEA is given below:

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

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

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

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

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

- 4) The 25th ERPC meeting held on 21.09.2014, the board concurred to the proposal of procurement of four sets of ERS and it was also informed that, the proposed four sets of ERS will be kept at Sikkim, Siliguri, Ranchi and Gaya and will be used by all constituents of ER during emergencies.

Powergrid informed that four sets of ERS for Eastern Region will be procured.

- 5) Bihar informed that they have 10 sets of 220 kV ERS towers and 2 sets are under process of procurements.

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

Annexure-C1

Maintenance Schedule of Thermal Generating Units of ER for September-2016

System	Station	Unit	Size (MW)	period		No. of Days	Reason
				From	To		
DVC	MTPS	5	210	14.09.16	29.09.16	16	Burner Replacement
WBPDC	Bakreswar TPS	2	210	21.08.16	20.09.16	31	Boiler Overhauling + APH Tube Replacement
NTPC	Barh	4	660	25.08.16	23.09.16	30	Boiler+Cond. Acid Clean+IP-LP crossover pipe metallic gasket rep.
NTPC	KhSTPS	3	210	21.08.16	22.09.16	31	Capital+DDCIMS+Boiler RLA+Boiler Acid Cleaning
ODISHA	TTPS	1	60	10.09.16	24.09.16	15	Boiler Overhaul
APRNL	APRNL	1	270	15.09.16	10.10.16	25	Gen. Overhauling
MPL	MPL	2	525	28.08.16	22.09.16	31	Maint

**EASTERN REGIONAL LOAD DESPATCH CENTRE
KOLKATA**

TRANSMISSION ELEMENTS OUTAGE APPROVED IN 124TH OCC MEETING OF ERPC

Sr. No	NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
1	400 KV Chaibasa #1 - 400KV Sundargarh #1 Tie Bay (Bay No.-417) at Rourkela.	24/08/2016	09:00	24/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
2	765kV Bus-2 at Angul	24/08/2016	08:00	25/08/2016	18:00	OCB	ER-II/Odisha	For Extension of Bus for commissioning of 765kV Angul Sriakakulam Line-1 &Line-2 bays along with Bus-Bar Protection	NLDC
3	400kV Bus-III AT Maithon	24/08/2016	09:00	24/08/2016	18:00	ODB	ER-II / KOL	Construction work under ERSS-XII	
4	220kV WBSETCL Bus Section-2	24/08/2016	9.00 hrs	24.08.16	17.00 hrs	ODB	ER-II	Checking of CB by OEM to correct trip timings	WBSETCL
5	400 KV BARIPADA-JAMSHEDPUR	24/08/2016	08:00	30/08/2016	17:00	ODB	ULDC	FOR OPGW RECTIFICATION.	
6	400 KV CHAIBASA - KOLAGHAT	25/08/2016	09:00	25/08/2016	18:00	ODB	ER-I/PG	FOR COMMISSIONING OF 63 MVAR L/R AT CHAIBASA	WBSETCL
7	132kV Siliguri-Melli	25/08/2016	09:00	29/08/2016	17.00 hrs	ODB	ER-II / KOL	GIS Construction Work	SIKKIM
8	400KV Berhampore Bheramara Ckt-II Line(404 bay)	25/08/2016	10:00	25/08/2016	18:00	ODB	ER-II / KOL	Checking healthiness of FOX515 Equipment vis a vis SPS.	NLDC
9	400kV Bus-IV AT Maithon	25/08/2016	09:00	25/08/2016	18:00	ODB	ER-II / KOL	Construction work under ERSS-XII	
10	400 KV BUS -1 AT CHAIBASA	26/08/2016	09:00	26/08/2016	18:00	ODB	ER-I/PG	FOR BUS EXTN. FOR BAY CONSTN. WORK.	
11	765 KV B/R -2 AT NRNC	26/08/2016	10:00	26/08/2016	14:00	ODB	ER-I/PG	FOR REPLACEMENT OF ADIATOR FIN DUE TO OIL LEAKAGE	NLDC
12	(220KV line-3)-207 Bay at Bolangir	26/08/2016	09:00	26/08/2016	18.00	ODB	ER-II/Odisha	AMP Work	OPTCL
13	400 KV Rourkela-Jamshedpur #2 Main Bay (Bay No.-409) at Rourkela.	26/08/2016	09:00	26/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
14	400KV RKL-SNG FDR-I (ONE) at Sundargarh	26/08/2016	09:00	26/08/2016	17:30	ODB	ER-II/Odisha	FLASH INSULATOR REPLACEMENT WORK ON LOC NO 24, 30 AND 39	
15	400KV Berhampore Sagardighi Ckt-II Line(410 bay)	26/08/2016	10:00	26/08/2016	18:00	ODB	ER-II / KOL	Checking healthiness of PLCC Equipment vis a vis SPS.	NLDC
16	132 KV RANGIT-RAHMAM	26/08/2016	09:00	26/08/2016	17:00	ODB	ER-II	For sag correction of all three phases & earth wire.	WBSETCL
17	400 KV GAYA-CHANDWA CKT-1	27/08/2016	08:00	29/08/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS AT T No-28, 30, 35 .	NLDC
18	400 KV NEW RANCHI-CHANDWA CKT-1	27/08/2016	08:00	29/08/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
19	132 kV PRN(PG)-PRN(BSPTCL)-1	27/08/2016	11:00	27/08/2016	13:00	ODB	ER-I/PG	FOR REPLACEMENT OFY PHASE CVT	BIHAR
20	132 KV TRANSFER BUS AT PURNEA	27/08/2016	09:00	_____		PERMANENT	ER-I/PG	PERMANET REMOVAL OF TRANSFER BUS IS REQUIRED FOR GIS BUILDING AND ASSOCIATED CIVIL WORK . THE 132 KV TRANSFER BUS AND 132 KV TBC BAY WILL BE UNDER PERMANENT S/D FOR CONSTRUCTION WORK OF AIS TO GIS CONVERSION OF ALL LINE AND ICT 132 KV BAYS	BIHAR

21	400 KV BUS -2 AT CHAIBASA	27/08/2016	09:00	27/08/2016	18:00	ODB	ER-I/PG	FOR BUS EXTN. FOR BAY CONSTN. WORK.	
22	(220KV line -4)-209 Bay at Bolangir	27/08/2016	09:00	27/08/2016	18.00	ODB	ER-II/Odisha	AMP Work	OPTCL
23	132kV Siliguri - Melli	27/08/2016	09:00	27/08/2016	17.00 hrs	ODB	ER-II / KOL	Insulator fitting	SIKKIM
24	220kV Maithon - Kalayaneswari Line-1	27/08/2016	09:00	27/08/2016	17:30	ODB	ER-II / KOL	Replacement of line Isolator Arm	DVC
25	132 KV GANGTOK-RANGIT	27/08/2016	08:00	27/08/2016	17:00	ODB	ULDC	FOR OPGW RECTIFICATION.	
26	400 KV RANCHI-RANCHI-4	27/08/2016	08:00	27/08/2016	17:00	ODB	ULDC	FOR OPGW RECTIFICATION.	
27	132 kV PRN(PG)-PRN(BSPTCL)-3	28/08/2016	09:00	28/08/2016	17:00	ODB	ER-I/PG	WORK OF CONSTRUCTION OF GIS BUS DUCT AND SF6 TO AIR BUSHING FOUNDATIONS. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL-3 line bay.(revised drawing is under approval). 2. dismantling of existing tandem isolators /BPI of R & B phases of BSPTCL-3 line bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
28	220kV Maithon - Kalayaneswari Line-2	28/08/2016	10:00	28/08/2016	18:30	ODB	ER-II / KOL	Replacement of line Isolator Arm	DVC
29	315 MVA ICT -2 AT PATNA	29/08/2016	10:00	29/08/2016	18:00	ODB	ER-I/PG	PREPARATORY WORK BEFORE AVAILING SHUT DOWN OF ICT - I FOR AUGMENTATION	BIHAR
30	133 kV PRN(PG)-PRN(BSPTCL)-3	29/08/2016	09:00	29/08/2016	17:00	ODB	ER-I/PG	WORK OF CONSTRUCTION OF GIS BUS DUCT AND SF6 TO AIR BUSHING FOUNDATIONS. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL-3 line bay.(revised drawing is under approval). 2. dismantling of existing tandem isolators /BPI of R & B phases of BSPTCL-3 line bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
31	63 MVAR BR Main Bay(416) at Jeypore	29/08/2016	09:30	29/08/2016	17:30:00	ODB	ER-II/Odisha	For AMP Works	
32	315 MVA ICT #1 at Rourkela.	29/08/2016	09:00	29/08/2016	18:00	ODB	ER-II/Odisha	AMP work	OPTCL
33	BNG-III Line Reactor at Binaguri	29/08/2016	09:00	29/08/2016	17.00 hrs	ODB	ER-II / KOL	Repeat tan delta of 400kV B Phase Bushing	
34	400 KV MALDA-PURNEA-I	29/08/2016	08:00	31/08/2016	17:00	ODB	ULDC	FOR OPGW RECTIFICATION.	
35	132kV Kurseong - Rangit	30/08/2016	09:00	30/08/2016	17.00 hrs	ODB	ER-II / KOL	Insulator fitting	WBSETCL
36	400 KV GAYA-CHANDWA CKT-2	30/08/2016	08:00	01/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS AT T No-40, 48, 51 .	NLDC
37	400 KV NEW RANCHI-CHANDWA CKT-2	30/08/2016	08:00	01/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
38	400 KV MAIN BAY MAITHAN RB-1 AT RANCHI	30/08/2016	09:30	30/08/2016	17:30	ODB	ER-I/PG	AMP	
39	220 KV PATNA - KHAGAUL	30/08/2016	10:00	30/08/2016	18:00	ODB	ER-I/PG	AMP WORK	BIHAR
40	132 kV PRN(PG)-PRN(BSPTCL)-3	30/08/2016	09:00	30/08/2016	17:00	ODB	ER-I/PG	WORK OF CONSTRUCTION OF GIS BUS DUCT AND SF6 TO AIR BUSHING FOUNDATIONS. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL-3 line bay.(revised drawing is under approval). 2. dismantling of existing tandem isolators /BPI of R & B phases of BSPTCL-3 line bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
41	400 KV BUS-1 AT JAMSHEDPUR	30/08/2016	09:30	30/08/2016	17:30	ODB	ER-I/PG	BAY CONSTRUCTION WORK FOR ICT -3	

42	400 KV JSR - RKL -2	30/08/2016	09:00	31/08/2016	18:00	OCB	ER-I/PG	FOR COMMISSIONING OF 400 KV CHAIBASA - JSR -2 AND CHAIBASA - RKL -2	
43	220KV BUS-I at Baripada	30/08/2016	07:00	30/08/2016	17:00	ODB	ER-II/Odisha	CONNECTION FROM EXISTING BUS TO NEW BUS	OPTCL
44	(220KV TBC)-210 Bay at Bolangir	30/08/2016	09:00	30/08/2016	18.00	ODB	ER-II/Odisha	AMP Work	OPTCL
45	ICT-I (3x 105 MVA) at Jeypore	30/08/2016	09:30	30/08/2016	17:30:00	ODB	ER-II/Odisha	For AMP Works	
46	400KV RKL-SNG FDR-II(Two) at Sundargarh	30/08/2016	09:00	30/08/2016	17:30	ODB	ER-II/Odisha	FLASH INSULATOR REPLACEMENT WORK ON LOC 255, 271	
47	132kv WBSETCL-1	30/08/2016	09:00	03/09/2016	17.00 hrs	ODB	ER-II / KOL	GIS Construction Work	WBSETCL
48	BNG-IV Line Reactor at Binaguri	30/08/2016	09:00	30/08/2016	17.00 hrs	ODB	ER-II / KOL	Repeat capacitance of 400kv Y Phase Bushing	
49	400 KV SUBHASGRAM-JEERAT	30/08/2016	08:00	30/08/2016	17:00	ODB	ULDC	FOR OPGW RECTIFICATION.	WBSETCL
50	132kv Siliguri-Kurseong	31/08/2016	09:00	31/08/2016	17.00 hrs	ODB	ER-II / KOL	GIS Construction Work	WBSETCL
51	132kv Siliguri - Kurseong	31/08/2016	09:00	31/08/2016	17.00 hrs	ODB	ER-II / KOL	Jumper Cone Repairing	WBSETCL
52	400 KV TIE BAY MAITHAN RB-1AT RANCHI	31/08/2016	09:30	31/08/2016	17:30	ODB	ER-I/PG	AMP	
53	220 KV PATNA - SIPARA -1	31/08/2016	10:00	31/08/2016	18:00	ODB	ER-I/PG	AMP WORK	BIHAR
54	132 KV KARMNASHA - MOHANIA	31/08/2016	09:30	31/08/2016	17:30	ODB	ER-I/PG	AMP WORK OF 132 KV BAYS AT KARMNASHA	BIHAR
55	220 kV NPRN-PRN#1 line	31/08/2016	09:00	31/08/2016	17:00	ODB	ER-I/PG	BAY AMP WORK	BIHAR
56	(220KV Bus Coupler)-204 Bay at Bolangir	31/08/2016	09:00	31/08/2016	18.00	ODB	ER-II/Odisha	AMP Work	OPTCL
57	315 MVA ICT #2 at Rourkela.	31/08/2016	09:00	31/08/2016	18:00	ODB	ER-II/Odisha	AMP work	OPTCL
58	315 MVA ICT -3 AT BIHARSHARIF	01/09/2016	09:00	01/09/2016	18:00	ODB	ER-I/PG	FOR COMPLETION OF BALANCE SWAPING WORK UNDER BUS SPLITTING SCHEME	BIHAR
59	315 MVA ICT -1 AT PATNA	01/09/2016	09:00	15/09/2016	19:00	OCB	ER-I/PG	FOR REPLACEMENT WITH 500 MVA ICT	BIHAR
60	765 KV SASARAM- FATEHPUR	01/09/2016	09:30	01/09/2016	17:30	ODB	ER-I/PG	AMP WORK	NLDC
61	160 MVA ICT-2 AT PURNEA	01/09/2016	09:00	01/09/2016	17:00	ODB	ER-I/PG	FOR GIS BAY COMMISSIONING WORK	BIHAR
62	400 KV BUS-2 AT JAMSHEDPUR	01/09/2016	09:30	01/09/2016	17:30	ODB	ER-I/PG	BAY CONSTRUCTION WORK FOR ICT -3	
63	400KV KAHALGAON - BARH - 1 & 2	01/09/2016	07:00	02/09/2016	19:00	ODB	ER-I/PG	FOR OPGW INSTALLATION WORK	NLDC
64	A/R OF 400KV BSF-BANKA-2	01/09/2016	07:00	30/09/2016	19:00	ODB	ER-I/PG	FOR OPGW INSTALLATION WORK	A/R OF BSF - BANKA OR KHG - BARH ONE WILL BE ALLOWED AT A TIME
65	A/R OF 400KV BSF-MUZ-1	01/09/2016	07:00	30/09/2016	19:00	ODB	ER-I/PG	FOR OPGW INSTALLATION WORK	NLDC
66	400KV JAMSHEDPUR - BARIPADA	01/09/2016	07:00	10/09/2016	19:00	ODB	ER-I/PG	FOR OPGW INSTALLATION WORK	
67	Arambag:315 MVA Tr-I	01/09/2016	06:00	01/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
68	Durgapur: 50 MVAR Bus reactor	01/09/2016	09:00	01/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
69	220KV BUS-II at Baripada	01/09/2016	07:00	01/09/2016	17:00	ODB	ER-II/Odisha	CONNECTION FROM EXISTING BUS TO NEW BUS	OPTCL
70	400 KV Rourkela-Ranchi#1 Main Bay (Bay No.-428) at Rourkela	01/09/2016	09:00	01/09/2016	18:00	ODB	ER-II/Odisha	Retrofitting of old VARM type A/R relay by Numerical MiCOM P442 type A/R relay.	
71	400 KV Rourkela-Ranchi #1 Line at Rourkela.	01/09/2016	16:00	01/09/2016	18:00	ODB	ER-II/Odisha	Checking of A/R and priority circuit for both Main & Tie CB of Ranchi#1 upon A/R relay retrofitting.	
72	765KV 1500MVA ICT-II at Sundergarh	01/09/2016	08:00	01/09/2016	18:00	ODB	ER-II/Odisha	Shifting of Spare ICT to other Phase & Rectification of LA leakage current in R-ph LA.	NLDC
73	400kv Tala-I L/R at Binaguri	01/09/2016	09:00	01/09/2016	17.00 hrs	ODB	ER-II / KOL	Repeat tan delta of 400kv R Phase Bushing & Neutral Bushing Replacement / oil leakage arrest.	
74	400kv NSLG-Bangaigaon Ckt-1	01/09/2016	07:00	01/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	NLDC
75	132 KV Rangpo-Gangtok line under Rangpo TL-AM	01/09/2016	10:00	01/09/2016	16:00 hrs	ODB	ER-II / KOL	removal of tree/bamboo infrigment urjently as Bamboo tilted towards line corridor after cyclone struck in sikkim in April 2016.	SIKKIM
76	315 MVA ICT#2 AT DURGAPUR	01/09/2016	10:00	01/09/2016	13:00	ODB	ER-II / KOL	ICT#2 oil leakage arresting and WTI calbration	DVC
77	ICT-I & 220 KV Main Bus-I at Malda	01/09/2016	09:00	01/09/2016	14.00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
78	315 MVA ICT-I AT SUBHASGRAM	01/09/2016	08:30	01/09/2016	17:00	ODB	ER-II / KOL	220KV Bph LA inspection	WBSETCL
79	400 KV BINAGURI-PURNEA-I	01/09/2016	08:00	04/09/2016	17:00	ODB	ULDC	FOR OPGW RECTIFICATION.	SUBJECT TO SYSTEM CONDITION
80	220 KV PATNA - SIPARA -2	02/09/2016	10:00	02/09/2016	18:00	ODB	ER-I/PG	AMP WORK	BIHAR
81	160 MVA ICT-1 AT PURNEA	02/09/2016	09:00	02/09/2016	17:00	ODB	ER-I/PG	FOR GIS BAY COMMISSIONING WORK	BIHAR
82	400 kV Jeypore-Bolangir S/C Line at Jeypore	02/09/2016	09:30	02/09/2016	17:30:00	ODB	ER-II/Odisha	For Testing of ABB Relay after replacement with Ohmega Relay & For AMP Works	NLDC

83	400KV RKL-SEL- FDR -II at Sundargarh	02/09/2016	09:00	02/09/2016	17:30	ODB	ER-II/Odisha	FLASH INSULATOR REPLACEMENT WORK ON LOC NO 251 TOP PHASE	
84	400 KV Rengali-Talcher-II Main Bay at Rengali	02/09/2016	07:00	02/09/2016	19:00	ODB	ER-II/Odisha	AMP work	
85	WBSETCL Bus Section-1 at Binaguri	02/09/2016	09:00	02/09/2016	17.00 hrs	ODB	ER-II / KOL	AMP of NSLG	WBSETCL
86	315 MVA ICT#1 AT DURGAPUR	02/09/2016	11:00	02/09/2016	12:00	ODB	ER-II / KOL	CB Retrofitting-trasfer load to transfer bus & protection testing	DVC
87	132 KV PURNEA KISHANGANJ LINE	03/09/2016	09:00	03/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of Transfer Bus section which is above KISHANGANJ & ICT #2 bay 1.Removing of jumpers of each phase from Transfer Bus to tandem isolator. 2.Dismantling of Transfer bus Conductors of that particular section.	BIHAR
88	A/R OF 400KV KAHALGAON - BARH - 2	03/09/2016	07:00	30/09/2016	19:00	ODB	ER-I/PG	FOR OPGW INSTALLATION WORK	A/R OF BSF - BANKA OR KHG - BARH ONE WILL BE ALLOWED AT A TIME
89	400 KV Durgapur-PPSP # 1	03/09/2016	09:00	03/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
90	Arambag:50 MVAR Bus Reactor	03/09/2016	06:00	03/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
91	132kv MLD(PG)-MLD(WB)#1	03/09/2016	07:00	03/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
92	400KV Keonjhar - Baripada	03/09/2016	07:00	04/09/2016	18:00	OCB	ER-II/Odisha	MAIN 2 RELAY RETROFICATION WORK	
93	400 KV Rourkela-Ranchi#2 Main Bay (Bay No.-421) at Rourkela	03/09/2016	09:00	03/09/2016	18:00	ODB	ER-II/Odisha	Retrofitting of old VARM type A/R relay by Numerical MiCOM P442 type A/R relay.	
94	400 KV Rourkela-Ranchi #2 Line at Rourkela.	03/09/2016	16:00	03/09/2016	18:00	ODB	ER-II/Odisha	Checking of A/R and priority circuit for both Main & Tie CB of Ranchi#2 upon A/R relay retrofitting.	
95	765KV 240MVAR Bus Reactor-II at Sundergarh	03/09/2016	09:00	03/09/2016	18:00	ODB	ER-II/Odisha	Rectification of LA leakage current in B-Ph LA	NLDC
96	WBSETCL Bus Section-2 at Binaguri	03/09/2016	09:00	03/09/2016	17.00 hrs	ODB	ER-II / KOL	AMP of NSLG	WBSETCL
97	400kv NSLG-Bangaigaon Ckt-2	03/09/2016	07:00	03/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	NLDC
98	160 MVA ICT-2 AT PURNEA	04/09/2016	09:00	04/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of Transfer Bus section which is above KISHANGANJ & ICT #2 bay 1.Removing of jumpers of each phase from Transfer Bus to tandem isolator. 2.Dismantling of Transfer bus Conductors of that particular section.	BIHAR
99	400 KV Arambag-Durgapur ckt	04/09/2016	06:00	04/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
100	132kv MLD(PG)-MLD(WB)#2	04/09/2016	07:00	04/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
101	132KV WBSETCL-2	04/09/2016	09:00	08/09/2016	17.00 hrs	ODB	ER-II / KOL	GIS Construction Work	WBSETCL
102	400kv Tala-II L/R at Binaguri	04/09/2016	09:00	04/09/2016	17.00 hrs	ODB	ER-II / KOL	CSD Commissioning	
103	220KV GAYA - BODHGAYA-1	05/09/2016	08:00	05/09/2016	18:00	ODB	ER-I/PG	FOR GIS BAY COMMISSIONING WORK	BIHAR
104	220KV BUS-I AT GAYA S/S	05/09/2016	08:00	05/09/2016	18:00	ODB	ER-I/PG	FOR GIS BAY COMMISSIONING WORK	BIHAR
105	TIE BAY OF 315 MVA ICT -1 AT SASARAM	05/09/2016	09:30	09/09/2016	17:30	OCB	ER-I/PG	FOR PIR REMOVAL WORK	

106	132 KV PURNEA KISHANGANJ LINE	05/09/2016	09:00	05/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. THE LINE WILL BE CHARGED ON EACH DAY AFTER COMPLETION OF WORK AT 17.00 HRS. 1.Removing of equipment jumpers and installation of suspension insulator of KISHANGANJ line bay. (revised drawing is under approval). 2. dismantling of existing tandem isolators /BPI of R & B phases of KISHANGANJ line bay 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
107	Arambag: 315 MVA Tr-II	05/09/2016	06:00	05/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
108	400KV Durgapur-PPSP # 2	05/09/2016	09:00	05/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
109	ICT-II(315 MVA) at Jeypore	05/09/2016	09:30	05/09/2016	17:30:00	ODB	ER-II/Odisha	For replacing 390 kV LAs with 336 kV LAs	
110	400 KV Rourkela-Sundargarh #2 Main Bay (Bay No-430) at Rourkela.	05/09/2016	09:00	05/09/2016	18:00	ODB	ER-II/Odisha	Retrofitting of old VARM type A/R relay by Numerical MiCOM P442 type A/R relay.	
111	400 KV Rourkela-Sundargarh #2 at Rourkela.	05/09/2016	16:00	05/09/2016	18:00	ODB	ER-II/Odisha	Checking of A/R and priority circuit for both Main & Tie CB of Sundargarh #2 upon A/R relay retrofitting.	
112	400kV NSLG-Tala Ckt-1	05/09/2016	07:00	05/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	NLDC
113	400 KV MAIN BUS 3 including Bus Sectionalizer-1 CB AT DURGAPUR	05/09/2016	10:00	05/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-3(Final commissioning)	
114	ICT-II & 220 KV Main Bus-II at Malda	05/09/2016	09:00	05/09/2016	14:00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
115	400KV MTN-Gaya-I LR (Switchable)	05/09/2016	09:00	05/09/2016	14:00	ODB	ER-II / KOL	CSD card replacement and on load testing of Reactor	
116	220 KV Malda-Dalkhola ckt -I	05/09/2016	08:00	05/09/2016	12:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	
117	220 KV Malda-Dalkhola ckt -II	05/09/2016	14:00	05/09/2016	17:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	
118	220kV S'gram-CESC-2	05/09/2016	08:30	05/09/2016	17:00	ODB	ER-II / KOL	Replacemnet of L-clamp of CT	WBSETCL
119	400 kv Subhashgram - Jeerat tr. Line	05/09/2016	07:00	06/09/2016	17:00hrs	ODB	ER-II / KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 7C/0-7D/0	WBSETCL
120	Tala-3 Main bay (403)	05/09/2016	9.30 hrs	07/09/2016	17.30 hrs	OCB	ER-II	CB Ovrhauling	
121	220KV BUS-II AT GAYA S/S	06/09/2016	08:00	06/09/2016	18:00	ODB	ER-I/PG	FOR GIS BAY COMMISSIONING WORK	BIHAR
122	220KV GAYA - BODHGAYA- 2	06/09/2016	08:00	06/09/2016	18:00	ODB	ER-I/PG	FOR GIS BAY COMMISSIONING WORK	BIHAR
123	400 kV RNC-NEW RANCHI CKT-1	06/09/2016	08:00	07/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	
124	400 KV MAIN BAY MAITHAN RB-2 AT RANCHI	06/09/2016	09:30	06/09/2016	17:30	ODB	ER-I/PG	AMP	
125	400 kV PTN-BARH CKT – 1	06/09/2016	08:00	06/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	
126	132 KV PURNEA KISHANGANJ LINE	06/09/2016	09:00	06/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. THE LINE WILL BE CHARGED ON EACH DAY AFTER COMPLETION.	BIHAR
127	315 MVA ICT-2 AT JAMSHEDPUR	06/09/2016	09:30	06/09/2016	17:30	ODB	ER-I/PG	BAY CONSTRUCTION WORK FOR ICT -3	JHARKHAND
128	400 KV Arambag-PPSP#1	06/09/2016	09:00	06/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
129	PG_UIHEP Main Bay at Indravati	06/09/2016	09:00	06/09/2016	13.00hrs	ODB	ER-II/Odisha	AMP 2016	
130	765KV 240MVAR Bus Reactor-I at Sundergarh	06/09/2016	08:00	06/09/2016	13:00	ODB	ER-II/Odisha	Shifting of Spare Reactor to other Phase	NLDC
131	125 Bus Reactor-I at Binaguri	06/09/2016	09:00	06/09/2016	17.00 hrs	ODB	ER-II / KOL	CSD Commissioning	
132	400 KV MAIN BUS 4 including Bus Sectionalizer-2 CB AT DURGAPUR	06/09/2016	10:00	06/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-4(Final commissioning)	
133	220 KV Kishanganj-Dalkhola Ckt -I	06/09/2016	08:00	06/09/2016	12:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	SUBJECT TO SYSTEM CONDITION
134	220 KV Kishanganj-Dalkhola Ckt -II	06/09/2016	14:00	06/09/2016	17:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	SUBJECT TO SYSTEM CONDITION
135	220 KV PURNEA-PURNEA-I	06/09/2016	08:00	06/09/2016	17:00	ODB	ULDC	AR SWITCH IN NON AUTO MODE.	SUBJECT TO SYSTEM CONDITION
136	400 KV BIHARSHARIF - BALIA -1	07/09/2016	08:00	07/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC

137	220 KV SIDE MAIN BAY OF 315 MVA ICT-2 AT RANCHI	07/09/2016	09:30	07/09/2016	17:30	ODB	ER-I/PG	AMP (ICT2 will be charge through TBC bay)	
138	132 KV PURNEA KISHANGANJ LINE	07/09/2016	09:00	07/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. THE LINE WILL BE CHARGED ON EACH DAY AFTER COMPLETION OF WORK AT 17.00 HRS. 1.Removing of equipment jumpers and installation of suspension insulator of KISHANGANJ line bay. (revised drawing is under approval). 2. dismantling of existing tandem isolators /BPI of R & B phases of KISHANGANJ line bay 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
139	400 KV Durgapur-PGCIL # 1	07/09/2016	09:00	07/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
140	Arambag: 315 MVA Tr-III	07/09/2016	06:00	07/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
141	765kV Angul Sundergarh Line-1 at Angul	07/09/2016	07:00	07/09/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	NLDC
142	80 MVAR Bus Reactor (Bay No. 401 and 402) at Pandiabili	07/09/2016	09:00	07/09/2016	19:00	ODB	ER-II/Odisha	On-Load CSD Commissioning	
143	400 KV Rourkela-SEL #2 Main Bay (Bay No.-427) at Rourkela.	07/09/2016	09:00	07/09/2016	18:00	ODB	ER-II/Odisha	Retrofitting of old VARM type A/R relay by Numerical MICOM P442 type A/R relay.	
144	400 KV Rourkela-SEL #2 by Rourkela	07/09/2016	16:00	07/09/2016	18:00	ODB	ER-II/Odisha	Checking of A/R and priority circuit for both Main & Tie CB of SEL #2 using A/R relay retrofitting	
145	Main Bay-703 of 765KV 1500 MVA ICT-I at Sundergarh	07/09/2016	09:00	07/09/2016	18:00	ODB	ER-II/Odisha	For checking healthiness of closing circuit and timing of 703CB.	
146	400kV NSLG-Tala Ckt-2	07/09/2016	07:00	07/09/2016	17:00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	NLDC
147	400 KV BUS-II of NTPC Farakka	07/09/2016	10:00	07/09/2016	14:00	ODB	ER-II / KOL	For connecting BUS isolator of bay no-12 to BUS-II (After augmentation of BUS Isolator from 2000A to 3150 A rating under ERSS-XIII projects). Like earlier occasions(OCC), the same s.down was once again, accorded, in 123rd OCC vide sr. No. 110 for dt. 05.08.2016 ; but NTPC didn't accord their consent for availing by POWERGRID.	
148	400 KV MAIN BUS 1 including Bus Sectionalizer-1 CB AT DURGAPUR	07/09/2016	10:00	07/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-1(Final commissioning)	
149	ICT-IV & 220 KV Main Bus-I at Malda	07/09/2016	09:00	07/09/2016	14:00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
150	220 KV Purnea- Dalkhola Ckt-I	07/09/2016	08:00	07/09/2016	12:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	
151	220 KV Purnea- Dalkhola Ckt-II	07/09/2016	14:00	07/09/2016	17:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	
152	400 KV Kh -Farakka # Line 1	07/09/2016	09:30	07/09/2016	17:30 hrs	ODB	NTPC	PM works & Relay testing.	
153	Non-Auto mode of Auto-Reclosure of 765KV Angul-Jharsuguda# 1&2	07/09/2016	08:00	07/09/2016	18:00	ODB	ER-II/Odisha	OPGW rectification works	NLDC
154	220 KV RAMCHANDRAPUR - CHANDIL &RAMCHANDRAPUR - JODA	07/09/2016	08:00	18/09/2016	18:00	OCB	JHARKHANDA	ERECTION AND COMMISSIONING OG MUTISECTION TOWER FOR 220 KV RAMCHANDRAPUR - CHAIBASA	DVC/OPTCL/WBSEB
155	400 KV BIHARSHARIF - BALIA -2	08/09/2016	08:00	08/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
156	400 kV RNC-NEW RANCHI CKT-2	08/09/2016	08:00	09/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	

157	160 MVA ICT#2 AT PURNEA	08/09/2016	09:00	08/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. THE ICT-2 WILL BE CHARGED ON EACH DAY AFTER COMPLETION OF WORK AT 17.00 HRS. 1.Removing of equipment jumpers and installation of suspension insulator of ICT-2 bay. (revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of ICT#2 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
158	400 KV JAMSHEDPUR - ADHUNIK (APNRL)-2	08/09/2016	09:30	08/09/2016	17:30	ODB	ER-I/PG	AMP WORK	
159	400kv Arambag-KTPP	08/09/2016	06:00	08/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
160	Durgapur: 315 MVA Tr-I	08/09/2016	09:00	08/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
161	BkTPP:400kv MB#1	08/09/2016	08:00	08/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
162	765kV Angul Sundergarh Line-2 at Angul	08/09/2016	07:00	08/09/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	NLDC
163	63 MVAR Baripada Line Reactor (Bay No. 403 R) at Pandiabili	08/09/2016	09:00	08/09/2016	19:00	ODB	ER-II/Odisha	On-Load CSD Commissioning	
164	Tie Bay-702 of 765KV ICT-I_765KV Bus Reactor-I at Sundergarh	08/09/2016	09:00	08/09/2016	18:00	ODB	ER-II/Odisha	For replacement of Grading Capacitor of 702CB having Tan delt violation	
165	400 KV MAIN BUS 2 including Bus Sectionalizer-2 CB AT DURGAPUR	08/09/2016	10:00	08/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-2(Final commissioning)	
166	220 KV Dalkhola-Dalkhola Ckt - I	08/09/2016	08:00	08/09/2016	12:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	WBSETCL
167	220 KV Dalkhola-Dalkhola Ckt - II	08/09/2016	14:00	08/09/2016	17:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	WBSETCL
168	Tala -2 Main bay (406)	08/09/2016	9.30 hrs	10/09/2016	17.30 hrs	OCB	ER-II	CB Ovrhauling	
169	400 KV MAIN BUS - I AT BAKRESWAR	08/09/2016	08:00	08/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
170	765KV GAYA-VARANASI- 1	09/09/2016	08:00	09/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
171	160 MVA ICT#2 AT PURNEA	09/09/2016	09:00	11/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. THE ICT-2 WILL BE CHARGED ON EACH DAY AFTER COMPLETION OF WORK AT 17.00 HRS. 1.Removing of equipment jumpers and installation of suspension insulator of ICT-2 bay. (revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of ICT#2 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
172	400KV BUS-1 AT BSF	09/09/2016	08:00	09/09/2016	12:00	ODB	ER-I/PG	FOR OPENING OF DROPPERS FOR SHUT DOWN OF JACK BUS OF ICT-1 & LAKHISARAI-2(UNDER BUS SPLITING WORK)	
173	MAIN BAY OF 400KV BSF-LAKHISARAI-2 AT BSF	09/09/2016	08:00	20/09/2016	18:00	OCB	ER-I/PG	FOR OPENING OF DROPPERS FOR SHUT DOWN OF JACK BUS (UNDER BUS SPLITING WORK)	
174	MAIN BAY OF 315MVA ICT-1 AT BSF	09/09/2016	08:00	20/09/2016	18:00	OCB	ER-I/PG	DUE TO OPENING OF JACK BUS DROPPERS (UNDER BUS SPLITING WORK)	

175	400KV BUS-2 AT BSF	09/09/2016	14:00	09/09/2016	20:00	ODB	ER-I/PG	DISMANTLE THE BUS ALUMINIUM PIPE. NOW THE BUS-2 BECOME TWO PART ONE IS BUS-2 & BUS-4. BUS-2 WILL BE TAKEN IMMEDIATELY.(UNDER BUS SPLITING WORK)	
176	315MVA ICT-1 AT BSF	09/09/2016	14:00	09/09/2016	20:00	ODB	ER-I/PG	DISMANTLE THE BUS ALUMINIUM PIPE. NOW THE BUS-2 BECOME TWO PART ONE IS BUS-2 & BUS-4. BUS-2 WILL BE TAKEN IMMEDIATELY.(UNDER BUS SPLITING WORK)	BIHAR
177	400KV BSF-LAKHISARAI-2	09/09/2016	14:00	09/09/2016	20:00	ODB	ER-I/PG	DISMANTLE THE BUS ALUMINIUM PIPE. NOW THE BUS-2 BECOME TWO PART ONE IS BUS-2 & BUS-4. BUS-2 WILL BE TAKEN IMMEDIATELY.(UNDER BUS SPLITING WORK)	NLDC
178	400KV BSF-LAKHISARAI-1	09/09/2016	14:00	09/09/2016	20:00	ODB	ER-I/PG	DISMANTLE THE BUS ALUMINIUM PIPE. NOW THE BUS-2 BECOME TWO PART ONE IS BUS-2 & BUS-4. BUS-2 WILL BE TAKEN IMMEDIATELY.(UNDER BUS SPLITING WORK)	NLDC
179	HALF MAIN BUS-2 AT BSF(SAID AS BUS-4)	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	BUS-4 WILL BE COMMISSIONED WITH BUS SPLIT BAY. THIS BUS-4 WITH NEW BUS BAR PROTECTION PANEL & HAVING NEW CVT WITH BUS-4. (UNDER BUS SPLITING WORK)	
180	MAIN BAY OF 315MVA ICT-2 AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
181	MAIN BAY OF 400KV BSF-SSRM-1 AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
182	TIE BAY BETWEEN 400KV BSF-KODERMA-2 & FUTURE AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
183	MAIN BAY OF 400KV BSF-KODERMA-1 AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
184	MAIN BAY OF 400KV BSF-VARANASI-1 AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
185	TIE BAY OF 400 KV BSF - VARANASI -2 & FUTURE AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
186	MAIN BAY OF 400KV BSF-BANKA-1 AT BSF	09/09/2016	14:00	19/09/2016	18:00	OCB	ER-I/PG	DUE TO S/D OF BUS-4. (UNDER BUS SPLITING WORK)	
187	400 KV Duragapur-PGCIL # 2	09/09/2016	09:00	09/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
188	Arambag: 315 MVA Tr-IV	09/09/2016	06:00	09/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
189	400 kv KPPP-KGP#2	09/09/2016	08:00	09/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
190	80MVAR Reactor at Duburi by Baripada	09/09/2016	07:00	11/09/2016	18:00	ODB	ER-II/Odisha	CSD installation and online & off line operation of CSD	
191	63 MVAR Duburi Line Reactor (Bay No. 404 R) at Pandiabali	09/09/2016	09:00	09/09/2016	19:00	ODB	ER-II/Odisha	On-Load CSD Commissioning	
192	63 MVAR Sundargarh #1 Line Reactor at Rourkela	09/09/2016	09:00	09/09/2016	18:00	ODB	ER-II/Odisha	AMP work	
193	400KV, 125MVAR BUS REACTOR-1 AT SUNDARGARH	09/09/2016	07:00	10/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
194	220/132 KV 160MVA ICT#1 of Siliguri SS	09/09/2016	09:00	12/09/2016	17.00 hrs	ODB	ER-II / KOL	GIS Construction Work	WBSETCL
195	220kv NSLG-SLG Ckt-I	09/09/2016	09:00	09/09/2016	17.00 hrs	ODB	ER-II / KOL	Relay retrofitting	NLDC
196	220kv NSLG-SLG Ckt-II	09/09/2016	09:00	09/09/2016	17.00 hrs	ODB	ER-II / KOL	Relay retrofitting	NLDC
197	400kv NSLG-Tala Ckt-3	09/09/2016	07:00	09/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	NLDC
198	220 KV Farakka - Lalmatia TL and 315 MVA ICT	09/09/2016	09:00	10/09/2016	18:00	ODB	ER-II / KOL	Bay no- 12 is to be connected after completion of erection of upgraded equipments (3150 A rating) at Bay no-12. 2) Replacement of strung BUS with HTLS conductor for bay no-12 .	JHARKHAND
199	400 KV MAIN BUS 3 including Bus Sectionalizer-1 CB	09/09/2016	10:00	09/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-3(Final commissioning)	
200	315 MVA ICT#1 AT DURGAPUR	09/09/2016	15:00	09/09/2016	16:00	ODB	ER-II / KOL	Final commissioning of CB	DVC
201	Dalkhola-I & 220 KV Main Bus-I at Malda	09/09/2016	09:00	09/09/2016	14:00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
202	220 KV Bus Coupler AT DALKHOLA	09/09/2016	08:00	09/09/2016	12:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	
203	765KV GAYA-VARANASI- 2	10/09/2016	08:00	10/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
204	400 kv RNC-NEW RANCHI CKT-3	10/09/2016	08:00	11/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	

205	50MVAR L /R OF MAITHAN RB-1 AT RANCHI	10/09/2016	09:30	10/09/2016	17:30	ODB	ER-I/PG	AMP (Line will be charged without switchable reactor)	
206	160 MVA ICT#2 AT PURNEA	10/09/2016	09:00	10/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. THE ICT-2 WILL BE CHARGED ON EACH DAY AFTER COMPLETION OF WORK AT 17.00 HRS. 1.Removing of equipment jumpers and installation of suspension insulator of ICT-2 bay. (revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of ICT#2 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
207	Durgapur: 105*3 MVA Tr-II	10/09/2016	09:00	10/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
208	400KV MAIN BUS-I at Baripada	10/09/2016	07:00	10/09/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -I OF GIS	
209	ICT-I (3x 105 MVA) at Jeypore	10/09/2016	10:30:00	10/09/2016	11:30:00	ODB	ER-II/Odisha	For changing ICT-I combination form Unit-I, II, IV to Unit-II,III and IV for charging Unit-III after New Oil replacement	
210	ICT-I (Bay No. 405 and 406) at Pandiabili	10/09/2016	09:00	10/09/2016	19:00	ODB	ER-II/Odisha	On-Load CSD Commissioning	
211	63 MVAR Raigarh #2 Line Reactor at Rourkela	10/09/2016	09:00	10/09/2016	18:00	ODB	ER-II/Odisha	AMP work	
212	220kV NSLG-BRP Ckt-I	10/09/2016	09:00	10/09/2016	17.00 hrs	ODB	ER-II / KOL	Relay retrofitting	NLDC
213	400 KV MAIN BUS 4 including Bus Sectionalizer-2 CB AT DURGAPUR	10/09/2016	10:00	10/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-4(Final commissioning)	
214	400kV Mejia-III Main bay	10/09/2016	09:00	16/09/2016	17:00	OCB	ER-II / KOL	O/H of BHEL CB	
215	220 KV Transfer Bus AT DLAKHOLA	10/09/2016	08:00	10/09/2016	16:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	WBSETCL
216	400kV Binaguri - Purnea Ckt-1	10/09/2016	9.00 hrs	10.09.16	17.00 hrs	ODB	ER-II	HVDC Crossing Checking	
217	765KV GAYA-BALIA	11/09/2016	08:00	09/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
218	A/R OF 400KV JAMSHEDPUR - BARIPADA	11/09/2016	07:00	30/09/2016	19:00	ODB	ER-I/PG	FOR OPGW INSTALLATION WORK	NLDC
219	400 KV Arambag-BKTPP	11/09/2016	06:00	11/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
220	315MVA ICT#2 at Baripada	11/09/2016	07:00	11/09/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -I OF GIS	OPTCL
221	220kV NSLG-BRP Ckt-II	11/09/2016	09:00	11/09/2016	17.00 hrs	ODB	ER-II / KOL	Relay retrofitting	NLDC
222	400kV Binaguri - Purnea Ckt-2	11/09/2016	9.00 hrs	11.09.16	17.00 hrs	ODB	ER-II	HVDC Crossing Checking	
223	220KV BAY OF 500 MVA ICT-1 (201 BAY) AT GAYA	12/09/2016	10:00	12/09/2016	18:00	ODB	ER-I/PG	AMP	BIHAR
224	400 kV RNC-NEW RANCHI CKT-4	12/09/2016	08:00	13/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	
225	500MVA ICT-I AT NEW PURNEA	12/09/2016	08:00	15/09/2016	18:00	OCB	ER-I/PG	FOR REPLACEMENT OF PRV (3 Nos.) ,COMMISSIONING OF CSD, COMMISSIONING OF BUSHING MONITORING SYSTEM, CONNECTION OF TERTIARY, COMMISSIONING OF TEST UNDER WARANTY PERIOD	BIHAR

226	132 kV PRN(PG)-PRN(BSPTCL)-2	12/09/2016	09:00	12/09/2016	17:00	ODB	ER-I/PG	<p>BOTH THE LINE & ICT WILL BE UNDER S/D SIMULTANEOUSLY BUT ICT-3 & 4 WILL BE CHARGED AFTER 2 HOURS. FOR Construction of GIS bus duct & SF6 to air bushing foundation. Already will remain S/D as mentioned above in SI No-6.</p> <p>Dismantling of Transfer Bus which is above TBC & BSEB- 2 bay 1.Cutting of through conductor of R,Y&B phases of Transfer bus above ICT -3 bay(this is to separate the inter connection jumper of the two transfer bus section btwn ICT -3 & BSPTCL- 2 2.Removing of jumpers of each phase from Transfer Bus to tandem isolator. 3.Dismantling of transfer bus Conductors of that particular section.</p>	BIHAR
227	160 MVA ICT#3 AT PURNEA	12/09/2016	09:00	12/09/2016	11:00	ODB	ER-I/PG	<p>BOTH THE LINE & ICT WILL BE UNDER S/D SIMULTANEOUSLY BUT ICT-3 & 4 WILL BE CHARGED AFTER 2 HOURS. FOR Construction of GIS bus duct & SF6 to air bushing foundation. Already will remain S/D as mentioned above in SI No-6.</p> <p>Dismantling of Transfer Bus which is above TBC & BSEB- 2 bay 1.Cutting of through conductor of R,Y&B phases of Transfer bus above ICT -3 bay(this is to separate the inter connection jumper of the two transfer bus section btwn ICT -3 & BSPTCL- 2 2.Removing of jumpers of each phase from Transfer Bus to tandem isolator. 3.Dismantling of transfer bus Conductors of that particular section.</p>	BIHAR
228	400kv ARMB-PPSP#2	12/09/2016	09:00	12/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
229	ICT-II (Bay No. 407 and 408) at Pandiabili	12/09/2016	09:00	12/09/2016	19:00	ODB	ER-II/Odisha	On-Load CSD Commissioning	
230	400 KV Talcher #2 Main Bay (Bay No.- 407) at Rourkela	12/09/2016	09:00	12/09/2016	18:00	ODB	ER-II/Odisha	AMP work	
231	400KV, 125MVAR BUS REACTOR-2 AT SUNDARGARH	12/09/2016	07:00	13/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
232	400kV Tala Ckt-I at Binaguri	12/09/2016	09:00	12/09/2016	17.00 hrs	ODB	ER-II / KOL	Relay retrofitting	NLDC
233	400kV NSLG-Rangpo Ckt-1	12/09/2016	07:00	12/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
234	400kV NSLG-Tala Ckt-4	12/09/2016	07:00	12/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
235	400 KV MAIN BUS 1 including Bus Sectionalizer-1 CB AT DURGAPUR	12/09/2016	10:00	12/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-1(Final commissioning)	
236	Dalkhola-II & 220 KV Main Bus-II at Malda	12/09/2016	09:00	12/09/2016	14.00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
237	400 KV Subhasgram- Jeerat Line	12/09/2016	08:30	12/09/2016	17:00	ODB	ER-II / KOL	LA and Jumper replacemnet at jeerat end.	WBSETCL
238	400 kV ICT#1 and bays at barh	12/09/2016	09:30	16/09/2016	18:00 hrs	OCB	NTPC	PM Job for ICT#1	
239	Bong – 2 Main bay (415)	12/09/2016	9.30 hrs	14/09/2016	17.30 hrs	OCB	ER-II	CB Ovrhauling	
240	220KV BAY OF 315 MVA ICT-2 (205 BAY) AT GAYA	13/09/2016	10:00	13/09/2016	18:00	ODB	ER-I/PG	AMP	
241	50MVAR L /R OF MAITHAN RB-2 AT RANCHI	13/09/2016	09:30	13/09/2016	17:30	ODB	ER-I/PG	AMP (Line will be charged without switchable reactor)	

242	132 kV PRN(PG)-PRN(BSPTCL)-2	13/09/2016	09:00	13/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL- 2 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of BSPTCL-2 bay 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
243	400 KV BANKA - BSF -1	13/09/2016	11:00	13/09/2016	15:00	ODB	ER-I/PG	FOR AUTO RECLOSE TESTING	
244	Durgapur: 400kv Tr.Bus	13/09/2016	07:00	13/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
245	Arambag:400kv Tr.Bus	13/09/2016	07:00	13/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
246	132kv NBU(WB)-Siliguri(PG)	13/09/2016	07:00	13/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
247	BkTPP:400kv MB#2	13/09/2016	08:00	13/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
248	315MVA ICT#2 at Baripada	13/09/2016	07:00	13/09/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -II OF GIS	OPTCL
249	400 KV Bus Reactor Main Bay (408) at Keonjhar	13/09/2016	09:00	13/09/2016	18:00	ODB	ER-II/Odisha	AMP/CSD relay rectification	
250	400KV Keonjhar-Rengali Line at Keonjhar	13/09/2016	09:00	14/09/2016	18:00	OCB	ER-II/Odisha	For OPGW Stringing Work	
251	22/132 KV 160MVA ICT#2 of Siliguri SS	13/09/2016	09:00	16/09/2016	17.00 hrs	ODB	ER-II / KOL	GIS Construction Work	WBSETCL
252	400kv NSLG-Kishanganj-2 Line	13/09/2016	07:00	13/09/2016	17.00 hrs	ODB	ER-II / KOL	Hot spot rectification	
253	400kv Bus-I at Binaguri	13/09/2016	07:00	13/09/2016	17.00 hrs	ODB	ER-II / KOL	To facilitate hot spot rectification in Purnea-3 & 4 Line	
254	400 KV MAIN BUS 2 including Bus Sectionalizer-2 CB AT DURGAPUR	13/09/2016	10:00	13/09/2016	18:00	ODB	ER-II / KOL	Testing of Bus bar protection for Bus-2(Final commissioning)	
255	220 KV BUS -II AT DALKHOLA	13/09/2016	09:00	13/09/2016	16:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	WBSETCL
256	400 KV MAIN BUS - II AT BAKRESWAR	13/09/2016	08:00	13/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
257	400KV MAIN BAY OF 400/220KV ICT-1 (416 BAY)	14/09/2016	10:00	14/09/2016	18:00	ODB	ER-I/PG	AMP	
258	132 kV PRN(PG)-PRN(BSPTCL)-2	14/09/2016	09:00	14/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL- 2 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of BSPTCL-2 bay 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
259	400 KV BANKA - BSF - 2	14/09/2016	11:00	14/09/2016	15:00	ODB	ER-I/PG	FOR AUTO RECLOSE TESTING	
260	Durgapur:400 KV Bus Coupler	14/09/2016	09:00	14/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
261	315MVA ICT#1 at Baripada	14/09/2016	07:00	14/09/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -II OF GIS	OPTCL
262	400KV Angul Meramundali Line-1 at Angul	14/09/2016	07:00	14/09/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	
263	Bus Reactor Main Bay at Indravati	14/09/2016	09:00	14/09/2016	13.00hrs	ODB	ER-II/Odisha	AMP 2016	
264	400 KV Talcher #2 - Jamshedpur #2 Tie Bay(Bay No.-408) at Rourkela	14/09/2016	09:00	14/09/2016	18:00	ODB	ER-II/Odisha	AMP work	
265	400 KV Bus Reactor Tie Bay (407-08) at Keonjhar	14/09/2016	09:00	14/09/2016	18:00	ODB	ER-II/Odisha	AMP/CSD relay rectification	
266	400KV SUNGARGARH-ROURKELA LINE-I at Sundargarh	14/09/2016	07:00	15/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
267	400kv NSLG-Kishanganj-1 Line	14/09/2016	07:00	14/09/2016	17.00 hrs	ODB	ER-II / KOL	Hot spot rectification	

268	400 KV BUS-I of NTPC Farakka	14/09/2016	10:00	14/09/2016	13:00	ODB	ER-II / KOL	S/down of Bay no- 08 is required to avoid induction as bay no-09 is vertically below the strung bus of Bay-08. Bay no- 08 to be disconnected from BUS-I (By jumper opening from BUS side), BUS-I shutdown is required for the isolation of Bay no- 08 so that testing of equipments and erection of AL pipes, etc of bay no- 09 could be started. None of the above referred activities could be carried out without shutdown of Bay no-08.	
269	400 KV Bay no-08 at NTPC Farakka (Tie bay of Generator-3).	14/09/2016	09:00	23/09/2016	17:00	OCB	ER-II / KOL	S/down is required to avoid huge induction as bay no-09 is vertically below the strung bus of Bay-08. None of the below referred activities could be carried out without shutdown of Bay no-08. Following works will be carried out:-1) Alignment of Isolator & E/S for Bay No- 09 2) To erect CT support structure & CT in Bay no-08 (as per new protection scheme). 3) dismantling of AL pipe bus between isolator and CB of Bay no-8. 4) Re-erection of AL pipe bus between Isolator and CB through new CTs in Bay no-8.5) Erection of AL IPS tube for Bay no-096) Commissioning activities work of CB of Bay no-097) Testing of CT / Isolator / CB of Bay no-09	
270	ICT-V & 220 KV Main Bus-I at Malda	14/09/2016	09:00	14/09/2016	14:00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
271	220 KV BUS -I AT DALKHOLA	14/09/2016	09:00	14/09/2016	16:00	ODB	ER-II / KOL	Stability testing for Bus Bar Protection Commissioning	WBSETCL
272	400 KV Kh -Farakka # Line 2	14/09/2016	09:30	14/09/2016	17:30 hrs	ODB	NTPC	PM works & Relay testing.	
273	400KV TIE BAY OF 400/220KV ICT-1 (417 BAY)	15/09/2016	10:00	15/09/2016	18:00	ODB	ER-I/PG	AMP	
274	400 kV PTN-BARH CKT – 2	15/09/2016	08:00	15/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	
275	132 kV PRN(PG)-PRN(BSPTCL)-2	15/09/2016	09:00	15/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL- 2 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of BSPTCL-2 bay 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
276	315 MVA ICT-2 AT JAMSHEDPUR	15/09/2016	09:30	15/09/2016	17:30	ODB	ER-I/PG	BAY CONSTRUCTION WORK FOR ICT -3	JHARKHAND
277	400 KV BANKA - KHLG -1	15/09/2016	11:00	15/09/2016	15:00	ODB	ER-I/PG	FOR AUTO RECLOSE TESTING	
278	BkTPP:400kv TR. BUS	15/09/2016	08:00	15/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
279	220kv Bus-I at Binaguri	15/09/2016	07:00	15/09/2016	17.00 hrs	ODB	ER-II / KOL	Bus isolator hot spot rectification / CVT replacement	
280	50 MVAR bus Reactor-1 AT DURGAPUR	15/09/2016	10:00	15/09/2016	18:00	ODB	ER-II / KOL	Commissioning of 125 Bus Reactor -2 in parallel	
281	400 KV Malda- Purnea ckt-I	15/09/2016	09:00	15/09/2016	16:00	ODB	ER-II / KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
282	132 kV ASHOKNAGAR - BASHIRHAT Tr line of WBSETCL	15/09/2016	07:00	16/09/2016	17:00hrs	ODB	ER-II / KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 13/0-14/0	WBSETCL
283	400KV Keonjhar-Baripada Line at Keonjhar	15/09/2016	09:00	15/09/2016	18:00	ODB	ER-II/Odisha	For jointing & splicing works of OPGW Stringing.	
284	Kishanganj-1Main bay CB (416)	15/09/2016	9.30 hrs	17/09/2016	17.30 hrs	OCB	ER-II	CB Ovrhauling	
285	400 KV TIE BUS AT BAKRESWAR	15/09/2016	08:00	15/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
286	400KV MAIN BAY OF 400/220KV ICT-2 (425 BAY)	16/09/2016	10:00	16/09/2016	18:00	ODB	ER-I/PG	AMP	

287	132 kV PRN(PG)-PRN(BSPTCL)-1	16/09/2016	09:00	16/09/2016	17:00	ODB	ER-I/PG	Dismantling of Transfer Bus which is above ICT 3 & BSPTCL 1 bay 1.Removing of jumpers of each phase from transfer bus to tandem isolator 2.Dismantling of transfer bus Conductors of that particular section	BIHAR
288	400 KV BANKA - KHLG -2	16/09/2016	11:00	16/09/2016	15:00	ODB	ER-I/PG	FOR AUTO RECLOSE TESTING	
289	400KV MAIN BUS-I at Baripada	16/09/2016	07:00	16/09/2016	18:00	ODB	ER-II/Odisha	INSPECTION OF MAIN BUS - I GIS BUSHING	
290	400kv 125MVAR B/R-3 at Angul	16/09/2016	09:00	16/09/2016	15:00	ODB	ER-II/Odisha	AMP works	
291	400 KV 125 MVAR Bus Reactor-SEL #2 Tie Bay (Bay No-426) at Rourkela.	16/09/2016	09:00	16/09/2016	18:00	ODB	ER-II/Odisha	AMP work	
292	400KV SUNGARGARH-ROURKELA LINE-2 at Sundargarh	16/09/2016	07:00	17/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
293	220kv Bus-II at Binaguri	16/09/2016	07:00	16/09/2016	17.00 hrs	ODB	ER-II / KOL	Bus isolator hot spot rectification	
294	400kv NSLG-Rangpo Ckt-2	16/09/2016	07:00	16/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
295	50 MVAR bus Reactor-1 AT DURGAPUR	16/09/2016	10:00	16/09/2016	18:00	ODB	ER-II / KOL	Commissioning of 125 Bus Reactor -2 in parallel	
296	ICT-III & 220 KV Main Bus-II at Malda	16/09/2016	09:00	16/09/2016	14:00	ODB	ER-II / KOL	Bay Stability for new Bus Bar commissioning.	WBSETCL
297	400 KV Malda- Purnea ckt-II	17/09/2016	09:00	17/09/2016	16:00	ODB	ER-II / KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
298	400KV TIE BAY OF 400/220KV ICT-2 (426 BAY)	17/09/2016	10:00	17/09/2016	18:00	ODB	ER-I/PG	AMP	
299	400KV MAIN BUS-II at Baripada	17/09/2016	07:00	20/09/2016	18:00	ODB	ER-II/Odisha	MAIN BUS-II GIS BUSHING ERECTION	
300	Jeypore Main Bay at Indravati	17/09/2016	09:00	17/09/2016	13.00hrs	ODB	ER-II/Odisha	Attending Oil leakage in B-Ph C.T., during the shut down period, no power flow will take place in 400KV Indravati (PG)-UIHEP Line due to non availability of 411 Tie CB of 125Mvar BR-UIHEP TIE BAY (Blasted on 18.03.2016).	
301	50 MVAR Bus Reactor at Rourkela.	17/09/2016	09:00	17/09/2016	18:00	ODB	ER-II/Odisha	AMP work	
302	400 KV B'Nagar-2 line AT DURGAPUR	17/09/2016	10:00	17/09/2016	18:00	ODB	ER-II / KOL	Wavetrap connector replacement	
303	400 KV N.Siliguri-N. Purnea Ckt- I	17/09/2016	09:00	17/09/2016	16:00	ODB	ER-II / KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
304	220 KV SUBHASGRAM- WBSETCL Line # 1	17/09/2016	08:30	17/09/2016	17:00	ODB	ER-II / KOL	Tan delta measurement and replacement of CT as per requirement	WBSETCL
305	400 KV Farakka- Kahalgaon 3 & 4	18/09/2016	08:00	23/09/2016	18:00	OCB	ER-II / KOL	Erection of tower at Loc no. 5/0 & 5A/0 of LILO of 400 KV Rajarhat- Purnea D/c at Farakka and stringing between them (5/0 to 5A/0). Special Remarks : Span between 5/0 to 5A/0 is 80 mtrs. So, Distance between tower 5/0 & 5A/0 to 400 KV Farakka - Kahalgaon line is even less. Tower height of 5/0 and 5A/0 is approx 80 mtrs (DD+25 Mtrs with 4 m RC). So, during erection also, shutdown is required for passing stay / guy wires /ropes.	NLDC
306	3*80MVAR GAYA-VARANASI-I LINE REACTOR AT GAYA	19/09/2016	10:00	20/09/2016	18:00	OCB	ER-I/PG	FOR HV BUSHING REPLACEMENT WORK IN Y-PHASE	
307	400KV BUS-II AT NEW PURNEA	19/09/2016	08:00	19/09/2016	18:00	ODB	ER-I/PG	AMP WORK	
308	160 MVA ICT#3 AT PURNEA	19/09/2016	09:00	19/09/2016	17:00	ODB	ER-I/PG	Dismantling of Transfer Bus which is above ICT 3 & BSPTCL 1 bay 1.Removing of jumpers of each phase from transfer bus to tandem isolator 2.Dismantling of transfer bus Conductors of that particular section	BIHAR
309	400 KV BUS-II & BUS-IV AT BSF	19/09/2016	08:00	19/09/2016	18:00	ODB	ER-I/PG	FOR INTERCONNECTING OF JUMPERS WITH BUS-II TO BUS-IV AND STABILITY TEST	

310	315 MVA ICT-I AT BSF	19/09/2016	08:00	19/09/2016	18:00	ODB	ER-I/PG	FOR INTERCONNECTING OF JUMPERS WITH BUS-II TO BUS-IV AND STABILITY TEST	BIHAR
311	400 KV BSF-LAKHISARAI--II	19/09/2016	08:00	19/09/2016	18:00	ODB	ER-I/PG	FOR INTERCONNECTING OF JUMPERS WITH BUS-II TO BUS-IV AND STABILITY TEST	NLDC
312	400 KV BSF-LAKHISARAI--I	19/09/2016	08:00	19/09/2016	18:00	ODB	ER-I/PG	FOR INTERCONNECTING OF JUMPERS WITH BUS-II TO BUS-IV AND STABILITY TEST	NLDC
313	400 KV KGP: 80 MVAR REACTOR	19/09/2016	08:00	19/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
314	400KV SUNGARGARH-IND BHARAT LINE at Sundargarh	19/09/2016	07:00	20/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	NLDC
315	220 KV Farakka- Lalmatia TL	19/09/2016	08:00	23/09/2016	18:00	OCB	ER-II / KOL	Erection of tower at Loc. No- 7/0 (DD+25 mtr with 4 m RC) and stringing between loc. No. 6/0 to 7/0 of LILO of 400 KV Rajarhat-Purnea D/c at Farakka. Special Remarks: Distance between tower 7/0 to 220 KV Farakka - Lalmatia line is approx 70 mtrs. Tower height of 7/0 is approx 80 mtrs (DD+25 Mtrs with 4 m RC). So, during erection, shutdown is required for passing stay / guy wires /ropes.	JHARKHAND
316	400 KV N.Siliguri-N. Purnea Ckt- II	19/09/2016	09:00	19/09/2016	16:00	ODB	ER-II / KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
317	315 MVA ICT-III AT SUBHASGRAM	19/09/2016	08:30	19/09/2016	17:00	ODB	ER-II / KOL	Relay retrofit	WBSETCL
318	Bus Reactor-1 Main bay CB (418)	19/09/2016	9.30 hrs	21/09/2016	17.30 hrs	OCB	ER-II	CB Overhauling	
319	132 KV TBC CB (CB ONLY NOT LINE)	19/09/2016	09:00	21/09/2016	17:00	OCB	ER-II	CB Overhauling	
320	400KV MAITHON GAYA-I & KODERMA GAYA-II 400KV	20/09/2016	08:00	21/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
321	161 MVA ICT#3 AT PURNEA	20/09/2016	09:00	20/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of ICT-3 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of ICT -3 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
322	400 KV BUS-I AT BSF	20/09/2016	08:00	20/09/2016	18:00	ODB	ER-I/PG	FOR CONNECTING OF DROPPERS FOR CHARGING OF JACK BUS OF ICT-I AND LAKHISARAI CKT-II	
323	400 KV BUS-I AT BSF	20/09/2016	08:00	20/09/2016	18:00	ODB	ER-I/PG	DISMENTLE THE BUS ALUMINIUM PIPE NOW .THE BUS-I BECOME TWO PART ONE IS BUS-I AND BUS-3.BUS-I WILL TAKEN IMMEDIATELY.	
324	400 KV ICT-II MAIN BAY AT BSF	20/09/2016	08:00	30/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
325	400 KV BSF-SAS-I MAIN BAY AT BSF	20/09/2016	08:00	30/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
326	315 MVA ICT-II AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	BIHAR
327	400 KV BSF-SASARAM-I	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
328	125 MVAR B/R-3 AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
329	50 MVAR B/R-I AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
330	MAIN BAY OF 400 KV BSF-KODERMA-II AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	

331	TIE BAY OF 400 KV BSF-KODERMA-I & FUTURE BAY AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
332	TIE BAY OF 400 KV BSF-VARANSI-II & FUTURE BAY AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
333	MAIN BAY OF 400 KV BSF-VARANSI-II AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
334	MAIN BAY OF 400 KV BANKA CKT-II AT BSF	20/09/2016	08:00	29/09/2016	18:00	OCB	ER-I/PG	DUE TO SHUTDOWN OF BUS-3 (UNDER BUS SPLITING WORK)	
335	220 KV Durgapur-Waria # 1	20/09/2016	07:00	20/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
336	400 KV KGPR-CHAIBASA	20/09/2016	08:00	20/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
337	400kV Angul Bolangir at Angul	20/09/2016	07:00	20/09/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	NLDC
338	220kV SLG-Kishanganj Ckt-II	20/09/2016	09:00	20/09/2016	17.00 hrs	ODB	ER-II / KOL	PG clamp removal	
339	400kV NSLG-Purnea Ckt-1	20/09/2016	07:00	20/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
340	315MVA ICT-I AT Maithon	20/09/2016	09:00	23/09/2016	18:00	OCB	ER-II / KOL	Removal of Jumper of ICT-I, connection of Jumpers and other work related to Charging of 500MVA ICT-III through 220kV ICT-I Bay.	DVC
341	765 kV NRNC-DHARMAJAYGARH Ckt-1	21/09/2016	08:00	22/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS AT T No-227	NLDC
342	400 kV PTN-BARH CKT – 3	21/09/2016	08:00	21/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	
343	162 MVA ICT#3 AT PURNEA	21/09/2016	09:00	21/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of ICT-3 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of ICT -3 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
344	220 KV Durgapur-Waria # 2	21/09/2016	07:00	21/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
345	220kv STPS-Chandil	21/09/2016	07:00	21/09/2016	16:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
346	400 KV KGPR-BARIPADA	21/09/2016	08:00	21/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
347	400KV Baripada- DUBURI Line at Baripada	21/09/2016	07:00	22/09/2016	18:00	OCB	ER-II/Odisha	Erection of Tower at new pile foundation at loc. No.8	
348	765 kV S/C Angul-Jharsuguda Transmission Line-II by Jharsuguda TLC	21/09/2016	09:00	29/09/2016	18:00	OCB	ER-II/Odisha	Respotting of tower location 50/1 (by agency : M/s KEC).	NLDC
349	765kV Angul Sngrh-1 ICT-2 Tie Bay - 708 at Angul	21/09/2016	09:00	21/09/2016	15:00	ODB	ER-II/Odisha	AMP works	NLDC
350	400KV SUNGARGARH-RAIGARH LINE-2 at Sundargarh	21/09/2016	07:00	22/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	NLDC
351	220kV NSLG-BRP Ckt-I	21/09/2016	09:00	21/09/2016	17.00 hrs	ODB	ER-II / KOL	PG clamp removal	NLDC
352	220 KV Siliguri-Kishanganj ckt -I	21/09/2016	09:00	21/09/2016	16:00	ODB	ER-II / KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
353	400 KV Fkk - Durgapur # line 2	21/09/2016	09:30	22/09/2016	17:30 hrs	ODB	NTPC	Main & Tie Breaker PM & testing.	
354	400KV MAITHON GAYA-II & KODERMA GAYA-I	22/09/2016	08:00	23/09/2016	18:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC

355	163 MVA ICT#3 AT PURNEA	22/09/2016	09:00	22/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of ICT-3 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolators /BPI of R & B phases of ICT -3 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
356	400KV KGP: 400 KV BUS TRANSFER BAY	22/09/2016	08:00	22/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
357	765kV Bus-I at Angul	22/09/2016	08:00	23/09/2016	18:00	OCB	ER-II/Odisha	For Extension of Bus for commissioning of 765kV Angul Sriakakulam Line-1 &Line-2 bays along with Bus-Bar Protection	NLDC
358	315 MVA ICT #1 - 50MVAR B/R Tie Bay (Bay No.-423) at Rourkela.	22/09/2016	09:00	22/09/2016	18:00	ODB	ER-II/Odisha	AMP work	OPTCL
359	220kV NSLG-BRP Ckt-II	22/09/2016	09:00	22/09/2016	17.00 hrs	ODB	ER-II / KOL	PG clamp removal	NLDC
360	220 KV Siliguri-Kishanganj ckt -II	22/09/2016	10:00	22/09/2016	16:00	ODB	ER-II / KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
361	132 KV BRP-WB-I (CB ONLY NOT LINE)	22/09/2016	09:00	24/09/2016	17:00	OCB	ER-II	CB Overhauling	WBSETCL
362	132 kV PRN(PG)-PRN(BSPTCL)-1	23/09/2016	09:00	23/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL- 1 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolator/ BPI of R & B phases of BSPTCL-1 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
363	400 KV BUS COUPLER BAY(MB 1&MB 2 ALTERNATIVELY)	23/09/2016	08:00	23/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
364	400 KV Baripada- Pandiabil & Baripada- Duburi Line at Baripada	23/09/2016	07:00	28/09/2016	18:00	OCB	ER-II/Odisha	De-stringing & dismantling of existing tower at loc. No. 8 and erection & stringing of new tower at pile foundation loc. No.8	OPTCL
365	Indravati-Rengali Line at Indravati	23/09/2016	09:00	23/09/2016	13.00hrs	ODB	ER-II/Odisha	Rectification of Hot spot in wave trap jumper(Y-Ph)	
366	400KV MAIN BUS-1 AT SUNDARGARH	23/09/2016	07:00	24/09/2016	19:00	OCB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
367	400kV NSLG-Rangpo Ckt-II	23/09/2016	09:00	23/09/2016	17.00 hrs	ODB	ER-II / KOL	PG clamp removal	
368	400kV NSLG-Purnea Ckt-2	23/09/2016	07:00	23/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
369	400 KV BUS-I of NTPC Farakka	23/09/2016	14:00	23/09/2016	17:00	ODB	ER-II / KOL	Bay no- 08 to be reconnected with BUS-I (By jumper connection with BUS side), BUS-I shutdown is required for the connection of Bay no-08 with BUS-I.	
370	315 MVA ICT-V AT SUBHASGRAM	23/09/2016	08:30	23/09/2016	17:00	ODB	ER-II / KOL	PSD commissioning	WBSETCL
371	400 KV Fkk - Durgapur # line 1	23/09/2016	09:30	24/09/2016	17:30 hrs	ODB	NTPC	Relay, Shunt Reactor testing & Main Bay Breaker PM.	
372	765KV BUS-I AT GAYA S/S	24/09/2016	08:00	24/09/2016	18:00	ODB	ER-I/PG	FOR ISOLATOR RECTIFICATION WORK	NLDC

373	132 kV PRN(PG)-PRN(BSPTCL)-1	24/09/2016	09:00	24/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL- 1 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolator/ BPI of R & B phases of BSPTCL-1 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
374	400 KV Farakka- Kahalgaon 1 & 2	24/09/2016	08:00	24/09/2016	18:00	ODB	ER-II / KOL	Stringing between Loc. No. 5A/0 to 6/0 of LILO of 400 KV Rajarhat- Purnea D/c at Farakka .	NLDC
375	Kishanganj -2 Main bay CB (419)	24/09/2016	9.30 hrs	26/09/2016	17.30 hrs	OCB	ER-II	CB Overhauling	
376	132 kV PRN(PG)-PRN(BSPTCL)-1	25/09/2016	09:00	25/09/2016	17:00	ODB	ER-I/PG	Construction of GIS bus duct & SF6 to air bushing foundation. 1.Removing of equipment jumpers and installation of suspension insulator of BSPTCL- 1 bay(revised drawing is under approval). 2. Dismantling of existing tandem isolator/ BPI of R & B phases of BSPTCL-1 bay. 3. Installing /erecting of BPI(existing) on new proposed foundation as per requirement on particular bay& then connection to CT.	BIHAR
377	400 KV KGP: 315 MVA TR 1	25/09/2016	08:00	25/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
378	220KV Gokarna- Sagardighi Ckt. I &2	25/09/2016	08:00	25/09/2016	18:00	ODB	ER-II / KOL	Stringing between loc. No. 3/0 to 4/0 of LILO of 400 KV Rajarhat- Purnea D/c at Gokarna	WBSETCL
379	132 KV BRP-WB-II (CB ONLY NOT LINE)	25/09/2016	09:00	27/09/2016	17:00	OCB	ER-II	CB Overhauling	WBSETCL
380	400 KV Ranchi - NEW RANCHI - I	25/09/2016	08:00	27/09/2016	18:00	ODB	PKPTCL	CROSSING OF PURULIA 0 RANCHI D/C	
381	765KV BUS-II AT GAYA S/S	26/09/2016	08:00	26/09/2016	18:00	ODB	ER-I/PG	FOR ISOLATOR RECTIFICATION WORK	NLDC
382	220KV BUS-II AT RANCHI	26/09/2016	10:00	26/09/2016	14:00	ODB	ER-I/PG	DURING S/D ICT-2 WILL BE OUT OF SERVICE. FOR ATTENDING HOT SPOT AT BUS ISOLATOR OF TRANSFORMER-II.DURING S/D ICT-II WILL BE CHARGED THROUGH TRANSFER BUS.	JHARKHAND
383	400KV MAIN BUS-1 AT SUNDARGARH	26/09/2016	07:00	26/09/2016	19:00	ODB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
384	220kv SLG-Kishanganj Ckt-1	26/09/2016	07:00	26/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
385	132 KV D/C (Gokarna -Raghunathganj Ckt. & Gokarna -Lalgola 1 Ckt.) & 132 D/C (Gokarna-Lalgola Ckt.2 & Gokarna -Sonar Bangla section of Gokarna-Sonarbangla-Lalgola Ckt.)	26/09/2016	08:00	26/09/2016	18:00	ODB	ER-II / KOL	Stringing between loc. No. 5/0 to 6/0 of LILO of 400 KV Rajarhat- Purnea D/c at Gokarna. Special Remarks : All 04 CKT.s are in single span.	WBSETCL
386	220kv D/C Jeerat -newtown Tr line of WBSETCL (T No. 110 - 111)	26/09/2016	07:00	27/09/2016	17:00hrs	ODB	ER-II / KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 3/0-4/0	WBSETCL
387	315 MVA ICT-II AT RANCHI	27/09/2016	10:00	27/09/2016	14:00	ODB	ER-I/PG	FOR AMP WORK	JHARKHAND
388	400KV MAIN BUS-2 AT SUNDARGARH	27/09/2016	07:00	29/09/2016	19:00	OCB	ER-II/Odisha	To attend mechanical interlock problem (constructional defect) of all 400kv siemens make isolators.	
389	400 KV BUS-I with Bay no-08 of NTPC Farakka	27/09/2016	10:00	27/09/2016	15:00	ODB	ER-II / KOL	To charge Bay no-09, jumper of Bay no-08 is to be opened and	
390	Bus reactor -2 Main bay CB (421)	27/09/2016	9.30 hrs	27/09/2016	17.30 hrs	OCB	ER-II	CB Overhauling	
391	400 kV PTN-BALIA CKT – 3	28/09/2016	08:00	28/09/2016	17:00	ODB	ER-I/PG	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANTS	NLDC
392	220kv SLG-Kishanganj Ckt-2	28/09/2016	07:00	28/09/2016	17.00 hrs	ODB	ER-II / KOL	Insulator replacement in crossings (Outage: Deemed available).	
393	400 KV Kh - Lakhisarai # Line 1	28/09/2016	09:30	28/09/2016	17:30 hrs	ODB	NTPC	PM works & Relay testing.	

394	400 KV BUS-I & BUS-3 AT BSF AT BSF	29/09/2016	08:00	29/09/2016	18:00	ODB	ER-I/PG	FOR INTERCONNECTING OF JUMPERS WITH BUS-I TO BUS-3 AND STABILITY TEST (UNDER BUS SPLITING WORK)	
395	TIE BAY OF 400 KV BSF - LAKHISARAI -2 AT BSF	30/09/2016	09:00	30/09/2016	14:00	ODB	ER-I/PG	S/D REQUIRED FOR OPENING OF JUMPER OF JACK BUS TO FACILITATE ERECTION OF CB IN MAIN BAY OF TENUGHAT CKT. AT BSF. IT IS TO BE NOTED THAT TIE BAY OF 400 KV BSF - LAKHISARAI -2 AT BSF WILL REMAIN OUT OF SERVICE TILL COMMISSIONING OF TENUGHAT MAIN BAY.	
396	400 KV BUS-IV AT BSF	30/09/2016	08:00	30/09/2016	12:00	ODB	ER-I/PG	FOR CONNECTING OF DROPPERS FOR CHARGING OF JACK BUS OF ICT-II AND SASARAM CKT-I (UNDER BUS SPLITING WORK)	
397	400 KV KGP: 315 MVA TR 2	30/09/2016	08:00	30/09/2016	15:00	ODB	WBSETCL	PREVENTIVE PLANNED MAINTENANCE	
398	765/400KV, 1500MVA ICT-I AT SUNDARGARH	30/09/2016	07:00	30/09/2016	19:00	ODB	ER-II/Odisha	For first time charging of 33KV Auxiliary Transformer.	NLDC
399	400 KV Ranchi - NEW RANCHI - II	30/09/2016	08:00	02/10/2016	18:00	ODB	PKPTCL	CROSSING OF PURULIA 0 RANCHI D/C	
400	Purnea-1 Main bay CB (422)	01/10/2016	9.30 hrs	03/10/2016	17.30 hrs	OCB	ER-II	CB Ovrhauling	
401	Bong -4 Main bay CB (427)	04/10/2016	9.30 hrs	06/10/2016	17.30 hrs	OCB	ER-II	CB Ovrhauling	
402	400 KV Bongaigaon- New Siliguri Transmission Line, CKT-1 & 2	06/09/2019	09:00	08/09/2016	17:00	ODB	ER-II	For Stringing work between 15/0 & 16/0 (LILO of 400 KV BONG-SLG Line at Alipurduar) The abov line crossing the 400 kV BONG - Siliguri Line between Tower Loc 244 & 245.	

Outages proposed in other RPCs requiring ERPC approval

Sl No	outages proposed in	Name of Requesting Agency	Name of Elements	From		To		Basis	Reason	Remarks (If Any)
				Date	Time	Date	Time			
1	NERPC	POWERGRID	400 kV Binaguri - Bongaigaon -1 TL	1/Sep/16	0700	1-Sep-16	1600	Daily	Insulation replacement in crossing at Binaguri	
2	NERPC	POWERGRID	400 kV Binaguri - Bongaigaon -2 TL	3/Sep/16	0700	3/Sep/16	1600	Daily	Insulation replacement in crossing at Binaguri	
3	SRPC	POWERGRID	A/R of 400 kV Jeypore-Gazuwaka	1/Sep/16	6:00	30/Sep/16	20:00	Daily basis (D)	For PID Testing. the Auto reclose selection of both lines to be kept in Non auto mode	
4	SRPC	POWERGRID	HVDC Gazuwaka Pole-1 (In Standby for 04-Hours)	13/Aug/16	10:00	13/Aug/16	14:00	C	Emergency work: Collection of Oil Sample from Recently Commissioned CT (CWD30T53 B-Phase) of Tie Bay (CWD30Q50) of South Side of Pole-1.	
5	SRPC	POWERGRID	Gajuwaka 'HVDC Pole-2	23/Aug/16	10:00	23/Aug/16	14:00	C	Emergency work:During Removal of Interruptor for Replacement of O-Ring of WA1.W1.Q1 Bay	

Anticipated Power Supply Position for the month of
Sep-16

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	BIHAR		
i)	NET MAX DEMAND	3700	2165
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	446	312
	- Central Sector	2353	1633
iii)	SURPLUS(+)/DEFICIT(-)	-902	-219
2	JHARKHAND		
i)	NET MAX DEMAND	1200	750
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	300	349
	- Central Sector	800	340
iii)	SURPLUS(+)/DEFICIT(-)	-100	-60
3	DVC		
i)	NET MAX DEMAND (OWN)	2800	1680
ii)	NET POWER AVAILABILITY- Own Source	4577	2404
	- Central Sector	421	293
	Long term Bi-lateral (Export)	1300	936
iii)	SURPLUS(+)/DEFICIT(-)	898	81
4	ORISSA		
i)	NET MAX DEMAND	4250	2530
ii)	NET POWER AVAILABILITY- Own Source	3261	2174
	- Central Sector	1085	732
iii)	SURPLUS(+)/DEFICIT(-)	96	376
5	WEST BENGAL		
5.1	WBSEDCL		
i)	NET MAX DEMAND (OWN)	6055	3632
ii)	CESC's DRAWAL	0	0
iii)	TOTAL WBSEDCL's DEMAND	6055	3632
iv)	NET POWER AVAILABILITY- Own Source	3610	2007
	- Import from DPL	-44	41
	- Central Sector	2079	1381
v)	SURPLUS(+)/DEFICIT(-)	-410	-203
vi)	EXPORT (TO B'DESH & SIKKIM)	10	7
5.2	DPL		
i)	NET MAX DEMAND	270	209
ii)	NET POWER AVAILABILITY	226	250
iii)	SURPLUS(+)/DEFICIT(-)	-44	41
5.3	CESC		
i)	NET MAX DEMAND	1945	1015
ii)	NET POWER AVAILABILITY - OWN SOURCE	740	589
	FROM HEL	530	320
	FROM CPL/PCBL	0	0
	Import Requirement	40	106
iii)	TOTAL AVAILABILITY	1945	1015
iv)	SURPLUS(+)/DEFICIT(-)	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
i)	NET MAX DEMAND	8270	4856
ii)	NET POWER AVAILABILITY- Own Source	4576	2846
	- Central Sector+Others	2649	1701
iii)	SURPLUS(+)/DEFICIT(-)	-1045	-309
7	SIKKIM		
i)	NET MAX DEMAND	85	34
ii)	NET POWER AVAILABILITY- Own Source	10	7
	- Central Sector+Others	142	96
iii)	SURPLUS(+)/DEFICIT(-)	67	69
8	EASTERN REGION At 1.03 AS DIVERSITY FACTOR		
i)	NET MAX DEMAND	19713	12015
	Long term Bi-lateral by DVC	1300	936
	EXPORT BY WBSEDCL	10	7
ii)	NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	20620	12888
iii)	PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	-404	-70