



Minutes
of
123rd OCC Meeting

Date: 11.08.2016
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata: 700 033

Eastern Regional Power Committee

Minutes of 123rd OCC Meeting held on 26th July, 2016 at ERPC, Kolkata

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

Item no. 1: Confirmation of minutes of 122nd OCC meeting of ERPC held on 09.06.2016

The minutes of 122nd OCC meeting were uploaded in ERPC website and circulated vide letter dated 15.06.2016 to all the constituents.

Members may confirm the minutes.

Deliberation in the meeting

Members confirmed the minutes of 122nd 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. Status of UFRs healthiness installed in Eastern Region
- B.4. Healthiness of SPS existing in Eastern Region
- B.5. Status of Islanding Schemes of Eastern Region
- B.6. Restoration of PLCC system of important lines
- B.7. Status update of previous decisions/follow up actions
- B.8. Third Party Protection Audit
- B.9. Inspection of UFR relays
- B.10. Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN
- B.11. Certification through BIS as per IS 18001:2007 to all generating/ transmission units
- B.12. Renewable Energy Generators in Eastern Region
- B.13. Energy Generation data management from Renewable Energy Sources
- B.14. Compilation of data for meeting Renewable Energy targets of 175 GW by 2020 -- Reference from MNRE
- B.15. Data of Peak Demand – Submission of hourly power cut data
- B.16. Formulation of a Skill Plan for Power Sector based on the assessed skill gap in the sector
- B.17. Recovery Procedures of ER Constituents – ERLDC
- B.18. Updated Operating Procedure of Eastern Region , 2016
- B.19. Nodal coordinators for web based scheduling software
- B.20. Dynamic data of Generator Models required in PSSE for Simulations
- B.21. Implementation of Automatic Demand Management Scheme (ADMS)
- B.22. Long outage of important transmission lines
- B.23. Persistent deviation vis-à-vis Grid requirements in operation of NTPC plants
- B.24. Transfer capability determination by the states -- Agenda by NPC
- B.25. Reasons for demand –supply gap and its variation -- Agenda by NPC
- B.26. Update on status of telemetry
- B.27. Status of Disturbance Recorder, Stand alone Event Logger and Time Synchronization equipment.
- B.28. Status of Emergency Restoration System (ERS Towers) for Eastern Region constituents
- B.29. Pollution mapping for Eastern Region

- B.30. Mock Black start exercises in Eastern Region
- B.31. Restricted Governor Mode of Operation
- B.32. Reactive Power performance of Generators and GT tap position optimization

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 **June, 2016** as informed by ERLDC is given below:

1. 400kV Chaibasa-Kharagpur-I first time idle charged from Chaibasa end up to 162km along with 63 MVar L/R at Chaibasa at 15:47hrs of 06/06/16.
2. 400kV Chaibasa-Kharagpur ckt-II first time idle charged from Chaibasa end up to AP 2/0 at Kharagpur (Jumper open at AP 2/0) at 15:58hrs of 13/06/16.
3. 400kV Kharagpur-Chaibasa (through KTPP-I bay at Kharagpur S/s) line first time charged at 18:27hrs of 17/06/16.
4. 400kV Kolaghat-Chaibasa (through Kharagpur-I bay at KTPP S/s) line first time charged at 20:27 hrs of 17/06/16.
5. 220kV Gaya-Sonenagar (through Bodhgaya-I bay at Gaya) first time charged from Gaya end only at 12:53 hrs of 27/06/16. Subsequently 220kV Gaya-Sonenagar loaded at 16:52 hrs of 27/06/16. Prior to this line charging, 220kV Gaya-Bodhgaya-I was charged using Dehri-I bay at Gaya at 21:36hrs of 26/06/16.
6. 400kV Pandiabili-Mendhasal-II (LILO of 400kV Baripada-Mendhasal at Pandiabili) first time charged at 00:48hrs of 29/06/16.
7. 400kV Main Bus- I & II at Pandiabili first time charged at 00:49hrs & 00:50hrs of 29/06/16 respectively.
8. 80MVAR B/R at Pandiabili first time charged at 01:04hrs of 29/06/16.
9. 400kV Baripada (PG)-Pandiabili (PG) (LILO of 400kV Baripada-Mendhasal at Pandiabili) along with 63MVar L/R at Pandiabili first time charged at 07:35hrs of 29/06/16.

WBSETCL vide mail dated 8th July 2016 communicated the following:

1. New 200MVA, 220/132kV ATR-II at 220kV Bidhannagar S/S was commissioned and charged at 11:58 hrs of 08/06/16. (argumentation of 160 MVA ATR-2)
2. New 160MVA, 220/132kV ATR-II at 220kV Egra S/S was commissioned and charged at 11:50 hrs of 15/06/16.
3. New 160MVA, 220/132kV ATR-II at 220kV Vidyasagar park S/S was commissioned and charged at 12:51 hrs of 22/06/16.
4. New 50MVA, 132/33kV ATR-II at 220kV Vidyasagar park S/S was commissioned and charged at 13:09 hrs of 22/06/16.

Other constituents may update (if any).

Deliberation in the meeting

BSPTCL vide letter dated 22nd July 2016 communicated the following:

1. 132 kV Madhubani - Darbhanga (LILO of 132 kV Darbhanga - Phoolparas ckt-2 at Madhubani) charged on 02/06/16.
2. 132 kV Madhubani - Phoolparas (LILO of 132 kV Darbhanga - Phoolparas ckt-2 at Madhubani) charged on 02/06/16.
3. 132 kV Pandaul - Phoolparas (LILO of 132 kV Darbhanga - Phoolparas ckt-1 at Pandaul) charged on 15/06/16.
4. 132 kV Pandaul - Darbhanga (LILO of 132 kV Darbhanga - Phoolparas ckt-1 at Pandaul) charged on 16/06/16.

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

OCC advised all other constituents to submit the details, if any.

Item No. B.3: Status of UFRs healthiness installed in Eastern Region

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

Other constituents (BSPTCL & OPTCL) may submit.

Deliberation in the meeting

UFR healthiness certificates for June 2016 have been received from all the constituents.

Item No. B.4: Healthiness of SPS existing in Eastern Region

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

NTPC vide mail dated 07.06.16 informed that SPS checking for the month of May-16 could not be carried out due non-availability of consent from NLDC. However it is certified that the SPS protection is healthy and in service at TSTPS.

ERLDC vide mail dated 18.07.16 informed that NLDC has given consent for SPS testing of HVDC Talcher-Kolar Bipole at Talcher end from 11:00 hrs to 12:00 hrs of 26.07.16.

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

Respective members may update.

Deliberation in the meeting

Healthiness certificates have been received from all the respective constituents.

Item No. B.5: Status of Islanding Schemes of Eastern Region

B.5.1: 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, WBPDL
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 June, 2016 has been received from BkTPS, Tata Power, CESC and CTPS, DVC.

Members may note.

Deliberation in the meeting

Members noted.

B.5.2: 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.

NTPC/Powergrid may update.

Deliberation in the meeting

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.

B.5.3: 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

Members noted.

Item No. B.6: 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 122nd OCC, WBPDCL informed that they will commission the autoreclose feature at 220kV Santaldih with implementation of SAS which is under process.

Member Secretary clarified that the issue of activation PLCC in JUSNL is very seriously taken by CERC. So in view of that other end like Joda of OPTCL & Santaldih of WB need to be restored with utmost care.

Therefore, OCC advised JUSNL, OPTCL and WBPDCL to restore the PLCC system at Joda and Santaldih at the earliest with mutual coordination.

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. The minutes of the meeting is enclosed at **Annexure-B.6**.*

JUSNL may update.

Deliberation in the meeting

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.

Item No. B.7: Concerned members may update the latest status.

B.7.1. 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-Barath 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.

Ind-Bharath may update the latest status.

Deliberation in the meeting

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.

B.7.2. 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.

Vedanta may update.

Deliberation in the meeting

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.

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.

Vedanta may update the latest status.

Deliberation in the meeting

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.

B.7.3. 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.

Sikkim/Powergrid may update.

Deliberation in the meeting

It was informed that Sikkim is facing problem in floating the e-tender and OCC therefore advised Powergrid to help Sikkim in this regard.

B.7.4. 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 122nd 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.7.5. 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.

Powergrid/BSPTCL may update.

Deliberation in the meeting

JUSNL informed that 220kV Tenughat-Biharshariff D/C line has been restored and in service from 12th July 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.

CTU/Powergrid may update.

Deliberation in the meeting

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.

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.*

NTPC may update.

Deliberation in the meeting

NTPC updated that transformer package and Shunt reactor will be awarded within 10 to 15 days.

B.7.6. 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 LILOfing 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 122nd 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.	LILOf one circuit of Sadeipalli-Kesinga220 kV D/C line at Bolangir S/S	Only 7 towers left (Severe ROW problem). By Dec, 2016.
b.	LILOf one circuit of Katapalli-Sadeipalli220 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.	LILOf one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	September, 2016

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the status is same.

B.7.7. 220 kV inter-connecting lines of BSPTCL with 2x200 MVA, 400/132 kV sub-stations at Lakhisarai & Banka

In 122nd OCC, BSPTCL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x200 MVA, 400/132 kV Banka sub-station	
a.	LILOf 1 st circuit of Banka (BSPTCL)-Sabour (BSPTCL) 132 kV D/C line at Banka (PG)	Charged.
b.	LILOf 2 nd circuit of Banka (BSPTCL)-Sabour (BSPTCL) 132 kV D/C line at Banka (PG)	Line & bays completed. Powergrid to terminate the line.
c.	132 kV Banka (PG)-Sultanganj (BSPTCL) line-I	Completed
d.	132 kV Banka (PG)-Sultanganj (BSPTCL) line-II	Completed
2.	The 2x200 MVA, 400/132 kV Lakhisarai sub-station	
a.	132kV Lakhisarai(PG)-Lakhisarai(BSPTCL)D/C line	Charged
b.	132 kV Lakhisarai-Jamui (BSPTCL) D/C line	Charged on 05.10.2015

BSPTCL may update.

Deliberation in the meeting

BSPTCL informed that LILOf 2nd circuit of Banka (BSPTCL)-Sabour (BSPTCL) 132 kV D/C line at Banka (PG) is completed on 6th July 2016.

B.7.8. 220 kV inter-connecting lines of JUSNL with 2x315 MVA, 400/220 kV sub-stations at Chaibasa, Daltonganj & Dhanbad

In 4th SSCM, 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 informed that the status remains same.

B.7.9. 220 kV inter-connecting lines of WBSETCL with 400/220 kV, 2x315 MVA Alipurduar & 2x500 MVA Rajarhat sub-stations

In 4th SSCM, 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)	December, 2016.
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 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>

Item No. B.8: 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

All the constituents were advised 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.erp.gov.in). Respective constituents are requested to comply and submit the report to ERPC for regular update. The tentative plan for July/August, 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, 2016.

Deliberation in the meeting

Members noted.

Item No. B.9: 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).

DVC may place their action plan for replacement of UF relay at Ramgarh.

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, 2016	132/33 KV Bari Pahari (Bihar Sharif) of BSPTCL
2		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 July/August, 2016.

Deliberation in the meeting

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.

Item No. B.10: 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.11: 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, WBPDCI 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 WBPDC 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

Members noted.

Item No. B.12: Renewable Energy Generators in Eastern Region

As per the information available at ERLDC following renewable generator are connected to the grid in Bihar and Odisha, Bihar SLDC and OPTCL SLDC are requested to confirm/update this list while other SLDCs are requested to furnish the details of available renewable resources in their control area.

S.N.	State	Energy Source	Generator	Capacity (MW)
1	Bihar	Bio-Fuel Co-generation	Upper Ganges Sugar & Industries Ltd., Hasanpur	6
2	Bihar	Bio-Fuel Co-generation	HPCL Bio-fuels limited	5.3
3	Bihar	Biomass	Harinagar Sugar Mills Ltd.	4
4	Bihar	Bio-Fuel Co-generation	New Swadeshi Sugar Mills Ltd.	5
5	Bihar	Bio-Fuel Co-generation	Upper Ganges Sugar & Industries Ltd.	7
6	Odisha	Solar PV	KISS	0.5
7	Odisha	Solar PV	Mahanadi Coalfields Ltd.	2
8	Odisha	Biomass	J.K. Paper Mills	25
9	Odisha	Solar PV	MBPS control & Power Systems Ltd.	1
10	Odisha	Solar PV	OCL India Ltd.	2.5
11	Odisha	Biomass	J.K. Paper Mills	5.4

Other Renewable Energy Projects in Odisha State

S.N.	State	Source	Generator	MW	Connectivity
1	Odisha	Solar PV	NTPC Talcher	10	11 KV
2	Odisha	Solar PV	Abacus holdings pvt. Ltd.	1	11 KV
3	Odisha	Solar PV	Aftaab Solar Pvt. Ltd.	5	33 KV
4	Odisha	Solar PV	Jay Iron & Steels	1	11 KV
5	Odisha	Solar PV	M.G.M. Minerals Pvt. Ltd.	1	11 KV
6	Odisha	Solar PV	Molisati Vinimay Pvt. Ltd.	1	11 KV
7	Odisha	Solar PV	PANTIME Finance Company Pvt. Ltd.	1	11 KV
8	Odisha	Biomass	Rajratna Energy Pvt. Ltd.	1	11 KV
9	Odisha	Solar PV	S. N. Mohanty	1	11 KV
10	Odisha	Solar PV	Shri Mahabir Ferro Alloys pvt Ltd.	1	33 KV
11	Odisha	Biomass	Shalivahan Green Energy Ltd	20	132 KV
12	Odisha	Solar PV	ACME Solar, Mursing, Bolangir	25	132 KV

Members may update.

Deliberation in the meeting

OCC advised all SLDCs to update the installed renewable generators in their respective control areas.

Item No. B.13: 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 has 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.13** 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

OCC advised all the SLDCs to submit the data to CEA as per the format given in Annexure- B.13 with a copy to ERPC Secretariat.

Item No. B.14: 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

Concerned State Utilities /Generating companies are requested to submit data of their respective control areas.

Item No. B.15: 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 June, 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.16: 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.16**) may please be sent to CEA (by mail: ceahrd@gmail.com).

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.17: 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 WBPDC.

In 122nd OCC, ERLDC updated that restoration procedure is yet to be received from Bihar and OPTCL.

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

OCC advised respective constituents to comply at the earliest.

ERLDC may update.

Deliberation in the meeting

West Bengal, OPTCL and BSPTCL agreed to submit the restoration procedure within 15 days.

Item No. B.18: Updated Operating Procedure of Eastern Region , 2016

The Operating Procedure of every region has to be updated and revised annually by the concerned RLDC , in compliance to section 5.1(f) of the IEGC. Accordingly, ERLDC vide letter no. ERLDC/SS/OP/2016/ dated 6TH July, 2016, had emailed the draft Operating Procedure of Eastern Region to all regional entities of Eastern Region for their valuable suggestions and observations.

The procedure would be finalized and uploaded at ERLDC website by 20-07-16, taking into consideration comments received till 18-07-16.

Members may please note.

Deliberation in the meeting

ERLDC explained the changes made in the operating procedure and members noted.

Item No. B.19: Nodal coordinators for web based scheduling software

The name of Nodal Co-coordinators has been received from DVC, GMR, OPTCL & MPL.

Subsequently, BSPTCL vide letter dated 29.01.2016 has nominated the officers as given below:

- 1) Sri Deepak Kumar, AEE (SLDC), M.- 7763817776, e-mail- sch.patna@gmail.com
- 2) Miss Anjali Anand, AEE (SLDC), M.- 7033092546, e-mail- sch.patna@gmail.com

In 118th OCC, ERLDC informed that they have received the coordinator names from WBSETCL, NTPC, JUSNL and GMR.

Sikkim vide mail dated 16.03.2016 has nominated their nodal officers as given below:

Sh. Namgyal Tashi, Assistant Engineer (SLDC), Energy & Power Department, Government of Sikkim, Sonam Tshering Marg, Gangtok, East Sikkim-737101, Mobile No# 7797672743, Email: namgyaltashi26@gmail.com

119th OCC advised all the constituents to nominate their nodal officers at the earliest.

JITPL vide mail dated 16.03.16 has also nominated their nodal officer as given below:

Name: Nitin Kumar Gupta, Assistant Manager, Contact No: 08587878395
Email Id: jitplscheduling@jindalgroup.com

Chuzachen vide mail dated 18.04.16 nominated their nodal officer as given below:

Mr Shailendra Gautam - Senior Manager, M. No. +918016099975,
e-mail: shailendra.gautam@gatiinfra.com

The nominations are pending from Jorethang only.

In 122nd OCC, it was also informed that a training on web based scheduling is going to organized in July, 2016.

ERLDC may update.

Deliberation in the meeting

It was informed that a training on web based scheduling is going to be organized in August, 2016.

Item No. B.20: 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, WBPDC, 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-B20**.

Other Generators may ensure submitting the data.

Deliberation in the meeting

*ERLDC updated the latest status. Updated status is enclosed at **Annexure-B20**.*

Item No. B.21: 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. He informed that on the request of the constituents, the issue was taken up with POWERGRID for inclusion of ADMS in the new SCADA system project under ULDC. He further informed that POWERGRID vide their letter dated 22.04.2016 have communicated that automatic load shedding and restoration feature named “Load Shed Support (LSS)” is already provisioned and tested in the new SCADA system for substations upto 132 kV. 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. M/s Chemtrols who are implementing the system, were asked to give their views on this.

M/s. Chemtrols informed the following:

a) On all the new RTUs supplied by them, the 33 kV side telemetry is covered and they have provided the DO (digital output) cable up to CR panel. The DO cable has already been laid and terminated in C&R panel wherever constituent's testing team facilitated. In BSPTCL system, this DO wiring has been done for majority of RTUs commissioned, while in WB and DVC systems, the termination of DO wiring points was not facilitated at the time of commissioning. The same is now in progress in DVC system. DO wiring will be done simultaneously on the 12 Nos. of RTUs under commissioning in WB system. However, they requested constituents to ensure the availability of their Testing Teams to facilitate the same.

b) Chemtrols further informed that this DO control cannot be exercised for the existing RTUs in the constituent systems.

c) OPTCL system does not have the provision for LSS. (DO command and control).

After detailed deliberation the following schedule was given to Chemtrols for wiring of DO in BSPTCL, DVC, WB and JUSNL systems till 30.06.2016.

BSPTCL: 50 stations

WB: 10 stations (where New RTUs are under commissioning)

DVC: 12 stations (where work is already in progress)

JUSNL: 2 stations

M/s Chemtrols stated that they will try their best to follow the above schedule. However, the deployment/ availability of testing team shall have to be ensured by the constituents. Constituent agreed to deploy Testing team as per requirement on priority. 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)

Members may update.

Deliberation in the meeting

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

Item No. B.22: 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 122nd OCC, OPTCL informed that the line would be charged by June, 2016.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the line was charged on 1st July 2016.

b) 400kV Meramundali-Mendhasal S/C

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

In 122nd OCC, OPTCL informed that the line would be charged by end of June, 2016.

OPTCL may update.

Deliberation in the meeting

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.

c) 400kV Sterlite-Meramundali D/c

Tower at Loc.No35 twisted(near Sterlite).

In 122nd OCC, OPTCL informed that the line would be charged by end of June, 2016.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the line would be charged by 10th August, 2016.

d) 220kV Tenughat-Biharshariff

Tower collapse at Loc. No.3.

In 122nd OCC, JUSNL informed that the line would be charged by end of June, 2016.

BSPTCL/JUSNL may update.

Deliberation in the meeting

JUSNL informed that the line was charged on 12th July, 2016.

e) 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.

BSPTCL may update.

Deliberation in the meeting

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

Item No. B.23: Persistent deviation vis-à-vis Grid requirements in operation of NTPC plants--ERLDC

It has been observed that some NTPC stations(specially FSTPP/KhSTPP) in ER are resorting to operational methodologies which are not consonant with Grid requirements. These can be divided into the following three broad categories:

- a) Persistent under-generation below schedule with no generation increase even after issual of messages.
- b) Failure to demonstrate DC when instructed to demonstrate(considering cases where schedule was lower than DC for significant period).
- c) Failure to generate upto schedule, when schedule of the NTPC stations were increased vide Regulation Up Ancillary services.

Instances depicting above violations would be presented by ERLDC for discussions/suggestions and for conclusion regarding the corrective actions.

In this regard, NTPC vide letter dated 14.07.2016 communicated that the ramp rate provided by ERLDC is much more than what has been given by KhSTPS. On ERLDC advice NTPC demonstrated the DC however NTPC was incurred huge financial loss on account of DSM as the grid frequency was already high. (Details are enclosed at **Annexure-B.23**)

Members may discuss.

Deliberation in the meeting

Members took serious note of persistent under injection by NTPC Power Stations (Specially FSTPS, KhSTPS).

It was informed that the RRAS Provider shall increase or decrease the generation as per the instruction of the Nodal Agency given through the respective RLDC for Regulation Up and Regulation Down respectively.

Accordingly, OCC advised NTPC to strict to the schedule and follow the ERLDC instructions.

Item No. B.24: 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)

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.

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.25: 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

Members noted.

Item No. B.26: 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 122nd 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.26**.

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

Members may update.

Deliberation in the meeting

*ERLDC presented the status. The updated status is enclosed at **Annexure-B.26**.*

Issues related to post implementation of New SCADA/ULDC scheme

*As decided in 33rd ERPC, a demo of the new reporting procedure on issues related to post implementation of new SCADA/ULDC scheme was shown by Chemtrol in a special meeting convened on 13.07.2016 at ERPC Kolkata. The minutes of the meeting is placed at **Annexure-B.26A**.*

Members may note.

Deliberation in the meeting

It was informed that the online reporting procedure is now in service. Members noted.

Item No. B.27: 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.27**.

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.28: 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.28**.

Members may update the latest status.

Deliberation in the meeting

Members noted.

Item No. B.29: 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 122nd 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

BSPTCL informed that they have completed 2nd set of measurements in 40 locations.

Item No. B.30: 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	July 2016	1 st Week of February 2017	
3	Rengali	2 nd week of June 2016	28 th August 2016	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		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	28 th August 2016	Last week of February 2017	
10	TLDP-III	1 st Week of June 2016		2 nd Week of January 2017	
11	TLDP-IV	Last Week of June 2016		1 st Week of February 2017	

Members may update.

Deliberation in the meeting

Members updated the latest status in above table.

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.31: 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).

At 09:41 Hrs of 05-07-16 the grid frequency dipped to 49.8 Hz from 50.07 Hz due to sudden loss of 1400MW wind generation in Rajasthan (NR).

Based on SCADA data available at ERLDC, the frequency response characteristics (MW/Hz) and MW response provided by governors of various generating units in ER, has been analysed at our end. The unit wise responses have already been uploaded in the group "er_gov_respons@yahoogroups.co.in."

In this regard ERLDC vide letter ERLDC/SS/FGMO/2016/1633-61 dated 7th July 2016 requested all SLDCs and eligible regional entity generators to share the responses captured by respective unit DCS and offer their valuable observations, if any.

Members may update.

Deliberation in the meeting

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 mode as the grid frequency is stable and almost close to 50 Hz.

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

All generators agreed.

Item No. B.32: Reactive Power performance of Generators and GT tap position optimization

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

Power Plant	Max and Min Voltage observed for June 16 (KV)	Date for monitoring (June 16)
Farakka STPS	424,400	1,22
Khalgaon STPS	417,398	7,22
Talcher STPS	402,394	23,24
Teesta	416,394	1,22
Bakreshwar TPS	413,391	1,14
Kolaghat TPS	422,394	1,14
Sagardighi TPS	435,410	13,14
MPL	423,408	1,14
Mejia-B	425,413	1,15
DSTPS	424,412	1,22
Adhunik TPS	423,405	1,15
Sterlite	423,415	24,29
Barh	--	
JITPL	--	
GMR	413,397	19,24
HEL	--	
Kodarma	424,396	14,22

In 122nd OCC, ERLDC informed that the performance of DSTPS, Mejia-B, GMR and APNRL need improvement.

OCC advised DSTPS, Mejia-B, GMR and APNRL to look into.

ERLDC may update.

Deliberation in the meeting

ERLDC presented the performance of the generators and informed that DSTPS, Koderma, Mejia-B, 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
- 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

Members noted.

PART C:: OPERATIONAL PLANNING

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

Members may finalize the Shutdown proposals of the generating stations for the month of August'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 August, 2016 is given at **Annexure-C.1**.*

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

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of August'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 August, 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	3	600	OUTAGE FOR LOW	15-Jan-16
STERLITE	2	600	SCARCITY OF WATER	23-Jun-16
MEJIA	4	210	LOW DEMAND	24-Mar-16
MEJIA	2	210	LOW DEMAND	8-May-16
MEJIA	3	210	LOW DEMAND	5-May-16
WARIA	4	210	ROTOR PROBLEM	30-Apr-16
KODERMA	1	500	LOW DEMAND	22-Apr-16
RAGHUNATHPUR	2	600	ROTOR PROBLEM	14-Feb-16
BANDEL	5	210	AMP	17-Jun-16
DPL	8	300	BOILER TUBE LEAKAGE	28-Jun-16
MEJIA	6	250	BOILER TUBE LEAKAGE	30-Jun-16
RAGHUNATHPUR	1	600	BOILER TUBE LEAKAGE	30-Jun-16
TENUGHAT	2	210	CONDENSOR PRESSURE	27-Jun-16

(ii) Transmission elements

Name of the Line/Element	Outage	Reason
220 KV TENUGHAT -	21/05/16	TOWER COLLAPSED AT LOC NO-03.
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

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 June'16

System frequency touched a maximum of 50.37Hz at 14:27Hrs of 09/06/16 and a minimum of 49.65Hz at 19:37Hrs of 29/06/16. 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 June'16.

Members may note.

Deliberation in the meeting

Members noted.

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

Sl no	Disturbance Place	Date & Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	Siliguri 220/132 kV (Powergrid)	11/06/16 at 1:39 hrs	0 MW	0 MW	At 01:39hrs, due to rain and high wind, piece of nearby tree branch fell on 132 kV main bus of 220/132kV Siliguri (POWERGRID) S/S resulting tripping of all 132kV feeders. 132kV Siliguri-Kurseong and 132kV Siliguri-NBU tripped from Siliguri end on Z-IV protection. 132kV Siliguri-Melli and 132kV Siliguri-Siliguri (WB) tripped from remote end. 220 kV ICT I & II tripped on DEF and O/C protection respectively.	GI-1
	Mendhasal, Nayagarh (OPTCL)			490 MW	At 16:30 hrs, during inclement weather condition 220kV Mendhasal –Nayagarh tripped from both end on R-N fault. After sometime, 220kV Nayagarh Bhanjanagar	GD-I

2		11/06/16 at 16:30 hrs	0 MW		tripped from Bhanjanagar end on R-N fault. At the same time, 400 kV Mendhasal-Baripada tripped from Mendhasal end. After the tripping of 400kV Mendhasal-Baripada, load at Mendhasal was being fed through 220kV Bhanjanagar-Mendhasal and the said line got overloaded.	
3	Indravati (POWERGRID & OPTCL)	11/06/16 at 19:59 hrs	0 MW	400 MW	At 19:59 hrs, 220kV Theruvali-Indravati I, II & III (circuit IV was not in service) and 220kV Theruvali-Laxmipur-II tripped from Theruvali end. At the same time, 400kV Indravati (PG)-Indravati and 400kV Jeypore-Indravati (PG) tripped on Z-III protection from Indravati (PG) end and Jeypore end respectively.	GD-I
4	Biharshariff, (PG & BSPTCL)	24/06/16 at 0:15 hrs	0 MW	700 MW	At 00:15 hrs, 315MVA ICT-III at Biharshariff tripped from 220KV side (BSPTCL side) due to fault in 220kV Biharshariff-Begusarai ckt-II (B-N fault) and subsequently 315MVA ICT-I & II tripped due to over current protection, causing power failure at Biharshariff	GD-I
5	Biharshariff (PG & BSPTCL)	26/06/16 at 7:28 hrs	0 MW	657 MW	At 07:28 hrs, 315MVA ICT-I,II,III at Biharshariff tripped on back up overcurrent due to fault in 220kV Biharshariff-Bodhgaya-II (R-N fault-Jumper of wave trap snapped at Biharshariff end).Tripping of said ICT'S caused power failure at Biharshariff, Begusarai, Fatuah, Gaya and Bodhgaya	GD-I

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.4: Any other items

1) Modification of Surrender Philosophy and Ramp rate up/down of the ISGS consequent to implementation of New Web Based Scheduling at ERLDC

Presently, development of web-based scheduling software at ERLDC by PWC is completed and the testing of the software is at final stage. The same software is already being installed at WRLDC and made operationalise with effective from 01st July, 2016. A detailed workshop cum interactive Session with all Stakeholders/beneficiaries shall be arranged during second or third week in August, 2016, wherein the detailed presentation of the software features and new scheduling procedures, associated issues and concerns will be deliberated. Some new procedure like surrender philosophy and ramping up/down rate consideration of ISGS have been implemented in the new scheduling software to uniform the scheduling process uniform across all the regions. The beta version of the software will be available for testing after training to the stake holders. Some new procedures are as follows:

Surrender Treatment/Philosophy

In the event of low demand as well as high availability from own generating stations beneficiaries may surrender their shares in ISGS. In that case the schedule of a thermal ISGS for particular time period, may becomes less than the minimum level of generation technically achievable by

the thermal units. In that case RLDC moderates the requisitions of the under-requisitioning beneficiaries in a manner so that unrealistic backing down or shutting down of thermal unit can be avoided.

Technical minimum is submitted by generators at the time of availability declaration. The philosophy adopted to manage surrender of ISGS share is as follows:

- The surrender requisition is considered first-come-first-serve basis with individual right of the beneficiaries ensured always. Viz, every constituent can surrender up to the technical minimum of the generator multiplied by their share percentage at any time of the day.
- Beneficiary can apply for full entitlement surrender in any ISGS but Surrender to any beneficiary shall be allowed till the technical minimum of the generator.
- In case of multiple surrender by beneficiaries, requisition of these beneficiaries shall be revised on pro-rata basis to achieve the technical minimum schedule of the generator.
- In case the generator schedule is at its technical minimum and one more beneficiary is applied for surrender, in such a case, the schedule of such beneficiary availing surrender more than its technical minimum entitlement earlier may be increased to accommodate the surrender requisition of the new beneficiary and to maintain technical minimum of the generator.

This may be better understood through an example:

Consider a generating station of 2000 MW capacity in which 4 states A,B,C and D have equal shares of 25% each. Taking technical minimum to be 70%, each state can surrender at least 150 MW. Considering a situation where state A has surrendered all of its entitlement (500 MW) from the station and the despatch schedule for the station becomes 1500 MW. State B also wants to surrender 150 MW of its share. From the current despatch schedule, only 100 MW is available for additional surrender in order to maintain the technical minimum. In this case, state B would be allowed to surrender 150 MW and the additional 50 MW would be reduced from state A's surrender quantum, i.e. 50 MW from the station would be scheduled to state A and the station despatch schedule would become 1400 MW (tech. min.). If any more surrender requests are received, they would be accommodated by reducing A's surrender quantum.

Ramp up/down rate of the ISGS

In the web based scheduling software every generator has the provision to fill their ramp rate in MW/unit/minute. The ramp up/down rate for any particular block will be $15 \times \text{ramp rate} \times \text{units on bar}$ as declared by the generator. In Eastern Region for the first block ramp rate up/down rate considered is half of the ramp rate for a block as per the recent scheduling software. With the implementation of the new web based scheduling software ramp rate up/down for any block shall be $15 \times \text{ramp rate} \times \text{units on bar}$ as followed in other regions.

ERLDC may explain.

Deliberation in the meeting

ERLDC explained the new procedure in the meeting.

Members noted.

NTPC informed that ERLDC should consider the average of ramp rate while giving the ramping schedule for the generators.

OCC decided that ERLDC will consider the ramp rate as declared by NTPC for ramping schedule of their generators.

2) 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.

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) end of 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.

PGCIL and OPTCL may please respond.

Deliberation in the meeting

OPTCL allowed the shutdown.

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.

Powergrid/JUSNL may update the status.

Deliberation in the meeting

One meter is to be installed at transfer bus and PGCIL informed that they will install the meter by 31st July 2016.

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.

BSPHCL may update.

Deliberation in the meeting

BSPHCL informed that software was not updated and they are not able to collect the meter data.

OCC advised PGCIL to look into.

3) 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)

Members may please discuss

Deliberation in the meeting

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.

4) 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.

Bhutan may explain the breaker operation at Malbase end.

Deliberation in the meeting

Bhutan representative agreed to communicate the issue to respective division.

Meeting ended with vote of thanks to the chair.

Participants in 123rd OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 26.07.2016 (Tuesday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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20	R. P. KUNDU	Engg, ERLDC	990339891	rajpratu@gmail.com	R. P. Kundu

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

Participants in 123rd OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 26.07.2016 (Tuesday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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40	Hemurajjan Chakraborty	Ch.D. ERPC, OPTCL	9438907310	hemurajjan113@gmail.com	Hemurajjan

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Participants in 123rd OCC Meeting of ERPC

Venue: ERPC Conference Room, Kolkata

Time: 11:00 hrs

Date: 26.07.2016 (Tuesday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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53	Biswajit Mondal	ERLDC	9903329201	biswajitmondal11@gmail.com	
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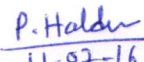
"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford

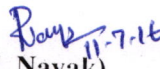
Minutes of Meeting held on 11.07.2016 in the Office Chamber of Director (Project), JUSNL regarding commissioning of PLCC panel in 220KV Chandil-Santhaldih line & 220KV Ramchandrapur- Joda Line in compliance of orders of CERC.


The meeting was conducted under the Chairmanship of the Director (Project), JUSNL. The representative of JUSNL, OPTCL, WBPDC, M/s BPL and ERPC participated in the meeting. The deliberation started with the initiative of CE (SLDC & ULDC), JUSNL in the light of the orders of CERC to complete the work of Auto reclosing by 31st July 2016. The resolutions of the meeting are as follow:-


1. OPTCL and WBPDC agreed to purchase BPL make PLCC panel of Analog modified version and they will install and complete in all respect at their end.
2. JUSNL agreed to upgrade the existing BPL make analog PLCC panel to ensure compatibility with the panels to be installed at Joda and Santhaldih.
3. The proposal of handing over PLCC panel from JUSNL to OPTCL & WBPDC is being dropped here after the latest proposal of purchasing of Analog upgraded version of BPL make panel after being assured by the BPL representative Mr. Sujoy that upgradation of analog version of BPL panel at Chandil and Ramchandrapur Grid is possible and would be compatible.
4. The representative of M/s BPL shown helplessness in providing the PLCC panel before 30th September 2016. Therefore, aforesaid time frame needs to be relaxed with due consent of CERC and for this, support of ERPC would be required.
5. Member Secretary (ERPC) was contacted and the details of resolution was briefed over mobile. He suggested to cover the development of unavailability of panel within targeted period. The proposal is being framed to implement the direction of CERC under relaxed time frame with due persuasion of ERPC, JUSNL, OPTCL and WBPDC.


The participants in the meeting are agreed to the extent mentioned above in the best possible manner to comply the directive of CERC within the targeted period.



11.07-16
(P. Halder)
DGM (Engg.), WBPDC

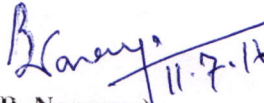

11-7-16
(P.K. Nayak)
DGM, Telecom, OPTCL



11/7/2016
(Sujoy)
BPL Engineer

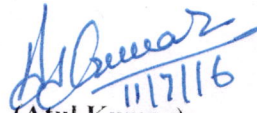

11/7/16
(S. Kejriwal)
EE (ERPC)


11/7/16
(H.K. Samantary)
CGM (TC), OPTCL


11/07/16
(S. Maithy)
GM (STPS), WBPDC


11.7.16
(B. Narayan)
CE, Trans. O&M


11/7/2016
(Akshay Kumar)
CE(SLDC&ULDC)


11/7/16
(Atul Kumar)
Director (Project), JUSNL

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

1. State/Centre :

2. Month :

3. Year :

[illegible]

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												
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2026												
2027												

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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 communcation 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		Kahalgaon	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- C.1

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

System	Station	Unit	Size (MW)	period		No. of Days	Reason
				From	To		
JUSNL	TVNL, Tenughat	2	210	01.08.16	15.09.16	46	Unit Overhauling
DVC	MTPS	1	210	05.06.16	05.07.16	31	AOH & Boiler Acid cleaning, <i>Deferred to August 2016</i>
		2	210	01.08.16	16.08.16	16	Burner Replacement
	DSTPS	2	500	30.07.16	24.08.16	25	Maintenance
	DSTPS	1	500	30.07.16	07.08.16	8	Maintenance
ODISHA	TTPS	5	110	27.07.16	17.08.16	20	Boiler Overhaul , <i>Unit#5 will be taken after availability of unit#4, .</i>
		6	110	25.08.16	29.09.16	36	BOH+COH of Tur.+IP Rot. Rep.+OH of HP mod.+ESP-III addition & ESP-I isolation
WBPDC**	Bakreswar TPS	2	210	21.08.16	20.09.16	31	Boiler Overhauling + APH Tube Replacement
DPL	DPPS	8	250	Aug-16	Aug-16	31	Boiler Overhauling
NTPC	*KhSTPS	3	210	16.08.16	19.09.16	35	Capital+DDCIMS+Boiler RLA+Boiler Acid Cleaning
	Barh	4	660	25.08.16	23.09.16	30	Boiler+Cond. Acid Clean+IP-LP crossover pipe metallic gasket rep.
IPP	VEDANTA	1	600	15.08.16	15.09.16	32	Annual Overhauling
IPP	MPL	2	525	28.08.16	21.09.16	24	Annual Overhauling

**EASTERN REGIONAL LOAD DESPATCH CENTRE
KOLKATA**

TRANSMISSION ELEMENTS OUTAGE APPROVED IN 123RD 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	315 MVA ICT #1 at Rourkela	27/07/2016	09:00	27/07/2016	18:00	ODB	ER-II/Odisha	AMP work	OPTCL
2	(220KV line -4)-209 Bay at Bolangir	27/07/2016	09:00	27/07/2016	18:00	ODB	ER-II/Odisha	AMP Work	OPTCL
3	400kV ICT-I Main Bay(Bay no- 407) at Rengali	27/07/2016	08:00	27/07/2016	17:00	ODB	ER-II/Odisha	AMP Work	
4	400 KV KAHALGOAN - BARH -1 & 2	27/07/2016	08:00	29/07/2016	18:00	OCB	ER-I	FOR POWERLINE CROSSING OF CONSTRUCTION WORK FOR SHIFTING OF KAHALGOAN - BANKA LINE UNDER BUS SPLIT SCHEME.	NLDC
5	TCSC & FSC UNIT OF 400KV NPRN-MUZ-2 AT NEW PURNEA	27/07/2016	10:00	27/07/2016	18:00	ODB	ER-I	AMP WORK	NLDC
6	315 MVA ICT-2 AT NPRN	27/07/2016	10:00	27/07/2016	18:00	ODB	ER-I	BUSHING ERECTION OF NEW 500 MVA ICT. IT IS TO BE NOTED THAT 315 MVA ICT -2 AT NPRN WILL BE REPLACED BY 500 MVA NEW ICT.	BIHAR
7	220 KV RANCHI - HATIA -2	27/07/2016	10:00	27/07/2016	15:00	ODB	ER-I	FOR ATTENDING HOT SPOT IN LINE ISOLATOR (B PH), DURING S/D HATIA -2 NOT IN SERVICE.	JHARKHAND
8	765KV BUS- I AT NEW RANCHI	27/07/2016	08:00	29/07/2016	18:00	ODB	ER-I	FOR AMP WORK	NLDC
9	400 KV BUS -1 AT MUZ	27/07/2016	09:00	27/07/2016	17:00	ODB	ER-I	FOR FINAL JUMPER CONNECTION AND STABILITY FOR 400 KV MUZ - DARBHANGA TL BAYS AT MUZ	
10	132kV Kurseong - Rangit at Siliguri S/S.	27/07/2016	09:00	27/07/2016	17:00	ODB	ER-II/KOL	Jumper Cone Repairing / Insulator fitting	WEST BENGAL
11	132kV Siliguri - Melli at Siliguri S/S.	27/07/2016	09:00	27/07/2016	17:00	ODB	ER-II/KOL	Insulator fitting	SIKKIM
12	400kV Bus-IV at Maithon.	27/07/2016	09:00	27/07/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-XII	
13	315MVA ICT-I AT Maithon	27/07/2016	09:00	29/07/2016	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
14	A/R 400KV Angul-Bolangir Line	27/07/2016	08:00Hrs	31/07/2016	17:00Hrs	ODB	ER-II/Odisha	Balance OPGW Stringing works (Loc.No.110-114) in Angul-Bolangir Line under Angul TL Section.	
15	315 MVA ICT #2 at Rourkela	28/07/2016	09:00	28/07/2016	18:00	ODB	ER-II/Odisha	AMP work	OPTCL
16	400 kV Jeypore-Bolangir S/C Line at Jeypore	28/07/2016	09:30	28/07/2016	16:30:00	ODB	ER-II/Odisha	For replacing Y-Ph CVT of Bolangir Line at Jeypore due to secondary voltage drift violation	NLDC
17	765kV Bus-1 at Angul	28/07/2016	08:00	29/07/2016	18:00	ODB	ER-II/Odisha	For Extension of Bus for commissioning of 765kV Angul Sriakakulam Line-1 &Line-2 bays along with Bus-Bar Protection	NLDC
18	132 KV PRN(PG) -PRN(BSPTCL) #1	28/07/2016	11:00	28/07/2016	13:00	ODB	ER-I	Y-PH DEFECTIVE CVT TO BE REPLACED AT PURNEA(PG)	BIHAR
19	400 KV BANKA - BIHARSHARIF -2	28/07/2016	11:00	28/07/2016	15:00	ODB	ER-I	FOR AUTO RECLOSE TESTING.	
20	132KV BUS AT SILIGURI S/S.	28/07/2016	09:00	28/07/2016	08:00	ODB	ER-II/KOL	FOR ATTENDING HOT SPOT (BUS SIDE CONNECTOR REPLACEMENT)	WEST BENGAL
21	220kV NSLG-BRP Ckt-I & II at Binaguri S/S	28/07/2016	09:00	06/08/2016	17:00	OCB	ER-II/KOL	Tower shifting due to doubling of rail track	NLDC/BHUTAN(MAY BE DEFFRED DUE TO HIGH INJECTION FROM CHUKHA)
22	400 KV Jeerat BHP Line at Jeerat.	28/07/2016	08:30	31/07/2016	17:30	ODB	ER-II/KOL	Isolation of Line Reactor, dismantling LA , Reactor Isolator, Bus Pipe and stringing, protection shifting & testing, connection of dropper.	WEST BENGAL
23	50 MVAR Jeerat BHP Line reactor at Jeerat.	28/07/2016	08:30	04/08/2016	17:30	OCB	ER-II/KOL	Reactor paralleling work.	WEST BENGAL
24	400 KV Transfer Bus at Jeerat	28/07/2016	08:30	04/08/2016	17:30	ODB	ER-II/KOL	Reactor paralleling work.	
25	Jeerat 400KV Main Bus#1	28/07/2016	08:30	28/07/2016	17:30	ODB	ER-II/KOL	Main Bus#1 Isolator check and IPS tube erection	WEST BENGAL

26	Jeerat 400KV Main Bus#2	28/07/2016	08:30	28/07/2016	17:30	ODB	ER-II/KOL	Main Bus#2 Isolator check and IPS tube erection	WEST BENGAL
27	400kV Bus-I at Maithon.	28/07/2016	09:00	28/07/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-IX	
28	132 kV D/C BARASAT -RAJARHAT Tr line of WBSETCL(100-101)	28/07/2016	09:00	29/07/2016	16:00	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 6/0-7/0	WEST BENGAL
29	400KV MAIN BUS-II at Baripada	29/07/2016	07:00	29/07/2016	18:00	ODB	ER-II/Odisha	HV TEST OF MAIN BUS-II OF GIS	
30	400KV, 125MVAR Bus Reactor-1 at Sundargarh	29/07/2016	07:00	30/07/2016	19:00	OCB	ER-II/Odisha	TO ATTEND MECHANICAL INTERLOCK PROBLEM (CONSTRUCTIONAL DEFECT) OF 400KV SIEMENS MAKE ISOLATORS.	
31	132 KV TRANSFER BUS AT PURNEA	29/07/2016	09:00			PERMANENT S/D	ER-I	PERMANET REMOVAL OF TRANSFER BUS IS REQUIRED FOR GIS BUILDING AND ASSOCIATED CIVIL WORK	BIHAR
32	132 KV PRN(PG) -PRN(BSPTCL)#3 LINE AT PURNEA	29/07/2016	09:00	31/07/2016	17:00	ODB	ER-I	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
33	400 KV BANKA - KAHALGAON -1	29/07/2016	11:00	29/07/2016	15:00	ODB	ER-I	FOR AUTO RECLOSE TESTING.	
34	400 KV BUS -2 AT MUZ	29/07/2016	09:00	29/07/2016	17:00	ODB	ER-I	FOR FINAL JUMPER CONNECTION AND STABILITY FOR 400 KV MUZ - DARBHANGA TL BAYS AT MUZ	
35	400 KV BUS-II of NTPC Farakka	29/07/2016	10:00	29/07/2016	14:00	ODB	ER-II/KOL	For disconnecting BUS isolator of bay no-12 from BUS-II (For augmentation of BUS isolator from 2000A to 3150A rating under ERSS-XIII projects).	
36	220KV SLG-NSLG-I AT SILIGURI S/S.	29/07/2016	09:00	29/07/2016	17:00	ODB	ER-II/KOL	FOR CT & REALY TESTING	
37	BNG-III L/R at Binaguri S/S	29/07/2016	09:00	29/07/2016	17:00	ODB	ER-II/KOL	Repeat tan delta of 400kV B Phase Bushing	
38	400kV Bus-II at Maithon.	29/07/2016	09:00	29/07/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-IX	
39	400 KV BANKA - BIHARSHARIF -1	30/07/2016	11:00	30/07/2016	15:00	ODB	ER-I	FOR AUTO RECLOSE TESTING.	
40	220KV BUS-I at Baripada	30/07/2016	07:00	30/07/2016	17:00	ODB	ER-II/Odisha	CONNECTION FROM EXISTING BUS TO NEW BUS	OPTCL
41	63 MVAR Sundargarh #1 Line Reactor at Rourkela	30/07/2016	09:00	30/07/2016	18:00	ODB	ER-II/Odisha	AMP work	
42	765kV Bus-2 at Angul	30/07/2016	08:00	31/07/2016	18:00	ODB	ER-II/Odisha	For Extension of Bus for commissioning of 765kV Angul Sriakakulam Line-1 &Line-2 bays along with Bus-Bar Protection	NLDC
43	BNG-IV L/R at Binaguri S/S	30/07/2016	09:00	30/07/2016	17:00	ODB	ER-II/KOL	Repeat capacitance of 400kV Y Phase Bushing	
44	400kV Bus-I at Maithon.	30/07/2016	09:00	30/07/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-IX	
45	400 KV BANKA - KAHALGAON -2	31/07/2016	11:00	31/07/2016	15:00	ODB	ER-I	FOR AUTO RECLOSE TESTING.	
46	(220KV TBC)-210 Bay at Bolangir	31/07/2016	09:00	30/07/2016	18:00	ODB	ER-II/Odisha	AMP Work	OPTCL
47	(220KV Bus Coupler)-204 Bay at Bolangir	31/07/2016	09:00	31/07/2016	18:00	ODB	ER-II/Odisha	AMP Work	
48	400 KV PATNA - BALIA -3	01/08/2016	08:00	05/08/2016	18:00	ODB	POWERGRID /ARA	FOR REPLACEMENT OF PORCELAIN INSULATORS BY POLYMER ONES	
49	765 kV Anugul - Jharsuguda - II	01/08/2016	08:00	10/08/2016	17:00	ODB	ER-II/Odisha	OPGW STRINGING WORK	GMR/JITPL/NLDC
50	220KV BUS-II at Baripada	01/08/2016	07:00	01/08/2016	17:00	ODB	ER-II/Odisha	CONNECTION FROM EXISTING BUS TO NEW BUS	OPTCL
51	63 MVAR Raigarh #2 Line Reactor at Rourkela	01/08/2016	09:00	01/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
52	400KV, 125MVAR Bus Reactor-2 at Sundargarh	01/08/2016	07:00	02/08/2016	19:00	OCB	ER-II/Odisha	TO ATTEND MECHANICAL INTERLOCK PROBLEM (CONSTRUCTIONAL DEFECT) OF 400KV SIEMENS MAKE ISOLATORS.	
53	220 KV NPRN-PRN#1 LINE	01/08/2016	09:00	01/08/2016	17:00	ODB	ER-I	Bay AMP work.	
54	400 KV KAHALGOAN - MAITHAN -1 & 2	01/08/2016	08:00	03/08/2016	18:00	OCB	ER-I	FOR POWERLINE CROSSING OF CONSTRUCTION WORK FOR SHIFTING OF KAHALGOAN - BANKA LINE UNDER BUS SPLIT SCHEME.	NLDC

55	315 MVA ICT-2 AT NPRN	01/08/2016	08:00	30/08/2016	18:00	OCB	ER-I	FOR REPLACEMENT OF 315 MVA ICT -2 WITH 500 MVA ICT.	BIHAR
56	400KV BUS-II AT NEW RANCHI	01/08/2016	08:00	04/08/2016	18:00	ODB	ER-I	ISOLATOR ERECTION, JUMPERING WORK UNDER JCP PROJECT	
57	A/R OF 400KV KAHALGAON - BARH - 2	01/08/2016	07:00	15/08/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	Either Khg - Banka 2 or Bsf - Banka - 2 or Bsf - Muz - 1 one ckt A/R shutdown shall be allowed
58	A/R OF 400KV BSF-BANKA-2	01/08/2016	07:00	31/08/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	Either Khg - Banka 2 or Bsf - Banka - 2 or Bsf - Muz - 1 one ckt A/R shutdown shall be allowed
59	A/R OF 400KV BSF-MUZ-1	01/08/2016	07:00	31/08/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	Either Khg - Banka 2 or Bsf - Banka - 2 or Bsf - Muz - 1 one ckt A/R shutdown shall be allowed
60	400 KV PATNA - BALIA - I	01/08/2016	10:00	01/08/2016	17:00	ODB	ER-I	Commissning of L/R NGR bypass scheme at Balia.	NLDC
61	400kv Tala-I L/R at Binaguri S/S	01/08/2016	09:00	01/08/2016	17:00	ODB	ER-II/KOL	Repeat tan delta of 400kv R Phase Bushing & Neutral Bushing Replacement	
62	400kv NSLG-Bangaigaon Ckt-1 at Binaguri S/S	01/08/2016	07:00	01/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	NLDC
63	50 MVA ICT-IV at Malda.	01/08/2016	08:00	01/08/2016	16:00	ODB	ER-II/KOL	AMP	WEST BENGAL
64	400kv Bus-II at Maithon.	01/08/2016	09:00	01/08/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-IX	
65	400KV MTN-Gaya-I LR (Switchable)at Maithon.	01/08/2016	09:00	01/08/2016	14:00	ODB	ER-II/KOL	CSD card replacement and on load testing of Reactor	
66	400 KV MAITHON-MEJIA-II	01/08/2016	10:00	01/08/2016	17:00	ODB	ER-II/KOL	Repair of Conductor	
67	400 KV MAITHON - RANCHI AND RTPS - RANCHI	02/08/2016	07:00	04/08/2016	18:00	ODB	DVC	Stringing work of 400 kv RTPS-Ranchi T/Line	
68	400 KV PATNA - BARH -1	02/08/2016	10:00	02/08/2016	14:00	ODB	POWERGRID /PATNA	FOR CHANGING OF QUAD CONDUCTOR TO TWIN CONDUCTOR FOR 400 KV LINE EQUIPMENTS AT PATNA S/S	
69	400 KV RANCHI-MAITHON-I	02/08/2016	08:00	02/08/2016	17:00	ODB	POWERGRID/	FOR ATTENDING S/D NATURE LINE DEFECTS	
70	A/R 400kv Rourkela-Sundargarh -Ind-Bharat LILO-I fdr at Sundargargh	02/08/2016	08:00	31/08/2016	17:30	ODB	ER-II/Odisha	For PID testing of Insulator string and Auto Recloser switch are to be NON AUTO mode during testing of Line.	NLDC
71	ICT-II MAIN BAY(418) at Jeyapore	02/08/2016	09:30	02/08/2016	17:30:00	ODB	ER-II/Odisha	For AMP Works	OPTCL
72	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	02/08/2016	09:00	12/08/2016	17:00	OCB	ER-I	For Neutral CT Replacement, Transformer cable replacement and OLTC Oil leakage arrest work of 160 MVA ICT#3 and dismantling of parallel connection of 100 MVA ICT# 4 with ICT#3	BIHAR
73	220 KV NEW PURNE-PURNEA -2 LINE	02/08/2016	09:00	02/08/2016	16:00	ODB	ER-I	For Dismantling of ERS Tower and 220 kv Conductor hanging from NPRN#2 gantry	
74	400 KV JAMSHEDPUR-DURGAPUR LINE	02/08/2016	10:00	02/08/2016	14:00	ODB	ER-I	40489L - LINE ISOLATOR ALIGNMENT.	
75	400 KV KODERMA - BIHARSHARIF CKT-1	02/08/2016	08:00	03/08/2016	18:00	ODB	ER-I	FOR LINE O&M WORKS	DVC
76	400 KV KHLG - BARH -1	02/08/2016	08:00	02/08/2016	17:00	ODB	ER-I	REPLACEMENT OF INSULATOR DAMAGED MISCREANTS	
77	400 KV PATNA - BALIA - I	02/08/2016	10:00	02/08/2016	17:00	ODB	ER-I	Commissning of L/R NGR bypass scheme at Balia.	NLDC
78	400 KV DSTPS - RTPS - I	02/08/2016	08:00	20/08/2016	17:00	ODB	DVC	OPGW STRINGING WORK	
79	315 MVA ICT#2 at Durgapur.	02/08/2016	10:00	02/08/2016	13:00	ODB	ER-II/KOL	ICT#2 oil leakage arresting and WTI calibration	DVC
80	WBSETCL Bus Section-1 at Binaguri S/S	02/08/2016	09:00	02/08/2016	17:00	ODB	ER-II/KOL	AMP of NSLG	WEST BENGAL
81	400KV Maithon Gaya-II line	02/08/2016	10:00	02/08/2016	13:00	ODB	ER-II/KOL	Removal of Bus Pipe for retrofitting work of CB	
82	400 KV PATNA - BARH -2	03/08/2016	10:00	03/08/2016	14:00	ODB	POWERGRID /PATNA	FOR CHANGING OF QUAD CONDUCTOR TO TWIN CONDUCTOR FOR 400 KV LINE EQUIPMENTS AT PATNA S/S	
83	400 KV RANCHI-RAGHUNATHPUR	03/08/2016	08:00	03/08/2016	17:00	ODB	POWERGRID/ RANCHI	FOR ATTENDING S/D NATURE LINE DEFECTS	
84	400KV Keonjhar Liine at Baripada	03/08/2016	07:00	04/08/2016	18:00	OCB	ER-II/Odisha	MAIN 2 RELAY RETROFICATION WORK	
85	400 KV Talcher #2 Main Bay (Bay No. - 407) at Rourkela	03/08/2016	09:00	03/08/2016	18:00	ODB	ER-II/Odisha	AMP work	

86	132 KV PURNEA KISHANGANJ LINE	03/08/2016	09:00	03/08/2016	17:00	ODB	ER-I	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
87	400 KV JAMSHEDPUR-APNRL-1 LINE	03/08/2016	09:30	03/08/2016	17:30	ODB	ER-I	AMP WORK OF LINE BAY AND MAIN BAY	
88	400 KV MUZAFFARPUR - GORAKHPUR - D/C	03-Aug-16	08:00	05-Aug-16	18:00	ODB	DMTCL	Stringing of LILO of both the circuits of 400kV Barh to Gorakhpur Transmission Line at Motihari GIS	NLDC
89	315 MVA ICT#1 at Durgapur.	03/08/2016	11:00	03/08/2016	12:00	ODB	ER-II/KOL	CB Retrofitting-trasfer load to transfer bus & protection testing	DVC
90	WBSETCL Bus Section-2 at Binaguri S/S	03/08/2016	09:00	03/08/2016	17:00	ODB	ER-II/KOL	AMP of NSLG	WEST BENGAL
91	400kV NSLG-Bangaigaon Ckt-2 at Binaguri S/S	03/08/2016	07:00	03/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	NLDC
92	400kV MTN Gaya-II/ICT-II TIE Bay at Maithon.	03/08/2016	09:00	08/08/2016	18:00	OCB	ER-II/KOL	CB Retrofitting work of 400kV BHEL CB	
93	400 KV PATNA - BALIA -1	04/08/2016	10:00	04/08/2016	14:00	ODB	POWERGRID /PATNA	FOR CHANGING OF QUAD CONDUCTOR TO TWIN CONDUCTOR FOR 400 KV LINE EQUIPMENTS AT PATNA S/S	
94	765KV ICT#1 - Bus Reactor#1 TIA Bay (702) at Sundargarh	04/08/2016	07:00	05/08/2016	19:00	OCB	ER-II/Odisha	FOR REPLACING OF GRADING CAPACITOR OF 702CB HAVING TAN DELTA VIOLATION.	NLDC
95	160 MVA ICT-2 AT PURNEA	04/08/2016	09:00	04/08/2016	17:00	ODB	ER-I		BIHAR
96	400 KV KODERMA - BIHARSHARIF CKT-2	04/08/2016	08:00	05/08/2016	18:00	ODB	ER-I	FOR LINE O&M WORKS	DVC
97	220 KV RNC - HATIA - 1	04/08/2016	08:00	04/08/2016	17:00	ODB	ER-I	TO ATTEND HOT SPOTS.	JHARKHAND
98	132KV SLG-MELLI AT SILIGURI S/S.	04/08/2016	08:00	04/08/2016	17:00	OCB	ER-II/KOL	FOR GIS WORK	SIKKIM
99	400kV Tala-II L/R at Binaguri S/S	04/08/2016	09:00	04/08/2016	17:00	ODB	ER-II/KOL	CSD Commissioning	NLDC
100	220kV S'gram-CESC-2 at Subhasgram.	04/08/2016	08:30	04/08/2016	17:30	ODB	ER-II/KOL	To attend hot spot in Y-Ph CT	WEST BENGAL
101	400 KV PATNA - BALIA -2	05/08/2016	10:00	05/08/2016	14:00	ODB	POWERGRID /PATNA	FOR CHANGING OF QUAD CONDUCTOR TO TWIN CONDUCTOR FOR 400 KV LINE EQUIPMENTS AT PATNA S/S	
102	400 KV RANCHI-MAITHON (RB) -I	05/08/2016	08:00	05/08/2016	17:00	ODB	POWERGRID/ RANCHI	FOR ATTENDING S/D NATURE LINE DEFECTS	
103	400kV Angul Bolangir Line at Angul	05/08/2016	07:00	06/08/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	NLDC
104	400 KV Talcher #2 - 400 KV Jamshedpur #2 Tie Bay- (Bay No.- 407) at Rourkela	05/08/2016	09:00	05/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
105	132 KV PURNEA -KISHANGANJ LINE	05/08/2016	09:00	07/08/2016	17:00	ODB	ER-I	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
106	400 KV TATA(BPRS)-BARIPADA LINE	05/08/2016	09:30	05/08/2016	17:30	ODB	ER-I	REPLACEMENT OF BROKEN INSULATOR AT LOC-218	
107	400 KV BUS-I AT NEW RANCHI	05/08/2016	08:00	09/08/2016	18:00	ODB	ER-I	ISOLATOR ERECTION, JUMPERING WORK UNDER JCP PROJECT	
108	400 KV PTN - BARH -3	05/08/2016	08:00	05/08/2016	17:00	ODB	ER-I	REPLACEMENT OFINSULATOR DAMAGED MISCREANTS	
109	220 KV RNC - HATIA -2	05/08/2016	08:00	05/08/2016	17:00	ODB	ER-I	TO ATTEND HOT SPOTS.	JHARKHAND
110	400 KV BUS-II of NTPC Farakka	05/08/2016	10:00	05/08/2016	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).	
111	220 KV Malda-Dalkhola ckt -I at Dalkhola S/S.	05/08/2016	08:00	05/08/2016	12:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	

112	220 KV Malda-Dalkhola ckt -II at Dalkhola S/S.	05/08/2016	14:00	05/08/2016	17:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
113	400kV NSLG-Tala Ckt-1 at Binaguri S/S	05/08/2016	07:00	05/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	
114	400 KV MAITHON-DURGAPUR-I	05/08/2016	10:00	05/08/2016	17:00	ODB	ER-II/KOL	Repair of Conductor	
115	400 kv Subhashgram - Jeerat tr. Line	05/08/2016	09:00	06/08/2016	16:00	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 7C/0-7D/0	WEST BENGAL
116	400 KV RANCHI-ROURKELA D/C	05/08/2016	09:00	07/08/2016	18:00	ODB	PKPTCL	CROSSING OF PURULIA - RANCHI D/C	
117	400 KV RANCHI-MAITHON (RB) -II	06/08/2016	08:00	06/08/2016	17:00	ODB	POWERGRID/RANCHI	FOR ATTENDING S/D NATURE LINE DEFECTS	
118	765KV GAYA-BALIA LINE	06/08/2016	08:00	06/08/2016	18:00	ODB	ER-I	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANT	NLDC
119	400 KV PTN - BARH -4	06/08/2016	08:00	06/08/2016	17:00	ODB	ER-I	REPLACEMENT OF INSULATOR DAMAGED MISCREANTS	
120	220 KV Kishanganj-Dalkhola Ckt -I at Dalkhola S/S.	06/08/2016	08:00	06/08/2016	12:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
121	220 KV Kishanganj-Dalkhola Ckt -II at Dalkhola S/S.	06/08/2016	14:00	06/08/2016	17:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
122	125 Bus Reactor-I at Binaguri S/S	06/08/2016	09:00	06/08/2016	17:00	ODB	ER-II/KOL	CSD Commissioning	
123	220 KV SUBHASGRAM- WBSETCL Line # 1 at Subhasgram.	06/08/2016	08:30	06/08/2016	17:30	ODB	ER-II/KOL	Tan delta measurement and replacement of CT as per requirement	WEST BENGAL
124	220KV D/C Thirubali-Narendrapur TL (OPTCL)	07/08/2016	08:00	08/08/2016	17:00	ODB	ER-II/Odisha	Power line crossing works of 765KV D/C Angul PS-Srikakulam PS Transmission Line (construction works)	OPTCL
125	400kV Angul Meramundali Line-1 at Angul	07/08/2016	07:00	08/08/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	OPTCL
126	765 kV GAYA - BALIA	07/08/2016	08:00	08/08/2016	17:00	ODB	ER-I	Erection of bushing, BPI & LA for 765KV Reactor located between Lko & Gaya lines at Balia.	NLDC
127	400kV NSLG-Tala Ckt-2 at Binaguri S/S	07/08/2016	07:00	07/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	
128	400 KV Rourkela-Ranchi#1 Main Bay (Bay No.-428) at Rourkela	08/08/2016	09:00	08/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
129	160 MVA ICT#2 AT PURNEA	08/08/2016	09:00	09/08/2016	17:00	ODB	ER-I	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
130	400KV MAITHON- GAYA-I AND 400KV KODERMA-GAYA-II	08/08/2016	08:00	09/08/2016	18:00	ODB	ER-I	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANT	DVC
131	400 KV MAIN BUS 3 including Bus Sectionalizer-1 CB at Durgapur.	08/08/2016	10:00	08/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-3(Final commissioning)	
132	220 KV Farakka - Lalmatia TL and 315 MVA ICT AT NTPC FARAKKA.	08/08/2016	09:00	09/08/2016	18:00	ODB	ER-II/KOL	1) 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 . <u>Special remarks</u> : Bay no-12 is in permanent shutdown for upgradation of equipments (3150 A rating) since 06.05.2016.	JHARKHAND
133	220 KV Purnea- Dalkhola Ckt-I at Dalkhola S/S.	08/08/2016	08:00	08/08/2016	12:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
134	220 KV Purnea- Dalkhola Ckt-II at Dalkhola S/S.	08/08/2016	14:00	08/08/2016	17:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
135	220kV NSLG-SLG Ckt-I at Binaguri S/S	08/08/2016	09:00	08/08/2016	17:00	ODB	ER-II/KOL	Relay retrofitting	
136	315 MVA ICT-III at Subhasgram.	08/08/2016	08:30	08/08/2016	17:30	ODB	ER-II/KOL	Relay retrofit	WEST BENGAL
137	400KV Maithon Gaya-II line	08/08/2016	10:00	08/08/2016	13:00	ODB	ER-II/KOL	Erection of Removed Bus Pipe for retrofitting work of CB	

138	A/R 400 KV MAITHON-DURGAPUR-I &II	08/08/2016	09:00	09/08/2016	14:00	ODB	ER-II/KOL	Non -Auto Mode to carry out PID at Railway crossings as discussed in ORM.	
139	400KV KAHALGAON - BARH - 2	08/08/2016	07:00	08/08/2016	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	
140	400 KV PATNA - BALIA -4	08/08/2016	08:00	08/12/2016	18:00	ODB	POWERGRID /ARA	FOR REPLACEMENT OF PORCELAIN INSULATORS BY POLYMER ONES	
141	80MVA Reactor at Duburi	09/08/2016	07:00	11/08/2016	18:00	ODB	ER-II/Odisha	CSD installation and online & off line operation of CSD	
142	765/400KV, 1500MVA ICT-1 at Sundargarh.	09/08/2016	07:00	10/08/2016	19:00	OCB	ER-II/Odisha	TO PROVIDE INSULATION SLEEV ON 33KV BUS BAR.	NLDC
143	765kV Angul Sundergarh Line-1 at Angul	09/08/2016	07:00	09/08/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	NLDC
144	400 KV JAMSHEDPUR-MEJIA LINE	09/08/2016	10:00	09/08/2016	12:00	ODB	ER-I	CT OIL SAMPLING OF LINE CT- 406LCT-RPH	DVC
145	400 KV KAHALGAON - LAKHISARAI CKT-1	09/08/2016	08:00	09/08/2016	18:00	ODB	ER-I	FOR LINE O&M WORKS	
146	400 KV MAIN BUS 4 including Bus Sectionalizer-2 CB at Durgapur.	09/08/2016	10:00	09/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-4(Final commissioning)	
147	160MVA ICT-I AT SILIGURI S/S.	09/08/2016	08:00	09/08/2016	17:00	OCB	ER-II/KOL	FOR GIS WORK	WEST BENGAL
148	220 KV Dalkhola-Dalkhola Ckt - I at Dalkhola S/S.	09/08/2016	08:00	09/08/2016	12:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	WEST BENGAL
149	220 KV Dalkhola-Dalkhola Ckt - II at Dalkhola S/S.	09/08/2016	14:00	09/08/2016	17:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	WEST BENGAL
150	220kV NSLG-SLG Ckt-II at Binaguri S/S	09/08/2016	09:00	09/08/2016	17:00	ODB	ER-II/KOL	Relay retrofitting	
151	400kV NSLG-Tala Ckt-3 at Binaguri S/S	09/08/2016	07:00	09/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	NLDC
152	400KV MAIN BUS-I at Baripada	10/08/2016	07:00	10/08/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -I OF GIS	
153	400 KV Rourkela-Sundargarh #2 Main Bay (Bay No-430) at Rourkela	10/08/2016	09:00	10/08/2016	18:00	ODB	ER-II/Odisha	AMP work	NLDC
154	765kV Angul Sundergarh Line-2 at Angul	10/08/2016	07:00	10/08/2016	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind	NLDC
155	400KV MAITHON -GAYA-II AND 400KV KODERMA - GAYA-I	10/08/2016	08:00	11/08/2016	18:00	ODB	ER-I	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANT	
156	400 KV JAMSHEDPUR-ROURKELA-2 LINE	10/08/2016	10:00	10/08/2016	13:00	ODB	ER-I	CHECKING OF AUTO-RECLOSE SCHEME.	
157	400 KV KAHALGAON - LAKHISARAI CKT-2	10/08/2016	08:00	10/08/2016	18:00	ODB	ER-I	FOR LINE O&M WORKS	
158	400 KV MAIN BUS 1 including Bus Sectionalizer-1 CB at Durgapur.	10/08/2016	10:00	10/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-1(Final commissioning)	
159	315 MVA ICT#1 at Durgapur.	10/08/2016	15:00	10/08/2016	16:00	ODB	ER-II/KOL	Final commissioning of CB	DVC
160	220 KV Transfer Bus Coupler at Dalkhola S/S.	10/08/2016	08:00	10/08/2016	12:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
161	220 KV Bus Coupler at Dalkhola S/S.	10/08/2016	14:00	10/08/2016	17:00	ODB	ER-II/KOL	Termination connection for Bus Bar Protection Commissioning	
162	220kV NSLG-BRP Ckt-I at Binaguri S/S	10/08/2016	09:00	10/08/2016	17:00	ODB	ER-II/KOL	Relay retrofitting	
163	315 MVA ICT-V at Subhasgram.	10/08/2016	08:30	10/08/2016	17:30	ODB	ER-II/KOL	PSD commissioning	WEST BENGAL
164	400kV Mejia-III Main Bay (412) at Maithon.	10/08/2016	09:00	17/08/2016	17:30	OCB	ER-II/KOL	O/H of BHEL CB	
165	400 KV MAITHON-MEJIA-3 & MEJIA-JAMSHEDPUR	10/08/2016	09:00	10/08/2016	14:00	ODB	ER-II/KOL	Non -Auto Mode to carry out PID at Railway crossings as discussed in ORM.	DVC
166	400 KV Kh -Banka # Line 1	11/08/2016	09:30	11/08/2016	17:30	ODB	NTPC	PM works & Relay testing.	
167	315MVA ICT#2 at Baripada	11/08/2016	07:00	11/08/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -I OF GIS	OPTCL
168	400 KV MAIN BUS 2 including Bus Sectionalizer-2 CB at Durgapur.	11/08/2016	10:00	11/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-2(Final commissioning)	
169	220kV NSLG-BRP Ckt-II at Binaguri S/S	11/08/2016	09:00	11/08/2016	17:00	ODB	ER-II/KOL	Relay retrofitting	
170	400 KV MAITHON-MEJIA-3 & MAITHON-JAMSHEDPUR	11/08/2016	09:00	11/08/2016	14:00	ODB	ER-II/KOL	Non -Auto Mode to carry out PID at Railway crossings as discussed in ORM.	DVC
171	220 KV BTPS - JAMSHEDPUR D/C	11/08/2016	09:00	12/08/2016	18:00	ODB	PKPTCL	CROSSING OF PURULIA - RANCHI D/C	DVC
172	400 KV Malda- Purnea ckt-I at Dalkhola S/S.	12/08/2016	09:00	12/08/2016	15:00	ODB	ER-II/KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	

173	400 KV Rourkela-SEL #2 Main Bay (Bay No-427) at Rourkela	12/08/2016	09:00	12/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
174	315 MVA 400/220KV ICT-II AT GAYA	12/08/2016	10:00	12/08/2016	16:00	ODB	ER-I	FOR GIS BAY COMMISSIONING WORK	BIHAR
175	400KV BIHARSHARIF-BALIA CKT-2	12/08/2016	10:00	12/08/2016	14:00	ODB	ER-I	FOR LINE BAY AMP WORK	NLDC
176	400 KV BUS - I AT CHAIBASA	12/08/2016	08:00	12/08/2016	17:00	ODB	ER-I	FOR BUS STABILITY TESTING AT CHAIBASA	
177	400 KV MAIN BUS 3 including Bus Sectionalizer-1 CB at Durgapur.	12/08/2016	10:00	12/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-3(Final commissioning)	
178	400kV Tala Ckt-I at Binaguri S/S	12/08/2016	09:00	12/08/2016	17:00	ODB	ER-II/KOL	Relay retrofitting	NLDC
179	400kV NSLG-Rangpo Ckt-1 at Binaguri S/S	12/08/2016	07:00	12/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	TEESTA
180	400kV NSLG-Tala Ckt-4 at Binaguri S/S	12/08/2016	07:00	12/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	NLDC
181	400KV Bus Coupler at Malda.	12/08/2016	08:00	12/08/2016	16:00	ODB	ER-II/KOL	AMP	
182	315 MVA ICT-I at Subhasgram.	12/08/2016	08:30	12/08/2016	17:30	ODB	ER-II/KOL	220KV Bph LA inspection	WEST BENGAL
183	400 KV MAITHON-MEJIA-3 & MAITHON-JAMSHEDPUR	12/08/2016	09:00	12/08/2016	14:00	ODB	ER-II/KOL	Non -Auto Mode to carry out PID at Railway crossings as discussed in ORM.	DVC
184	400 KV Fkk - Kh # line 4	12/08/2016	09:30	13/08/2016	17:30	ODB	NTPC	Relay & CT testing, Breaker PM & Breaker Contact Resistance monitoring.	
185	315MVA ICT#2 at Baripada	13/08/2016	07:00	13/08/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -II OF GIS	OPTCL
186	400 KV 125 MVAR Bus Reactor-SEL #2 Tie Bay (Bay No-426) at Rourkela	13/08/2016	09:00	13/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
187	160 MVA ICT-2 AT PURNEA	13/08/2016	09:00	13/08/2016	17:00	ODB	ER-I	For Tertiary bay connection work	BIHAR
188	160 MVA ICT#2 AT PURNEA	13/08/2016	09:00	13/08/2016	17:00	ODB	ER-I	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
189	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	13/08/2016	09:00	13/08/2016	17:00	ODB	ER-I	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.	BIHAR
190	765KV GAYA-VARANASI LINE-II	13/08/2016	08:00	13/08/2016	18:00	ODB	ER-I	FOR REPLACEMENT OF INSULATORS DAMAGED BY MISCREANT & LINE ISOLATOR RECTIFICATION WORK	NLDC
191	L/R OF NEW RANCHI- DHARAMJAYGARH LINE-1 AT NRNC	13/08/2016	08:00	13/08/2016	18:00	ODB	ER-I	FOR AMP WORK	NLDC
192	400 KV MAIN BUS 4 including Bus Sectionalizer-2 CB at Durgapur.	13/08/2016	10:00	13/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-4(Final commissioning)	
193	400kV NSLG-Kishanganj-2 Line at Binaguri S/S	13/08/2016	07:00	13/08/2016	17:00	ODB	ER-II/KOL	Hot spot rectification	
194	400kV Bus-I at Binaguri S/S	13/08/2016	07:00	13/08/2016	17:00	ODB	ER-II/KOL	To facilitate hot spot rectification in Purnea-3 & 4 Line	
195	400 KV MEJIA-JAMSHEDPUR & MAITHON-JAMSHEDPUR	13/08/2016	09:00	13/08/2016	14:00	ODB	ER-II/KOL	Non -Auto Mode to carry out PID at Railway crossings as discussed in ORM.	
196	315MVA ICT#1 at Baripada	14/08/2016	07:00	14/08/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -II OF GIS	OPTCL

197	132KV D/C Asika-Chhtrapur TL (OPTCL)	14/08/2016	08:00	14/08/2016	17:00	ODB	ER-II/Odisha	Power line crossing works of 765KV D/C Angul PS-Srikakulam PS Transmission Line (construction works)	OPTCL
198	160 MVA ICT-1 AT PURNEA	14/08/2016	09:00	14/08/2016	17:00	ODB	ER-I	For Tertiary bay connection work	BIHAR
199	132 KV PURNEA - PURNEA BSPTCL#2 LINE	14/08/2016	09:00	14/08/2016	17:00	ODB	ER-I	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.	BIHAR
200	132 KV PURNEA(PG) - PURNEA (BSPTC)L#2 LINE	14/08/2016	09:00	15/08/2016	17:00	ODB	ER-I	FOR 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
201	400 KV MAIN BUS 1 including Bus Sectionalizer-1 CB at Durgapur.	14/08/2016	10:00	14/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-1(Final commissioning)	
202	400kV NSLG-Kishanganj-1 Line at Binaguri S/S	14/08/2016	07:00	14/08/2016	17:00	ODB	ER-II/KOL	Hot spot rectification	
203	220kV Bus-I at Binaguri S/S	15/08/2016	07:00	15/08/2016	17:00	ODB	ER-II/KOL	Bus isolator hot spot rectification / CVT replacement	
204	400 KV MAITHON-MEJIA-I & II	15/08/2016	09:00	19/08/2016	14:00	ODB	ER-II/KOL	Non -Auto Mode to carry out PID at Railway crossings as discussed in ORM.	
205	400KV MAIN BUS-II at Baripada	16/08/2016	07:00	16/08/2016	18:00	ODB	ER-II/Odisha	ERECTION OF BUSHING & GAS INSULATED BUS DUCT OF MAIN BUS -II OF GIS	
206	400 KV Bus Reactor Main Bay (408) at Keonjhar	16/08/2016	09:00	16/08/2016	18:00	ODB	ER-II/Odisha	AMP/CSD relay rectification	
207	400 KV Bus Reactor Tie Bay (407-08) at Keonjhar	16/08/2016	09:00	16/08/2016	18:00	ODB	ER-II/Odisha	AMP/CSD relay rectification	
208	400KV Keonjhar-Rengali Line at Keonjhar	16/08/2016	09:00	17/08/2016	18:00	OCB	ER-II/Odisha	For OPGW Stringing Work	
209	50 MVAR Bus Reactor at Rourkela	16/08/2016	09:00	16/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
210	500 MVA 400/220KV ICT-I AT GAYA	16/08/2016	10:00	16/08/2016	16:00	ODB	ER-I	FOR GIS BAY COMMISSIONING WORK	BIHAR
211	400 KV MAIN BUS 2 including Bus Sectionalizer-2 CB at Durgapur.	16/08/2016	10:00	16/08/2016	18:00	ODB	ER-II/KOL	Testing of Bus bar protection for Bus-2(Final commissioning)	
212	400 KV BUS-I of NTPC Farakka	16/08/2016	10:00	16/08/2016	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), 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. Shutdown of BUS-I will not be accorded by ERLDC [(Without normalization of bay no- 12 as shutdown of BUS-I will force shutdown of 400 KV Farakka – Malda- I (Bay no-10) and 315 MVA ICT with 220 KV Farakka- Lalmatia line)] . As such, shut-down of BUS-II must precede that of BUS-I .	

213	400 KV Bay no-08 at NTPC Farakka	16/08/2016	09:00	23/08/2016	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. F	
214	400 KV Malda- Purnea ckt-II at Dalkhola S/S.	16/08/2016	09:00	16/08/2016	15:00	ODB	ER-II/KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
215	220kV Bus-II at Binaguri S/S	16/08/2016	07:00	16/08/2016	17:00	ODB	ER-II/KOL	Bus isolator hot spot rectification	
216	400kV NSLG-Rangpo Ckt-2 at Binaguri S/S	16/08/2016	07:00	16/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	TEESTA
217	315 MVA ICT-V at Malda.	16/08/2016	08:00	01/08/2016	16:00	ODB	ER-II/KOL	CT Change & AMP	WEST BENGAL
218	400KV Jeerat- SGR Line at Subhasgram.	16/08/2016	08:30	16/08/2016	17:30	ODB	ER-II/KOL	Line Yph CVT replacement	WEST BENGAL
219	220kV D/C Jeerat -newtown Tr line of WBSETCL (T No. 110 - 111)	16/08/2016	09:00	17/08/2016	16:00	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 3/0-4/0	WEST BENGAL
220	400 KV PATNA - BALIA -3	16/08/2016	08:00	19/08/2016	18:00	ODB	POWERGRID /ARA	FOR REPLACEMENT OF PORCELAIN INSULATORS BY POLYMER ONES	
221	220 KV BUS-I AT KISHENGANJ	16/08/2016	09:00	19/08/2016	15:00	OCB	POWERGRID/ KISANGANJ	FOR Interconnection of Hyosung GIS to PINGGAO GIS (Extention of main Bus)	
222	80 MVAR Bus Reactor at Keonjhar	17/08/2016	09:00	17/08/2016	18:00	ODB	ER-II/Odisha	AMP/CSD relay rectification	
223	ICT-II(315 MVA) at Jeypore	17/08/2016	09:30	17/08/2016	17:30:00	ODB	ER-II/Odisha	For replacing 390 kV LAs with 336 kV Las	OPTCL
224	132 KV PURNEA(PG) - PURNEA (BSPTCL)L#2 LINE	17/08/2016	09:00	17/08/2016	17:00	ODB	ER-I		BIHAR
225	315 MVA ICT#1 AT BIHARSHARIF	17/08/2016	10:00	17/08/2016	18:00	ODB	ER-I	FOR AMP WORK	BIHAR
226	220 KV BUS-1 AT MUZ	17/08/2016	09:00	17/08/2016	17:30	ODB	ER-I	FOR FINAL JUMPER CONNECTION AND STABILITY FOR GIS BAY AT MUZ	BIHAR
227	400 KV Kh -Banka # Line 2	17/08/2016	09:30	17/08/2016	17:30	ODB	NTPC	PM works & Relay testing.	
228	400 KV Bus-I at Sundargarh	17/08/2016	08:00	18/08/2016	17:00	ODB	IND BHARAT	connecting the extension busbar of two nos 400 KV bays at Sundargarh	
229	132 KV PURNEA(PG) - PURNEA(BSPTCL)#1 LINE	18/08/2016	09:00	18/08/2016	17:00	ODB	ER-I	FOR CONSTRUCTION OF GIS BUS DUCT & SF6 TO AIR BUSHING FOUNDATION 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
230	3*80MVAR GAYA-VARANASI-II LINE REACTOR AT GAYA	18/08/2016	10:00	18/08/2016	18:00	OCB	ER-I	FOR HV BUSHING REPLACEMENT WORK IN Y-PHASE	
231	Malda-Dalkhola-I Line at Malda.	18/08/2016	08:00	18/08/2016	16:00	ODB	ER-II/KOL	AMP & Line Maintenance	
232	220 KV Main Bus #1 at Subhasgram.	18/08/2016	08:30	18/08/2016	17:30	ODB	ER-II/KOL	Bus-I Bph CVT inspection	WEST BENGAL
233	400kV Kahalgaon-I Main Bay at Maithon.	18/08/2016	09:00	25/08/2016	17:30	OCB	ER-II/KOL	O/H of BHEL CB	
234	315 MVA ICT#2 at Baripada	19/08/2016	07:00	19/08/2016	18:00	ODB	ER-II/Odisha	HV TEST OF MAIN BUS-I OF GIS	OPTCL
235	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	19/08/2016	09:00	19/08/2016	17:00	ODB	ER-I	FOR CONSTRUCTION OF GIS BUS DUCT & SF6 TO AIR BUSHING FOUNDATION 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
236	315 MVA ICT#3 AT BIHARSHARIF	19/08/2016	10:00	19/08/2016	18:00	ODB	ER-I	FOR AMP WORK	BIHAR
237	220 KV BUS-2 AT MUZ	19/08/2016	09:00	19/08/2016	17:30	ODB	ER-I	FOR FINAL JUMPER CONNECTION AND STABILITY FOR GIS BAY AT MUZ	BIHAR
238	400 KV N.Siliguri-N. Purnea Ckt- I at Dalkhola S/S.	19/08/2016	09:00	19/08/2016	16:00	ODB	ER-II/KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
239	400 KV Fkk - Durgapur # line 2	19/08/2016	09:30	19/08/2016	17:30	ODB	NTPC	Relay & CT testing.	
240	400kV NSLG-Purnea Ckt-1 at Binaguri S/S	19/08/2016	07:00	19/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	
241	400 KV Bus-II at Sundargarh	19/08/2016	08:00	20/08/2016	17:00	ODB	IND BHARAT	connecting the extension busbar of two nos 400 KV bays at Sundargarh	

242	315 MVA ICT#2 at Baripada	20/08/2016	07:00	20/08/2016	18:00	ODB	ER-II/Odisha	HV TEST OF MAIN BUS-I OF GIS	OPTCL
243	400kV Keonjhar Main Bay(Bay no- 401) at Rengali	20/08/2016	08:00	20/08/2016	17:00	ODB	ER-II/Odisha	AMP Work	
244	160 MVA ICT#3 & 100 MVA ICT#4 (PARALLEL) AT PURNEA	20/08/2016	09:00	22/08/2016	17:00	ODB	ER-I	FOR 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
245	220KV SLG-NSLG-II AT SILIGURI S/S.	20/08/2016	09:00	20/08/2016	17:00	ODB	ER-II/KOL	FOR CT & REALY TESTING	
246	220kV SLG-Kishanganj Ckt-II at Siliguri S/S.	20/08/2016	09:00	20/08/2016	17:00	ODB	ER-II/KOL	PG clamp removal	
247	400kV Bus-I at Maithon.	20/08/2016	09:00	20/08/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-IX	
248	400 KV Fkk - Sagardighi # line	20/08/2016	09:30	20/08/2016	17:30	ODB	NTPC	CT testing.	WEST BENGAL
249	400KV Baripada- DUBURI Line at Baripada	21/08/2016	07:00	22/08/2016	18:00	OCB	ER-II/Odisha	Erection of Tower at new pile foundation at loc. No.8	OPTCL
250	315 MVA ICT #1 - 50MVAR B/R Tie Bay (Bay No.- 423) at Rourkela	21/08/2016	09:00	21/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
251	400kV Keonjhar - Talcher-II Tie Bay (Bay no- 402) at Rengali	21/08/2016	08:00	21/08/2016	17:00	ODB	ER-II/Odisha	AMP Work	
252	160 MVA ICT-II AT SILIGURI S/S.	21/08/2016	07:00	21/08/2016	17:00	ODB	ER-II/KOL	FOR GIS WORK	WEST BENGAL
253	400 KV N.Siliguri-N. Purnea Ckt- II at Dalkhola S/S.	21/08/2016	10:00	22/08/2016	16:00	ODB	ER-II/KOL	Replacement of broken insulators and jumper/hardware fittings tightening works in line	
254	220kV NSLG-BRP Ckt-I at Siliguri S/S.	21/08/2016	09:00	21/08/2016	17:00	ODB	ER-II/KOL	PG clamp removal	
255	ICT-I (3x 105 MVA) at Jeypore	22/08/2016	10:30:00	22/08/2016	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	OPTCL
256	765/400KV ICT-1 at Angul	22/08/2016	09:00	22/08/2016	15:00	ODB	ER-II/Odisha	AMP Works	NLDC
257	220KV BUS-I AT GAYA S/S	22/08/2016	10:00	22/08/2016	16:00	ODB	ER-I	FOR GIS BAY COMMISSIONING WORK	BIHAR
258	400 KV BUS - II AT CHAIBASA	22/08/2016	08:00	22/08/2016	17:00	ODB	ER-I	FOR BUS STABILITY TESTING AT CHAIBASA	
259	400 KV Farakka- Kahalgaon 3 & 4	22/08/2016	08:00	27/08/2016	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). <u>Special Remarks</u> : 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.	
260	220 KV Farakka- Lalmatia TL	22/08/2016	08:00	26/08/2016	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. <u>Special Remarks</u> : 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
261	132KV SLG-WBSETCL-I AT SILIGURI S/S.	22/08/2016	08:00	22/08/2016	17:00	OCB	ER-II/KOL	FOR GIS WORK	WEST BENGAL
262	220 KV Malda-Dalkhola ckt -I at Dalkhola S/S.	22/08/2016	08:00	22/08/2016	12:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	
263	220 KV Malda-Dalkhola ckt -II at Dalkhola S/S.	22/08/2016	14:00	22/08/2016	17:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	
264	220kV NSLG-BRP Ckt-II at at Siliguri S/S.	22/08/2016	09:00	22/08/2016	17:00	ODB	ER-II/KOL	PG clamp removal	
265	Malda-Dalkhola-II Line at Malda.	22/08/2016	08:00	22/08/2016	16:00	ODB	ER-II/KOL	AMP	

266	400 KV Bus Reactor at Jeerat.	22/08/2016	08:30	31/08/2016	17:30	OCB	ER-II/KOL	Erection of CT , LA and Final protection testing of new CB and erection of IPS tube from Bus Reactor to new Isolator	WEST BENGAL
267	400 KV RANCHI - CHANDWA D/C	22/08/2016	09:00	24/08/2016	18:00	ODB	PKPTCL	CROSSING OF PURULIA - RANCHI D/C	NLDC
268	400 KV PATNA - BALIA -4	22/08/2016	08:00	26/08/2016	18:00	ODB	POWERGRID /ARA	FOR REPLACEMENT OF PORCELAIN INSULATORS BY POLYMER ONES	
269	400 KV Baripada- Pandiabil & Baripada- Duburi Line	23/08/2016	07:00	28/08/2016	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
270	400 KV Chaibasa #1 - 400KV Sundargarh #1 Tie Bay (Bay No.-417) at Rourkela	23/08/2016	09:00	23/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
271	400kV Talcher -I Main Bay (Bay no-404) at Rengali	23/08/2016	08:00	23/08/2016	17:00	ODB	ER-II/Odisha	AMP Work	
272	132 KV PURNEA(PG) -PURNEA (BSPTCL)#1 LINE	23/08/2016	09:00	25/08/2016	17:00	ODB	ER-I	FOR 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
273	220KV BUS-II AT GAYA S/S	23/08/2016	10:00	23/08/2016	16:00	ODB	ER-I	FOR GIS BAY COMMISSIONING WORK	BIHAR
274	400 KV BUS-1 AT JAMSHEDPUR	23/08/2016	09:30	23/08/2016	17:30	ODB	ER-I	CONSTRUCTION- BAY EXTENSION WORK RELATED TO 315 MVA ICT -3 BAY AT JSR	
275	400 KV BUS-I of NTPC Farakka	23/08/2016	14:00	23/08/2016	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.	
276	220 KV Kishanganj-Dalkhola Ckt -I at Dalkhola S/S.	23/08/2016	08:00	23/08/2016	12:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	
277	220 KV Kishanganj-Dalkhola Ckt -II at Dalkhola S/S.	23/08/2016	14:00	23/08/2016	17:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	
278	400kV NSLG-Rangpo Ckt-II at Binaguri S/S S/S.	23/08/2016	09:00	23/08/2016	17:00	ODB	ER-II/KOL	PG clamp removal	TEESTA
279	400kV NSLG-Purnea Ckt-2 at Binaguri S/S	23/08/2016	07:00	23/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	
280	400kV Bus-II at Maithon.	23/08/2016	09:00	23/08/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-IX	
281	765KV BUS-I AT GAYA S/S	24/08/2016	10:00	24/08/2016	16:00	ODB	ER-I	FOR ISOLATOR RECTIFICATION WORK	NLDC
282	220 KV Purnea- Dalkhola Ckt-I at Dalkhola S/S.	24/08/2016	08:00	24/08/2016	12:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	
283	220 KV Purnea- Dalkhola Ckt-II at Dalkhola S/S.	24/08/2016	14:00	24/08/2016	17:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	
284	400 KV Kh - Farakka # Line 3	24/08/2016	09:30	24/08/2016	17:30	ODB	NTPC	PM works & Relay testing.	
285	400 KV Rourkela-Jamshedpur#2 Main Bay (Bay No.-409) at Rourkela	25/08/2016	09:00	25/08/2016	18:00	ODB	ER-II/Odisha	AMP work	
286	400kV Talcher -I Tie Bay(Bay no- 406) at Rengali	25/08/2016	08:00	25/08/2016	17:00	ODB	ER-II/Odisha	AMP Work	
287	765KV BUS-II AT GAYA S/S	25/08/2016	10:00	25/08/2016	16:00	ODB	ER-I	FOR ISOLATOR RECTIFICATION WORK	NLDC
288	400 KV BUS-2 AT JAMSHEDPUR	25/08/2016	09:30	25/08/2016	17:30	ODB	ER-I	CONSTRUCTION- BAY EXTENSION WORK RELATED TO 315 MVA ICT -3 BAY AT JSR	
289	TCSC & FSC UNIT OF 400KV NPRN-MUZ-1 AT NEW PURNEA	25/08/2016	10:00	25/08/2016	18:00	ODB	ER-I	AMP WORK	NLDC
290	220 KV Dalkhola-Dalkhola Ckt - I at Dalkhola S/S.	25/08/2016	08:00	25/08/2016	12:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	WEST BENGAL
291	220 KV Dalkhola-Dalkhola Ckt - II at Dalkhola S/S.	25/08/2016	14:00	25/08/2016	17:00	ODB	ER-II/KOL	Stability testing for Bus Bar Protection Commissioning	WEST BENGAL
292	400kV Bus-III at Maithon.	25/08/2016	09:00	25/08/2016	18:00	ODB	ER-II/KOL	Construction work under ERSS-XII	

293	132 kV ASHOKNAGAR - BASHIRHAT Tr line of WBSETCL	25/08/2016	09:00	26/08/2016	16:00	ODB	ER-II/KOL	For Stringing work Rajarhat-Purnia 400 KV D/C line in between 13/0-14/0	WEST BENGAL
294	400 kV GT#4 Bay, Bay No:38 Main Bay BARH	25/08/2016	09:30	27/08/2016	18:00	OCB	NTPC	PM Job of Bay and Relay testing.	
295	400 kV GT#4 TIE Bay, Bay No:37 Tie Bay BARH	25/08/2016	09:30	27/08/2016	18:00	OCB	NTPC	PM Job of Bay and Relay testing.	
296	400KV GT # 4 BARH	25/08/2016	09:30	31/08/2016	18:00	OCB	NTPC	PM Job of Generator Transformer.	
297	(220KV line-3)-207 Bay at Bolangir	26/08/2016	09:00	26/08/2016	18:00	ODB	ER-II/Odisha	AMP Work	OPTCL
298	132KV SLG-WBSETCL-II AT SILIGURI S/S.	26/08/2016	08:00	26/08/2016	17:00	OCB	ER-II/KOL	FOR GIS WORK	WEST BENGAL
299	220kV SLG-Kishanganj Ckt-1 at Siliguri S/S	26/08/2016	07:00	26/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	
300	400 KV Malda-Purnea-I at Malda.	26/08/2016	08:00	26/08/2016	16:00	ODB	ER-II/KOL	AMP & Line Maintenance	
301	400/220 KV Auto Transformer AT FARAKKA	26/08/2016	09:30	27/08/2016	17:30	ODB	NTPC	Relay & CT testing, Breaker PM & Breaker Contact Resistance monitoring.	JHARKHAND
302	220kV SLG-Kishanganj Ckt-2 at Siliguri S/S	28/08/2016	07:00	28/08/2016	17:00	ODB	ER-II/KOL	Insulator replacement in crossings	
303	400 KV BUS-I with Bay no-08 of NTPC Farakka	29/08/2016	10:00	29/08/2016	15:00	ODB	ER-II/KOL	To charge Bay no-09, jumper of Bay no-08 is to be opened and to be connected with isolator of Bay no-09. <i>Then only, Bus reactor#1 with Bay no-09 will come into service.</i>	
304	400 KV Farakka- Kahalgaon 1 & 2	29/08/2016	08:00	29/08/2016	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 .	
305	220KV Gokarna- Sagardighi Ckt. I &2	29/08/2016	08:00	29/08/2016	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	WEST BENGAL
306	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.)	31/08/2016	08:00	31/08/2016	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. <u>Special Remarks</u> : All 04 CKT.s are in single span.	WEST BENGAL
307	132KV SLG-KURSEONG AT SILIGURI S/S.	01/09/2016	08:00	01/09/2016	17:00	OCB	ER-II/KOL	FOR GIS WORK	WEST BENGAL
308	220 KV BUS-I AT KISHENGANJ	08/10/2016	09:00	13/08/2016	15:00	OCB	POWERGRID/ KISANGANJ	FOR Interconnection of Hyosung GIS to PINGGAO GIS (Extention of main Bus)	
309	Arambag:400/220kv 315MVA Tr#4	02/08/2016	09:00	02/08/2016	16:00	ODB	WBSETCL	MAINTENANCE WORK	
310	400kv ARMBG-DGP Line	07/08/2016	07:00	07/08/2016	16:00	ODB	WBSETCL	MAINTENANCE WORK	
311	400kv KTPP-Jeerat Line	14/08/2016	07:00	14/08/2016	15:00	ODB	WBSETCL	MAINTENANCE WORK	

Anticipated Power Supply Position for the month of
Aug-16

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	BIHAR		
i)	NET MAX DEMAND	3600	2185
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	746	322
	- Central Sector	2517	1807
iii)	SURPLUS(+)/DEFICIT(-)	-337	-56
2	JHARKHAND		
i)	NET MAX DEMAND	1100	750
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	448	285
	- Central Sector	592	364
iii)	SURPLUS(+)/DEFICIT(-)	-60	-101
3	DVC		
i)	NET MAX DEMAND (OWN)	2702	1675
ii)	NET POWER AVAILABILITY- Own Source	4000	2550
	- Central Sector	432	313
	Long term Bi-lateral (Export)	1100	967
iii)	SURPLUS(+)/DEFICIT(-)	630	221
4	ORISSA		
i)	NET MAX DEMAND	4300	2567
ii)	NET POWER AVAILABILITY- Own Source	3250	2146
	- Central Sector	1117	757
iii)	SURPLUS(+)/DEFICIT(-)	67	336
5	WEST BENGAL		
5.1	WBSEDCL		
i)	NET MAX DEMAND (OWN)	6070	3699
ii)	CESC's DRAWAL	0	0
iii)	TOTAL WBSEDCL's DEMAND	6070	3699
iv)	NET POWER AVAILABILITY- Own Source	3610	2073
	- Import from DPL	-50	38
	- Central Sector	2143	1481
v)	SURPLUS(+)/DEFICIT(-)	-367	-107
vi)	EXPORT (TO B'DESH & SIKKIM)	10	7
5.2	DPL		
i)	NET MAX DEMAND	275	216
ii)	NET POWER AVAILABILITY	225	254
iii)	SURPLUS(+)/DEFICIT(-)	-50	38
5.3	CESC		
i)	NET MAX DEMAND	1840	1000
ii)	NET POWER AVAILABILITY - OWN SOURCE	740	595
	FROM HEL	546	322
	FROM CPL/PCBL	0	0
	Import Requirement	554	83
iii)	TOTAL AVAILABILITY	1840	1000
iv)	SURPLUS(+)/DEFICIT(-)	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
i)	NET MAX DEMAND	8185	4915
ii)	NET POWER AVAILABILITY- Own Source	4575	2922
	- Central Sector+Others	3243	1803
iii)	SURPLUS(+)/DEFICIT(-)	-367	-190
7	SIKKIM		
i)	NET MAX DEMAND	85	33
ii)	NET POWER AVAILABILITY- Own Source	10	7
	- Central Sector+Others	145	102
iii)	SURPLUS(+)/DEFICIT(-)	71	76
8	EASTERN REGION At 1.03 AS DIVERSITY FACTOR		
i)	NET MAX DEMAND	19390	12125
	Long term Bi-lateral by DVC	1100	967
	EXPORT BY WBSEDCL	10	7
ii)	NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	21076	13379
iii)	PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	576	280