



Minutes of 131st OCC Meeting

Date: 06.04.2017
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata: 700 033

Eastern Regional Power Committee

Minutes of 131st OCC Meeting held on 20th March, 2017 at ERPC, Kolkata

PART A

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

Member Secretary, ERPC welcomed all the members and specially welcomed Shri M R Mohanty, CGM(O&M), OPTCL & Shri Rahul Chakravorty, DGM, CESC. He informed the house that it is last OCC meeting for both of them as they were going to superannuate from their jobs. The house puts on record the long association of both the stalwarts of OPTCL and CESC with OCC forum and applauds for their contribution to OCC forum. Finally, all OCC members wished them a happy and healthy retirement life.

Item no. 1: Confirmation of minutes of 130th OCC meeting of ERPC held on 17.02.2017

The minutes of 130th OCC meeting were uploaded in ERPC website and circulated vide letter dated 07.03.2017 to all the constituents.

Members may confirm the minutes.

Deliberation in the meeting

Members confirmed the minutes.

PART B: ITEMS FOR DISCUSSION

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 **February 2017** as informed by ERLDC and BSPTCL is given below:

- 1) 400kV Main Bus – I (Section A) and Main Bus – II (Section A) and Bus Sectionalizer at ± 800 kV HVDC Converter station Alipurduar, Powergrid was charged for first time as follows:
 - a. Main Bus – I (Section A): 16:16hrs of 10/02/17
 - b. Main Bus - II(Section A): 19:20Hrs of 10/02/17
- 2) 400/220/33kV, 315MVA ICT – II at ± 800 kV HVDC Alipurduar, POWERGRID was charged for first time 16:25hrs of 10/02/17.

DVC vide letter dated 24.02.17 declared date of Commercial Operation (COD) of Bokaro Thermal Power Station- A (BTPS-A) of 500 MW w.e.f. 00:00 Hrs of 23.02.2017.

Teesta Urja Limited (TUL) vide letter dated 22.02.17 and 27.02.17 declared date of Commercial Operation (COD) of 1200 MW Teesta-III HEP Unit #2, 3 & 4 (200 MW each) w.e.f. 00:00 hrs of 23.02.2017 and Unit #1, 5 & 6 (200 MW each) w.e.f. 00:00 hrs of 28.02.2017 respectively.

Other constituents may update.

Deliberation in the meeting

BSPTCL vide mail informed the commissioning of following elements:

- 3) *LILO of 132 KV Purnea-Farbisganj (S/C) tr line at 132/33 KV Triveniganj S/s was charged on 04.02.2017.*

On query, DVC intimated that the trial run period of BTPS-A unit (500 MW) was from 18.02.17 to 19.03.17.

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

In the PSDF review meeting, 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 in 35th TCC is as given below:

SN	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	PSDF grant approved (in Rs.)	Amount drawn till date (in Rs.)	Status as updated in 129 th OCC
1	WBSETCL	Renovation & up-gradation of protection system of 220 kV & 400 kV Substations in W. 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.	10.05.15	10.05.17	162.5 Cr.	19.53 Cr	Total contract awarded for Rs. 67.73 Cr <i>Erection work for received equipment is in progress.</i>
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. + 9.88 Cr.	1) Hardware supplied and installed. 2) SAT completed for pilot state 3) Protection database management software (PDMS) delivered. 4) Training on PDMS organised at Odisha.
5	BSPTCL	Renovation and up-gradation of 220/132/33 KV GSS Biharsharif, Bodhgaya, Fatuha, Khagaul, Dehri -on-sone & 132/33 kV GSS Kataiya	11/5/2015	Feb'2017	64.33 crore	23.68 crore	<i>Project is on going.</i> Order for supply of equipment placed for Rs.13.51 Cr.
6		Installation of capacitor bank at different 35 nos. of GSS under BSPTCL	5/9/2016		18.88 crore		Approved (triparty agreement among NLDC, Govt. of Bihar & BSPTCL is in under process)
7		Renovation & up-gradation of protection and control system of 12 nos. 132/33 KV GSS under BSPTCL.					Recommendation of appraisal committee is awaited. Estimated cost 54.69 crore.
8	DVC	Renovation and upgradation of control & protection system and replacement of Substation Equipment of 220/132/33 kV Ramgarh Substation			25.96		Approved by Ministry of Power

9		Renovation and upgradation of control & protection system including replacement of substation equipment at Parulia, Durgapur, Kalyaneshwari, Jamshedpur, Giridih, Barjora, Burnpur, Dhanbad and Burdwan Substation of DVC			140		Appraisal committee has recommended. It will be placed in next monitoring Committee meeting.
10	WBPDC	Implementation of Islanding scheme at Bandel Thermal Power Station					Appraisal committee has recommended. It will be placed in next monitoring Committee
		Upgradation of Protection and SAS			26.09		Approved by Ministry of Power
11	OHPC	Renovation and up-gradation of protection and control system of 4 nos OHPC substations.					<i>OHPC will submit the detailed proposal soon as per the requirement of Appraisal committee.</i>
12a	ERPC	Training for Power System Engineers					<i>The proposal was examined by the Techno Economic sub group of PSDF and advised to submit revised proposal with consideration of views of the group.</i>
12b		Training on Integration of Renewable Energy resources					<i>The proposal was examined by the Techno Economic sub group of PSDF and advised to submit revised proposal only for training at NORD POOL Academy with consideration of views of the group.</i>
12c		<i>Training on Power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents</i>					

Other constituents may update.

Deliberation in the meeting

Members updated the status as above.

Item No. B.3: MONITORING OF SCHEMES FUNDED FROM PSDF—NPC Agenda

In the 6th meeting of NPC held on 19th December, 2016 it was decided that all the RPCs in the monthly OCC meetings may follow up with entities to expedite completion of the scheme by giving due priority. The implementation of most of these schemes are based on the recommendation of the Enquiry Committee on Grid Disturbance of July 2012 headed by Chairperson, CEA. Therefore, timely implementation of these schemes would enhance the grid security and reliability. Accordingly, the grant sanctioned from PSDF for the schemes of Eastern Region is enclosed at **Annexure-B.3(I)** for deliberation in the OCC meeting.

The status of implementation of the above schemes (physical as well as financial progress) may please be reviewed and the entities are requested to expedite implementation of the schemes. The entities may also be advised to furnish information in the format enclosed at **Annexure-B.3 (II)** by first week of every month on regular basis to Member Convener, PSDF Project Monitoring Group (AGM, NLDC, POSOCO) with a copy to NPC Division.

*In 129th OCC, all the respective constituents are advised to furnish the status to NLDC & NPC as per the desired format as attached at **Annexure- B.3 (II)**.*

In 130th OCC, BSPTCL informed that they have furnished the status to NLDC & NPC. OCC advised all other constituents to furnish the status to NLDC & NPC at the earliest.

In 35th ERPC meeting, CE-NPC, CEA informed that grant has been allotted to Powergrid for installation of STATCOM but no update on the progress have been received from Powergrid.

Powergrid informed that project has already been awarded and they will submit the details to PSDF Nodal Agency and NPC.

Constituents may update.

Deliberation in the meeting

Powergrid informed that the details will be furnished shortly.

OCC advised all the constituents to furnish the status to NLDC & NPC at the earliest

Item No. B.4: OPERATIONAL LOAD FLOW STUDY FOR OFF-PEAK PERIOD (WINTER LEAN PERIOD)

In 128th OCC for lean off-peak load flow study, OCC finalized the date and time as follows

- 13.00 Hrs of 28th December, 2016.
- 02:00 Hrs of 29th December, 2016

OCC advised to submit the data as per the format available in ERPC website.

Further, 129th OCC advised PRDC to interact with ERLDC and resolve the issue of mismatch between SCADA snapshot and Study result of peak scenario for few pockets of ER grid as per the earlier decision.

PRDC presented the status of data collection for off-peak load flow study. Further, it was informed that the report will be submitted by March, 2017.

PRDC may place the report.

Deliberation in the meeting

PRDC informed that they will submit the report by end of March, 2017..

Further OCC advised PRDC to carry out another load flow study in the first week of May, 2017 tentatively for 4th and 5th May, 2017 for 19:00 and 20:00 Hrs. Therefore, all utilities have to record data for four instances.

Item No. B.5: Status of UFRs healthiness installed in Eastern Region

UFR Healthiness Certification for the month of February, 2017 has been received from DVC and CESC.

BSPTCL, JUSNL, OPTCL and WBSETCL may update.

Deliberation in the meeting

It was informed that all the constituents have submitted the UFR healthiness certificate for February, 2017.

Item No. B.6: Healthiness of SPS existing in Eastern Region

CESC, Vedanta, , have submitted the healthiness certificate for the month of February 2017.

130th OCC requested NTPC ER-II to submit the healthiness certificate at the earliest.

NTPC, GMR, Chuzachen JITPL, Powergrid-Odisha & Powergrid ER-II may submit the healthiness certificate for February, 2017.

Deliberation in the meeting

It was informed that SPS healthiness certificate received from GMR, Chuzachen and Powergrid-Odisha.

NTPC informed that they could not perform the healthiness checking due to non-receipt of consent from NLDC.

OCC advised NTPC to check and ensure that SPS is in service and accordingly submit the healthiness certificate.

ERLDC pointed that during a disturbance at OPTCL system the Vedanta SPS did not operate satisfactorily.

OCC advised SLDC, Odisha to look into the matter and check the healthiness of Vedanta SPS.

In 129th OCC, on query about SPS at 400kV level at Rangpo S/s for reliable power evacuation through 400kV Rangpo – Siliguri D/c, Powergrid informed that the SPS at Rangpo substation has been completed and the extension of signal to respective generation stations have been tested.

However, ERLDC informed that the SPS scheme for unit trip/ generation reduction has been received from Teesta-III & Chuzachen. The scheme details are yet to be received from Jorethang, Dikchu and Tashiding HEPs.

OCC advised all generators to share the details with ERLDC & to comply other requirements as per decision of the special meeting of 14.10.16 & 30.11.16 so that there should not be any delay in doing commercial transactions by concerned generators

ERLDC informed that Powergrid, Jorethang, Chuzachen and Teesta-III had submitted the SPS scheme through mail.

OCC advised ERLDC to consider this mail communication as official and requested Dikchu and Tashidig HEP to share the scheme details with ERLDC at the earliest.

Respective members may update.

Deliberation in the meeting

ERLDC informed that the SPS needs to be tested and the response time of each generator needs to be checked.

OCC advised to carry out the SPS test on 22.03.2017 and advised to review the response time of each generator on special meeting of 29.03.2017.

Item No. B.7: Status of Islanding Schemes of Eastern Region

B.7.1. Status of commissioned Islanding Schemes in Eastern Region

At present, the following islanding schemes are in service:

1. CESC as a whole Islanding Scheme, CESC
2. BkTPS Islanding Scheme, WBPDC

3. Tata Power Islanding Scheme, Haldia
4. Chandrapura TPS Islanding Scheme, DVC

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

The healthiness certificate for Islanding Scheme for February, 2017 has been received from CTPS, DVC, BkTPS, Tata Power and CESC.

Members may note.

Deliberation in the meeting

Members noted.

B.7.2. FSTPS Islanding Scheme, NTPC

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

In 127th OCC, Powergrid informed that the work under the scope of JUSNL has been completed.

In 35th TCC, NTPC confirmed that the final hooking of U#1 will be completed during overhauling S/D of U-1 in the month of March-April, 2017. They assured FSTPP islanding scheme with U#1 of FSTPS will be operational positively by April 2017 without further delay. On specific queries NTPC informed that except hooking up with units all their assigned works for implementing FSTPS islanding are satisfactorily completed.

NTPC may update.

Deliberation in the meeting

NTPC informed that the overhauling S/D of U-1 has been taken from 14th March, 2017 and the scheme will be operational as per schedule.

B.7.3. Bandel Islanding Scheme, WBDCL

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

Subsequently, PSDF Secretariat vide mail dated 07.10.2016 informed that the Scheme was examined on 28.09.2016 and has sought some clarification from WBDCL.

In 127th OCC, WBDCL informed that clarification has been submitted.

It was informed that the Appraisal committee has recommended. It will be placed in next Monitoring Committee

In 130th OCC, it was informed that the PSDF Appraisal committee has accepted the proposal and forwarded to CERC.

WBDCL may update the latest status.

Deliberation in the meeting

WBDCL informed that the status is same.

Item No. B.8: Water requirement of Teesta-V Power Station after commencement of generation from Teesta-III HE Project-- NHPC

NHPC vide letter dated 22.02.2017 pointed the issue of water requirement of Teesta-V Power Station during lean season after commencement of generation from Teesta-III HE Project, it is to mention that during lean season major portion of water at Teesta-V Power Station shall be available through Teesta-III HE Project. Hence, the scheduling of generating units of Teesta-III HE Project must be 4 hour in advance to generation schedule given to Teesta-V Power Station so that reservoir level at Teesta-V Power Station can be built up before commencement of generation.

Moreover, Teesta-III HE Project generation scheduling should be in set pattern so that other power stations in its downstream. can forecast their generation scheduling correctly. Further, Teesta-III HE Project may be advised to intimate its generation schedule to us on mail id teestav.nhoc@gmail.com and through SMS on mobile no 9800003801 in advance.

NHPC may elaborate. Members may discuss.

Deliberation in the meeting

*ERLDC informed that they had convened a meeting on 08.03.2016 with NHPC and Teesta Urja to discuss this issue. The minutes is enclosed at **Annexure-B.8**.*

Further, they explained the issue in details and informed that the problem of water requirement for generation in Teesta-V might arise only during peak hours of the day in lean season only.

Item No. B.9: Time correction of SEMs in Eastern Region – Replacement of heavily drifted SEMs

The issue was discussed in 35th TCC/ERPC meetings and it was felt that the meters with severe drift greater than 10 min need to be replaced first and if replacement is done with Genus then readings are to be collected manually using Laptop till interfacing with AMR is completed.

35th ERPC advised Powergrid to replace the 10% of the heavily drifted SEMs with new Genus make meters and monitor the performance of the Genus meters. Powergrid should present this performance before constituents and subsequently the decision on replacement of the other time drifted meters will be taken up.

ERPC also advised Powergrid to place the list of 10% of the heavily drifted SEMs to be replaced with Genus make meters in next OCC meeting.

*Subsequently, ERLDC has prepared a list of such SEMs, the same is placed at **Annexure- B.9**.*

Powergrid/ ERLDC may update.

Deliberation in the meeting

Powergrid informed that they have already started meter replacement work and all highly drifted meters as per list will be replaced by 1st week of April, 2017.

On query, Powergrid informed that the present list of drifted SEMs were of Powergrid sub-stations which are being replaced. Further, Powergrid agreed to send the weekly data of newly installed SEMs to ERLDC by every Tuesday till the integration of Genus meter with AMR system by TCS,

Item No. B.10: Charging of 132KV Patraru(DVC) - Patraru(JSEB) tie line and Kolaghat(DVC) - Kolaghat(WBSETCL) tie line--DVC

It has been observed that 132KV, Patraru(DVC) - Patraru(JSEB) tie line and Kolaghat(DVC) - Kolaghat(WBSETCL) tie line are out since long. These lines are made on request to facilitate any shut-down/ maintenance purpose.

But, inter-state tie lines are meant for stability of any state network irrespective any power flow through it as per sec 40(a) of Elec Act 2003. It is learnt that at Kolaghat S/s of WBSETCL, all three ATRs have already been replaced and are all in service. DVC is supplying around 138MVA load to WBSEDCL between Burdwan S/s to Kharagpur S/s of DVC and it has been felt necessary that Kolaghat - Kolaghat tie be kept in service for reliability of power supply to WBSEDCL and stability of the grid. Similarly, Patraru(DVC) - Patraru(JSEB) tie line be also kept in service to obviate the low voltage problem at Patraru and North-karanpura S/s of DVC and stability of grid as well.

128th OCC felt that inter-state lines should be utilized to improve the reliability of the system and advised WBSETCL and JUSNL to charge 132KV Kolaghat(DVC) - Kolaghat(WBSETCL) and 132kv Patraru(DVC) - Patraru(JSEB) lines on continuous basis.

DVC vide mail dated 10.01.17 informed that West Bengal SLDC has not agreed with synchronisation of DVC system with WBSETCL via 132kv network due to non availability of 132kv circuit breaker at WBSETCL end and high loading of 132kv KTPP - Kolaghat(WBSETCL) D/C with present peak load of Kolaghat S/S (above 130MW with traction)

Regarding Kolaghat(DVC)- Kolaghat(WBSETCL) line, OCC preferred to carry out a simulation study to know the cause of constraints.

In 130th OCC, JUSNL informed that charging of Patraru(DVC) - Patraru(JSEB) tie line on continuous basis is not possible as it will be overloaded the JUSNL system in the case of contingency of TVNL units or one ckt of 220 kV Hatia-Ranchi. They submitted the relevant data regarding the line along with the load flow pattern.

OCC requested ERLDC/ERPC to carry out a system study to find the constraints related to closing of this tie.

Regarding Kolaghat(DVC)- Kolaghat(WBSETCL) line, OCC requested WBSETCL to submit a official communication mentioning the anticipated constraints/problems due to closing of the said tie. After that ERLDC/ERPC may carry out a system study to find out the constraints. OCC also requested WBSETCL to provide the relevant data for carrying out the system study.

WBSETCL agreed.

DVC and WBSETCL may update.

Deliberation in the meeting

WBSETCL submitted their official communication on the issue. The same is enclosed at Annexure-B.10.

Item No. B.11: HIGH VOLTAGE PROBLEM IN 400KV MERAMUNDALI GRID S/S

GRIDCO vide letter dated 07.01.17 intimated that presently Odisha is going through very high voltages at 400kV bus of Meramundali, Duburi and Mendhashal grid S/S. The situation is further worsened due to high reactive power flow from Meramundali to Angul pooling sub-station, from Duburi to Meramundali sub-station and from Kuchei to Duburi sub-station. It may be noted that, PGCIL has installed two nos. of 330 MVAr Bus reactors at Angul 765kV substation and two nos.

of 125 MVAR Bus reactors at Angul 400kV substation, thus resulting high reactive power flow from Meramundali to Angul & Duburi to Meramundali grid S/S. In view of the above OPTCL suggests the following as short term and long term measures to mitigate the high voltage issue as well as to improve the high reactive power flow situation.

Short term measure

- OPTCL will install 80 MVar reactor at Meramundali 400kV S/S.
- The Angul-Meramundali Double circuit tie to be opened at both ends.

Long term measure

- The Meramundali-Angul Double circuit will be terminated at Meramundali (B). A letter regarding the above change has already been forwarded to CEA and will be placed in the next Standing Committee meeting of CEA. Meramundali(B) will be a new 400kV substation of OPTCL, approved by CEA and the work order to be issued shortly.

In 130th OCC, ERLDC presented the study results and informed the following:

- *The voltage at Meramundali is increasing during winter season due low demand at Meramundali, Dubri and Mendhasal and insufficient reactive power support.*
- *In the present scenario the 765/400 kV Angul S/s is acting like sink of Reactive power for OPTCL system in around 400kV Meramundali S/s.*
- *With opening 400kV Angul-Meramundali line the export of reactive power to the ISTS network is reduced drastically but the voltage at 400kV Meramundali S/s is increasing by 4 kV which may affect the sub-station equipment.*
- *Further due to outage of one ckt of 400 kV Meramundali- Mendhasal the voltage at Meramundali is on higher side. This line may be restored at the earliest.*

In 35th TCC, ERLDC informed that VAR is being generated at OPTCL system and the 765/400 kV Angul S/s is acting like sink of Reactive power for OPTCL system in around 400kV Meramundali S/s. The opening of 400kV Angul-Meramundali line will not the solution. Further due to outage of one ckt of 400 kV Meramundali- Mendhasal the voltage at Meramundali is on higher side. This line may be restored at the earliest.

OPTCL informed that 400 kV Meramundali- Mendhasal line will be charged on tomorrow and 315 MVA, 400/220kV ICT will be restored by 15th March, 2017.

Powergrid informed that the flexible LLO scheme as approved in 18th SCM was approved in their Board and it is in final stage and the scheme will be implemented by 2018.

TCC opined that the high voltage issue should be reviewed after restoration of 400 kV Meramundali- Mendhasal line and commissioning of 315 MVA, 400/220kV ICT at Meramundali in OCC meeting.

TCC advised all generators in around 400kV Meramundali S/s to absorb VAR up to maximum extend as per the capability curve. TCC also advised OPTCL to plan for proper reactive power compensation at 400kV Meramundali, New Dubri and Mendhasal S/s.

CE, CEA opined that reactive power compensation is part of grid security and it is eligible for PSDF grant. OPTCL may apply for PSDF.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the Meramundali- Mendhasal line has been charged and the ICT will be commissioned by 1st April, 2017.

Further, OPTCL added that they have carried out preliminary study for Reactive power planning and requested ERLDC for carrying out a joint study to determine the reactor capacity at 400kV Meramundali, New Dubri and Mendhasal S/s.

OCC requested ERLDC to extend their help to OPTCL for Reactive power planning.

Item No. B.12: Restoration of PLCC system of important JUSNL ties

I) 220 KV Chandil –Santaldih line

In 130th OCC meeting, JUSNL intimated that PLCC for 220 kV Chandil-Santaldih line has been tested and commissioned successfully on 25.01.17.

WBPDCCL informed that the PLCC was activated but the auto-reclosure could not be put into service as the R-Ph pole of Circuit Breaker is not getting closed during auto-reclosure operation. The same is taken up with the OEM (i.e. ABB) and they will be rectifying the CB.

In 35th TCC, WBPDCCL informed that overhauling of the R-ph pole of CB will be done by 15th March 2017. Subsequently, auto-reclosure feature will be enabled.

II) 220 KV Ramchandrapur-Joda line

In 130th OCC meeting, OPTCL informed that PLCC panels at 220kV Joda end will be commissioned within a week. JUSNL informed that the Ramchandrapur end is ready in all respect for implementation of PLCC.

In 35th TCC, OPTCL informed that PLCC panels at 220kV Joda end will be commissioned by March 2017.

JUSNL/WBPDCCL/OPTCL may update.

Deliberation in the meeting

WBPDCCL informed that shutdown was proposed on 31st March, 2017 to complete the work..

OPTCL informed that PLCC panels will be commissioned by March 2017.

Item No. B.13: Concerned members may update the latest status.

B.13.1. Commissioning of 400 kV Ind-Bharath to Jharsuguda D/C (dedicated line)

In 130th OCC, IBEUL informed that construction of the line has been completed and ready for commission. The line will be commissioned by 28th February, 2017.

OCC advised IBUEL to communicate the status to ERPC and ERLDC after commissioning of line for commencement of commercial transaction.

OCC advised ERPC secretariat to check the readiness of Protection co-ordination, communication both data and voice and all other details in interaction with ERLDC before permitting IBEUL for commercial evacuation of power.

In 35th TCC, it was informed that IBUEL vide mail has submitted the status of their dedicated line to ERPC and ERLDC on 23-02-2017. TCC advised ERPC secretariat to assess the position and do needful in line with CERC order, regulation and decisions taken in several meetings held on this issue.

IBEUL may update.

Deliberation in the meeting

IBEUL informed that their dedicated line will be commissioned by 24th March, 2017.

A. Statutory clearances of 400kv transmission line of IBEUL at the crossing points over the MGR rail corridor of OPGC

OPGC vide letter dated 03.03.2017 intimated that OPGC is pursuing construction of 2x660MW Thermal Power Plant at Ib-Thermal Power Station in the district of Jharsuguda, Odisha. The plant location is in close proximity to IBEUL's power plant located in the same area. Construction work of OPGC's expansion project is in very advanced state with a scheduled commissioning in 3rd Qr. of FY 2017-18. OPGC's expansion project includes construction of a dedicated rail corridor (MGR) connecting the power plant to its captive coal mines in Sundergarh. The alignment of the MGR has been finalized in 2009 and land acquisition has been completed. The MGR is presently under construction.

IBEUL has constructed its 400kV transmission line for evacuation of power which is crossing the MGR corridor of OPGC. This 400 KV transmission line has been constructed by IBEUL without maintaining the required statutory clearance at four locations (involving tower footing location and maintaining vertical clearance for conductors). This has been communicated to IBEUL at the time when the transmission line construction was yet to be undertaken. It is a matter of regret that in spite of several discussions and commitments by IBEUL, they have failed to comply with the statutory clearances during the construction of towers. As a result, the construction of the MGR corridor of OPGC is getting delayed due to failure of IBEUL to complete the rectification work of the 400kV transmission line at the crossing points and this is seriously affecting the commissioning schedule of OPGC expansion power plant.

In view of the above, OPGC requested to keep on hold all clearances for charging of the 400 kV transmission lines of IBEUL till the rectification works at the affected crossing points are completed in compliance with all the statutory requirements. This will facilitate completion of the construction work of the MGR system of OPGC as per schedule.

OPGC/IBEUL may update.

Deliberation in the meeting

IBEUL informed that the issue has been discussed with Govt. of Odisha and they have already placed an order for extending the tower heights for maintaining the statutory clearances and the work will be completed by May, 2017.

OCC advised IBEUL to get fresh clearance from CEA for the complete line including the said crossing points over the MGR rail corridor of OPGC before commissioning the line.

B.13.2. Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

In 35th TCC, Vedanta updated the latest status as follows:

Activities	Nos	Status as on 15-Nov-16 (as updated in 34 th TCC)	Status as on 24-Feb-17 (As updated in 35 th TCC)	Remarks
Tower Foundation	64	60	64	Completed
Tower Erection	64	42	59	
Stringing /OPGW Cabling & Testing	20.5 Km	One stretch completed	9 km completed	

Sub station Bay	2	Equipment Erection, Cable Trench, Earthing Completed	Bay construction completed	Will be completed by 2 nd March, 2017.
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Vedanta informed that the construction work was delayed due to non-availability of shutdown of 11kV lines during Panchayat election.

TCC opined that Vedanta is not serious about the construction of the line and still asking for 2 months extension. TCC viewed that the line can be commissioned by end of March 2017 if they could take up the activities related to statutory clearances simultaneously. Accordingly advised Vedanta to place item wise schedule for commissioning of line, in 35th ERPC meeting on 25.2.17.

Vedanta informed that they will submit the item wise schedule for commissioning of line within a week.

In 35th ERPC, Vedanta added that physical construction of the line will be completed by the end of March, 2017 and the line will be commissioned by end of April 2017 after getting the statutory clearances. Vedanta requested ERPC to extend the dead line for removal of LILO up to 30th April 2017.

Further, GRIDCO, Odisha informed that the dead line for removal of LILO may be extended up to 15th April 2017.

In view of above, ERPC decided to extend the dead line for removal of LILO up to 15.04.2017 and advised Vedanta to strictly adhere to the schedule for commissioning of the dedicated line in all aspects.

Further, ERPC authorised CTU to open the LILO on 16.04.2017.

Vedanta may update.

Deliberation in the meeting

*Vedanta submitted the item wise schedule in the meeting the same is placed at **Annexure-B.13.2.***

B.13.3. Status of Bus Splitting schemes in Eastern Region

A. Bus Splitting of Powergrid Sub-stations

As per decision of Standing Committee of ER CTU was entrusted to do Bus splitting at 400 kV Maithon, Durgapur & Biharsariff S/Ss or ER. The latest status on the same are:

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

In 130th OCC, Powergrid informed that physical bus splitting at 400kV Biharshariff S/s has been completed. Protection part is yet to be completed.

Powergrid added that bus splitting at 400kV Biharshariff S/s will be commissioned by March 2017.

Powergrid/BSPTCL may update.

Deliberation in the meeting

Powergrid added that bus splitting at 400kV Biharshariff S/s will be commissioned by April, 2017.

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 126th OCC, 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 work has been completed.
- Transformer package and Shunt reactor– have been awarded.

In 35th TCC, NTPC informed that the work is in progress as per the schedule and the bus splitting will be completed by December, 2018.

NTPC may update.

Deliberation in the meeting

NTPC informed that the bus splitting will be implemented by December, 2018.

B.13.4. 11KV Auxiliary power supply of 400KV Berhampore Powergrid Substation.

In 34th TCC, WBSEDCL informed that the construction of dedicated line has been delayed due to ROW issues. The same has been resolved now and the construction of dedicated line will be completed by December, 2016.

WBSEDCL added that cable needs to be laid out for highway crossing for which cost estimate will be given to Powergrid within a week.

Powergrid agreed to do the payment after receiving the estimate.

In 130th OCC, WBSEDCL informed that the requisite amount has been received from Powergrid and the work will be completed by 15th March, 2017.

WBSEDCL/Powergrid may update.

Deliberation in the meeting

WBSEDCL informed that the work will be completed by the end of March, 2017.

B.13.5. Run-back scheme of Sasaram 500MW HVDC B-t-B converter -- ERLDC

It is understood that the following run-back schemes are functional for the 500 MW B-t-B HVDC converter at Sasaram:

1. Tripping of any circuit of 400kV Biharshariff-Sasaram D/C line – reduction of HVDC power order to 250 MW
2. Tripping of both circuits of 400kV Biharshariff-Sasaram D/C line – complete blocking of the HVDC converter.

In this connection it is stated that the above run-back conditions were relevant when 400kV Biharshariff-Sasaram D/C line was the only AC source on the East side bus. However, at present due to existence of 765kV Sasaram-Fatehpur 765kV line along with 765/400kV Sasaram ICT, there would be no loss of AC voltage of the 400kV East bus, even if both circuits of Biharshariff-Sasaram 400kV D/C line trip.

It is to mention that on 19-12-16, the HVDC Sasaram power order had to be reduced to 250MW when 400kV Biharshariff-Sasaram-I was taken under planned shutdown. Thereafter, at 12:43 Hrs, the other 400kV circuit Biharshariff-Sasaram-II tripped due to transmission of DT signal from Biharshariff to Sasaram leading to complete blocking of the converter. However, such blocking was unwarranted as the 765kV Sasaram-Fatehpur line together with the 765/400kV ICT at Sasaram was still in service.

It is therefore suggested that the existing run-back scheme may be activated only when Sasaram 765/400kV ICT or Sasaram-Fatehpur 765kV line is under outage and bypassed under normal conditions. The scheme may be further reviewed when at least two units of Nabinagar TPS commence firm generation.

ERLDC explained the scheme in 128th OCC.

OCC decided to implement the revised scheme and advised Powergrid to modify the scheme in coordination with CTU.

In 129th OCC, Powergrid informed that for implementing the scheme there is a requirement of modification in CCU which will be done by the OEM (Alstom). The same will be implemented by March, 2017.

In 130th OCC, Powergrid informed that the CCU at Sasaram is old and it is not possible to implement the revised scheme. So, the CCU needs to be changed for implementation of new scheme.

Powergrid/ERLDC may update.

Deliberation in the meeting

ERLDC advised Powergrid to at least block or bypass the existing run back scheme logic for the time being.

Powergrid informed that they will explore the possibilities to bypass the existing scheme.

B.13.6. 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s

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

In 130th OCC, OPTCL updated the completion schedule of inter-connecting system as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x315MVA 400/220kV Bolangir S/s	
a.	LILo of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir S/S	Only 7 towers left (Severe ROW problem). By May, 2017.
b.	LILo of one circuit of Katapalli-Sadeipalli 220 kV D/C line at Bolangir S/S	Charged on 04.05.16
2.	400/220 kV Keonjhar S/S	
a.	Keonjhar (PG)-Keonjhar (OPTCL) 220 kV D/C line	By 2017.

b.	Keonjhar (PG)-Turumunga(OPTCL) 220kV D/C line	By 2019.
3.	400/220kV Pandiabil Grid S/s: Expected by June'16	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C line	Dec, 2017.
b.	LILO of one circuit of Atri-Puri (Samangara) 220 kV D/C line at Pandiabil (PG)	May, 2017

OPTCL may update.

Deliberation in the meeting

OPTCL updated the status as above.

B.13.7. 220 kV inter-connecting lines of JUSNL with 2x315 MVA, 400/220 kV sub-stations at Chaibasa, Daltonganj & Dhanbad

In 125th OCC, JUSNL updated the latest status as follows:

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

JUSNL may update.

Deliberation in the meeting

JUSNL updated the status as above.

B.13.8. 220 kV inter-connecting lines of WBSETCL with 400/220 kV, 2x315 MVA Alipurduar & 2x500 MVA Rajarhat sub-stations

In 126th OCC, WBSETCL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x315MVA, 400/220kV Alipurduar sub-station	
a.	Alipurduar (POWERGRID) – Alipurduar (WBSETCL) 220kV D/c (Twin moose)	April, 2017
2.	2x500MVA, 400/220kV Rajarhat --- by Feb, 2017	
a.	Rajarhat-N. Town-3 (WBSETCL) 220 kV D/C line	Matching
b.	Rajarhat-N. Town-2 (WBSETCL) 220 kV D/C line	June, 2018
c.	Rajarhat- Barasat (WBSETCL) 220 kV D/C line	June, 2018

WBSETCL may update.

Deliberation in the meeting

WBSETCL updated the status as above.

Item No. B.14: 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

Members noted for compliance.

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 (WBPDC)-	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 (WBPDC)	Completed on 25 th February, 2016
18) 400kV Bakreswar (WBPDC)	Completed on 26 th February, 2016

- 19) 765kV Gaya(PG)
 20) 400kV Biharshariff(PG)
 21) 220kV Biharshariff(BSPTCL)

Completed on 1st November, 2016
 Completed on 3rd November, 2016
 Completed on 3rd November, 2016

The list of observations for the above sub-stations is already available at ERPC website (www.erpc.gov.in). Respective constituents are requested to comply and submit the report to ERPC for regular update.

Members may note.

Deliberation in the meeting

Members noted.

Item No. B.15: Inspection of Under Frequency Relays (UFR)

In 124th OCC, DVC informed that the UFR relays will be delivered by August, 2016 and the UFRs at 220/132/33 KV Ramgarh S/s will be replaced by next month.

In 125th OCC, DVC informed that the UFR relays are in transit and the UFRs at 220/132/33 KV Ramgarh S/s will be replaced by next month.

In 127th OCC, DVC informed that the UFR relays at 220/132/33 KV Ramgarh S/s will be replaced by December, 2016.

In 128th & 129th OCC, DVC informed that the UFR relays at 220/132/33 KV Ramgarh S/s will be replaced by January, 2017.

The proposed UFR audit schedule is placed below:

Sl No	Proposed Date	Substation/feeder inspected by the sub-group
1	April, 2017	220/132/33 KV Sampatchak of BSPTCL
2		132/33 KV Purnea of BSPTCL
4	May, 2017	220/132/33 KV Kalyaneswari of DVC
5		220/132/33 KV New Bishnupur of WBSETCL
6		132/33 KV Old Bishnupur of WBSETCL
7	June, 2017	BRS (Liluah S/Stn.) of CESC

Members may decide.

Deliberation in the meeting

Members noted.

Item No. B.16: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

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

NTPC communicated their activity of the preparation of Crisis Management Plan for countering the cyber attacks vide letter dated 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 for compliance.

Item No. B.17: 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 WBPDCI has received certification of IS 18001:2007 from BIS on 29.04.2016.

In 124th OCC, WBPDCI informed that Bakreswar Generating station has received certification of IS 18001:2007 from BIS.

In 130th OCC, WBPDCI informed that Sagardighi Thermal Power Project has also received certification of IS 18001:2007 from BIS in December, 2016.

Members may note and update the status.

Deliberation in the meeting

Members noted.

Item No. B.18: 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.18** with a copy to ERPC Secretariat.

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

SLDCs may update.

Deliberation in the meeting

Members noted for compliance.

Item No. B.19: 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.

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

Members may update.

Deliberation in the meeting

Members noted for compliance.

Item No. B.20: 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.

In 129th OCC, JUSNL and BSPTCL agreed to furnish the data.

For the month of February, 2017 data has been received from OPTCL, CESC & WBSETCL.

JUSNL BSPTCL & DVC may update.

Deliberation in the meeting

Members noted.

ERLDC informed that for better load/demand anticipation they need the above data of hourly scheduled and unscheduled power-cuts / load shedding.

ERPC secretariat agreed to share the data with ERLDC.

Item No. B.21: 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.

In 129th OCC, all the constituents are advised to comply.

Members may update.

Deliberation in the meeting

Members noted.

Item No. B.22: 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.

33rd 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.

In 126th OCC, OCC advised all the SLDCs to mention the constraints along with ATC/TCC figures.

WBSETCL is uploading the ATC/TCC figures in their website.

OCC advised DVC, JUSNL and Odisha to upload ATC/TTC figures along with the constraint details in their website.

OCC advised Bihar to compute ATC/TTC figures and submit to ERPC and ERLDC at the earliest.

In 129th OCC, BSPTCL informed that they will compute their ATC/TTC and furnished to ERPC/ERLDC.

Import TTC for Feb 2017

State	TTC (MW)	Reliability Margin	ATC (MW)	Remarks
WBSETCL	3960	300	3660	Not mentioned
OPTCL	1447	80	1367	Outage of one 220kV Meramundali-BhanjanagarCkt.
DVC	Not received			Received for month of Jan 17
BSPHCL	Not received			
JUSNL	713	100	613	1) 220 kV D/C Ranchi- Hatia-II 2) 132 kV Jamtara- Maithon 3) 132 kV Ramchandrapur- Adityapur line
SIKKIM	Not received			

130th OCC requested all the SLDCs to compute and send the ATC/TTC figures for the next month in advance along with the details like assumptions, constraints etc.

Members may update.

Deliberation in the meeting

BSPTCL informed that they will submit the ATC/TTC figures at the earliest.

Item No. B.23: Implementation of New Web Based Scheduling at ERLDC

As per the deliberation in 130th OCC meeting, a detailed workshop cum interactive Session with all Stakeholders/beneficiaries was arranged during 20-21 February, 2017, where in all eastern region IPPs, NTPC, NHPC, Regional entities and SLDCs except Sikkim SLDC participated. As per the decision taken in the workshop, parallel operation of WBES has been started with effective from 01st March, 2017. In this process all users are uploading their daily operation scheduling related data in new WBES module as well as in the old scheduling software. Depending upon the progress of the parallel operation, ERLDC would migrate to the new WBES software from 01st April, 2017. Till now the progress of parallel operation is satisfactory and we are planning to migrate with effective from 01st April, 2017.

Members may share their issues regarding above.

Deliberation in the meeting

ERLDC requested all the utilities to intimate their views for the new WBES software which is running in parallel.

Further, it was informed that if there are no operational/ technical issues with the WBES software, we will migrate to it w.e.f. 01.04.2017.

Item No. B.24: Long outage of important transmission elements

a) Non availability of Line Reactor of 400KV Malda-Purnea-I

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

In 129th OCC, Powergrid informed that the reactor will be dispatched by 25th January, 2017 and the same will be commissioned by February, 2017.

In 130th OCC, Powergrid informed that the reactor will be commissioned by end of February, 2017.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that the reactor commissioning was delayed due to some vibration issue and now it is expected to be commissioned by April, 2017.

b) 400kV Meramundali-Mendhasal S/C

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

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

In 124th OCC, OPTCL informed that restoration of tower 180 will take time due to water logging and the tower would be restored by December, 2016.

In 130th OCC, OPTCL informed that the line will be restored by 20th February, 2017.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the line was restored on 25th February, 2017.

c) 400kV Patna-Kishengunj D/C

Tower collapsed at Loc. 51 in Kankai river on 26.07.2016 and three nos towers at Loc no 128F/0, 128 G/0 and 128E/0 in Ganga river on 01.09.2016.

In 129th OCC, Powergrid informed that the work has been awarded.

In 130th OCC, Powergrid informed that line will be restored by July, 2017.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that line will be restored by July, 2017.

d) 400kV Purnea-Biharshariff D/C(under outage wef 23/08/16)

Three Nos.Tower(mid river) collapsed.

In 126th OCC, ENICL informed that the final assessment is under progress. The same will be submitted to ERPC and ERLDC.

In 130th OCC, ENICL informed that line will be restored by last week of June, 2017.

ENICL may update.

Deliberation in the meeting

ENICL informed that line will be restored by last week of June, 2017.

e) Tie bay of 125MVAR Bus reactor and 400kV Indravati-Indravati and Indravati(PG):

Under outage wef 18/03/16 due to R-Ph pole bursting of Tie CB. Due to non-availability of the tie bay, the Buses are coupled only via the tie bay of 400kV Rengali-Indravati and 400kVIndravati-Jeypore at Indravati and any outage of the lines would result in decoupling of the Buses.

In 125th OCC, Powergrid informed that main CB has some problem which will be taken care by OHPC/OPTCL.

In 129th OCC,OPTCL informed that the CB has reached at the site. The installation work will be completed by February,2017.

In 130th OCC, OPTCL informed that the work will be completed by February, 2017.

Powergrid/OHPC may update.

Deliberation in the meeting

OPTCL informed that the work will be completed by end of March, 2017.

f) 220 kV Waria – Bidhannagar-II

The line is under outage wef 20.08.16 due to collapse of one no of tower collapse.

In 129th OCC, DVC informed that the line will be restored by July, 2017.

In 130th OCC, WBSETCL requested DVC for early restoration of line in view of summer peak.

OCC requested DVC to expedite the work.

DVC may update.

Deliberation in the meeting

DVC informed that the line will be restored by mid of June, 2017.

g) 315MVA ICT-I at Meramundali

The ICT is under outage wef 12/11/16 due to damage after B-ph LA blasting.

In 129th OCC, OPTCL informed that the ICT reached the site and it will be in service by February 2017.

In 130th OCC, OPTCL informed that the ICT will be in service by 15th March, 2017

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the ICT will be in service by first week of April, 2017.

h) 220kV Meramundali-Bhanjanagar-I

The line is under outage w.e.f 25/11/16 for conductor replacement work. OPTCL may furnish the details of conductor replacement being done and the expected date of restoration.

In 128th OCC, OPTCL informed that the conductor replacement work will be completed by January 2017. OPTCL added that type of conductor is ACSR Zebra.

In 130th OCC, OPTCL informed that the conductor replacement work will be completed by end of March 2017.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that the conductor replacement work will be completed by end of March 2017.

i) Main bay of 315MVA ICT at Farakka(Tie element-400kV FSTPP-Malda-I)

The main bay is under s/d for upgradation w.e.f 06/05/16. Powergrid may update stating status of the upgradation.

In 125th OCC, Powergrid informed that Bus-I end is ready and will be charged, Bus-II end is bypassed and will be ready for charge after getting shutdown.

In 128th OCC, NTPC informed that the bay will be in service by 2nd week of January, 2017.

In 129th OCC, NTPC informed that the tie transformer-III has been charged and the shutdown will be allowed by next week. Powergrid informed that the work will be completed by January, 2017.

In 130th OCC, Powergrid informed that the element will be charged today.

Powergrid/NTPC may update.

Deliberation in the meeting

Powergrid informed that the element was charged on 9th March, 2017.

j) 50MVAR Bus Reactor-I at Farakka (alongwith main and tie bays)

Under shutdown w.e.f 31/05/16 for dismantling from old bay and re-installation in new bay in the dia of FSTPP GT#3.

In 130th OCC, Powergrid informed that the reactor will be charged by 1st week of March, 2017.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that they have requested for shutdown on 22nd and 23rd March, 2017 to complete the work.

k) Restoration of 400kV Bay-12 at Farakka STPS

Consequent to strengthening of 400kV Farakka – Malda D/C line, the associated bays at Farakka and Malda ends have also been uprated by PGCIL. However, Bay-12 at Farakka STPS connected to 400kV Bus-1, is yet to be put into service by Farakka. Under the circumstances, Farakka-Malda-I line is connected only to 400kV Bus-2 and 400/220kV ICT is also operating on Bus-2 through the tie CB of Farakka-Malda-I.

A fault involving 400kV Bus-2 will cause outage of both the ICT and Farakka-Malda-I. NTPC may therefore take necessary action for restoration of Bay-12 (connected to 400kV Bus-1) at the earliest.

NTPC may update.

Deliberation in the meeting

OCC advised NTPC to look into the matter and resolve at the earliest.

Item No. B.25: Submission of the first time charging documents for charging of the new elements

As per the NLDC and ERPC approved procedure for Interconnection of new Transmission Elements, Indenting agency has to submit detail formats related to first time charging of new transmission elements 10 days in advance of the proposed date for commissioning to ERLDC. However, ERLDC usually does not receive the detail format as per the procedure in time. After receipt of the first time charging format, ERLDC carries out system studies to envisage the change in system parameter with new element, validation of SCADA & voice communication, validation of protection and validation of SEM etc. before issuing the consent for charging of the new elements.

In this regard, indenting agencies are requested submit their new elements charging format at least 10 day ahead to ERLDC along with following additional details:

1. Minutes of the meeting (SCM/RPC) mentioning the original target date, Name of the Project package
2. Revised target date of project commissioning along with MoM of the meeting.
3. Reason for deviation from the target commissioning date of the new asset.

Members may comply.

Deliberation in the meeting

OCC advised all the constituents to comply.

Item No. B.26: Accounting of Tertiary Loading Arrangement at PGCIL s/station in ER

Auxiliary consumption of PGCIL EHV AC sub stations are usually met from HT feeders of the state Discom. In few substations of PGCIL, auxiliary consumption is met through tertiary winding (as alternate supply for reliability).

At present State net drawl through PGCIL substation in ER is being computed considering meter installed at feeders after LV side of Transformer. Those sub stations where auxiliary requirement is met through tertiary, States net drawl need to be computed by adding drawl through feeders after LV side of Transformer and auxiliary consumption through tertiary.

In NR, WR & SR, auxiliary power through is already being accounted in states net drawl.

In order to account for the drawl through tertiary for Auxiliary consumption, PGCIL is requested to:

1. Provide list of substations in ER where auxiliary supply is met through tertiary.
2. Install SEM on 33 KV tertiary side of transformers used for auxiliary supply.

Members may discuss.

Deliberation in the meeting

OCC advised Powergrid to submit the list of substations in ER where auxiliary supply is met through tertiary(both for 33 kV and 11kV level).

Powergrid agreed.

Item No. B.27: Expediting commissioning of the 4th 400/220kV ICT at Biharshariff

POWERGRID is executing the work of re-commissioning 220kV Tenughat-Biharshariff S/C line at 400kV as a consultancy project of JUSNL. The work is expected to be completed by end of June-17, subject to release of the balance amount payable to POWERGRID by JUSNL. After charging the line at 400kV, power flowing through this line towards Biharshariff will land at 400kV switchyard PGCIL. Since Biharshariff is a major load center of Bihar, this arrangement may cause heavy loading of the 3X315 MVA, 400/220kV ICTs at Biharshariff, which would become the only source for supplying power to the downstream S/Stns.

Since the 500MVA ICT earmarked for Biharshariff S/Stn may take around 2 years to be ready, PGCIL may arrange to divert a 400/220kV ICT at Biharshariff from other project/region.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that due to unavailability the proposed diversion of a 400/220kV ICT to Biharshariff is not possible.

Item No. B.28: LILO Connection of Inter-Regional tie line 132 KV Sonenagar-Rihand (UP,NR) Circuit-I (direct line) at NPGC,Nabinagar for providing startup power to NPGC -- BSPTCL

BSPTCL vide letter dated 18.02.17 intimated that LILO connection of inter-regional tie line 132kV Sonenagar-Rihand (UP,NR) Circuit-I (direct line) is urgently required at NPGC, Nabinagar for providing startup power for commissioning of Super Thermal Power Project (3x660MW) Unit # 1 which is expected to be commissioned in March,2017. At present 132kV Sonenagar-Rihand (UP,NR) Circuit-I remain charged on No Load from Sonenagar end & open at Rihand (UP) end.

BSPTCL requested for LILO Connection of 132 KV Sonenagar-Rihand(UP,NR) Circuit-I transmission line at NPGC ,Nabinagar for providing start up power.

BSPTCL may elaborate. Members may discuss.

Deliberation in the meeting

BSPTCL informed that NPGC, Nabinagar has applied for 65 MVA start up power and initially they will draw around 5-10 MW power through 132 kV Sonenagar-Rihand-I line LILoed at NPGC, Nabinagar. It was also pointed that 132kV Sonenagar-Rihand (UP,NR) Circuit-I is lying idle charged since last 5-6 years and presently it remains charged on no load from Sonenagar end & open at Rihand (UP) end.

Further, BSPTCL added that in order to cater the start up power from Sonenagar end they are strengthening the 132 kV Sonenagar GSS with double moose conductor which will be completed by March, 2017.

It was informed that NPGC, Nabinagar will only draw startup power for commissioning activities through the above LILO as an interim arrangement and injection of power/trial-run will be done after the completion of 400 kV ATS of NPGC, Nabinagar

OCC agreed for commencement of start up power through LILO of 132kV Sonnagar-Rihand-I line at NPGC, Nabinagar as consumer of BSPTCL and as an interim arrangement subject to the consent of NRPC.

Further, it was decided that the now the inter-regional tie-line will be 132 kV NPGC, Nabinagar-Rihand and requested Powergrid to install a new SEM at NPGC, Nabinagar end for accounting purpose.

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

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

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

In 130th OCC, ERLDC informed that the 220 kV Lalmatia data is not coming since Jan, 2016 and requested NTPC to look into the matter.

NTPC informed that the AMC of PLCC is with Powergrid and requested Powergrid to restore the PLCC communication at the earliest.

OCC advised NTPC to resolve the matter at the earliest.

Further, OCC advised all the respective constituents to ensure the availability of telemetry data to ERLDC. The updated status is enclosed at Annexure- B.29.

Members may update.

Deliberation in the meeting

*OCC advised all the respective constituents to ensure the availability of telemetry data to ERLDC. The updated status is enclosed at **Annexure- B.29**.*

Item No. B.30: Installation of PMUs in Eastern Region under URTDSM project

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

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

In 130th OCC, Powergrid submitted the latest status of PMU installation, which is given at Annexure- B.30.

POWERGRID may update the status.

Deliberation in the meeting

*The updated status as furnished by Powergrid is placed at **Annexure- B.30**.*

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

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

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

Members may update.

Deliberation in the meeting

Members noted.

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

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

Members may update the latest status.

Deliberation in the meeting

Members noted.

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

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

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

The updated status as updated by constituents & as intimated by Powergrid vide mail dated 19.10.16 is as given below:

	Scope (no. of location s)	Installed Locations	Number of locations where the results for 1st set of Measurements submitted	No. of locations where the results for 2nd set of Measurements submitted	Number of locations where the results for 3rd set of Measurements submitted	Number of locations where the results for 4 th set of Measurements submitted
JUSNL	67	27	21	19	13	3
BSPTCL	59	52	52	40	4	0
WBSETCL	73	68	43	3	2	0
OPTCL	164	102	102	90	79	0
SIKKIM POWER	12	9	6	6	0	0
POWERGRID ER1	99	99	99	47	0	0
POWERGRID ER2	40	40	40	40	17	0
POWERGRID ODISHA	42	42	42	42	40	0

It is requested to submit the fourth and balance third set measurement result at the earliest.

Further, the schedule for measurement as informed vide letter dated 20.01.2016 & mail dated 21.01.2016 are as follows:

Measurement Schedule		
<i>4th set</i>	<i>5th set</i>	<i>6th set</i>
<i>21st -30th Sep 2016</i>	<i>21st -31st Jan 2017</i>	<i>21st -31st May 2017</i>

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

Powergrid updated the latest status as follows:

	Scope (no. of location s)	Installed Locations	Number of locations where the results for 1st set of Measurements submitted	No. of locations where the results for 2nd set of Measurements submitted	Number of locations where the results for 3rd set of Measurements submitted	Number of locations where the results for 4 th set of Measurements submitted
JUSNL	67	27	17	17	13	11
BSPTCL	59	52	40	29	4	3
WBSETCL	73	68	43	4	3	1
OPTCL	164	102	100	90	79	1
SIKKIM POWER	12	9	6	6	0	0
POWERGRID ER1	99	99	99	47	0	0
POWERGRID ER2	40	40	40	40	17	0
POWERGRID ODISHA	42	42	42	42	40	0

Powergrid informed that most of scheduled measurements till fourth set has not been completed yet, it is requested to complete the measurements and submit the results at the earliest.

Powergrid added that they prepared an online format to submit the details of measurements. Powergrid requested to fill the Google form(<https://goo.gl/6375HJ>) for onward submission of measurements for better analysis of results.

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

Members may update.

Deliberation in the meeting

Members noted.

Item No. B.34: Mock Black start exercises in Eastern Region – ERLDC

i) The status of black start exercises

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

Sl no	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	U.Kolab	Last week of May, 2016	<i>Completed on 16th July 2016</i>	Last Week of January 2017	Completed on 25.01.17
2	Maithon (To be tested in islanded mode)	1 st week of June 2016	<i>Completed on 02.12.2016</i>	1 st Week of February 2017	
3	Rengali	2 nd week of June 2016	<i>Completed on 23rd Sept, 2016</i>	Last week of November 2016	Completed on 25.01.17
4	U. Indarvati	3 rd week of June 2016	<i>Completed on 16th July 2016</i>	2 nd week of February 2017	<i>Scheduled on 23.03.2017</i>
5	Subarnarekha	1 st week of October 2016	<i>Completed on 19.10.16</i>	1 st week of January 2017	
6	Balimela	3 rd week of October 2016	<i>Completed on 29.11.16</i>	1 st week of March 2017	<i>Scheduled on 24.03.2017</i>
7	Teesta-V	2 nd week of Nov 2016		Last week of February 2017	<i>Scheduled on 30.03.2017</i>
8	Chuzachen	Last Week of May 2016	<i>17th Jan, 2017 (Scheduled)</i>	January 2017	
9	Burla	Last Week of June 2016	<i>Completed on 28.07. 2016</i>	Last week of February 2017	<i>Scheduled on 23.03.2017</i>
10	TLDP-III	1 st Week of June 2016		2 nd Week of January 2017	
11	TLDP-IV	Last Week of June 2016	<i>Completed on 17.11.16</i>	1 st Week of February 2017	

In 130th OCC, OCC advised CHEP to finalize the date for mock black start exercise in consultation with Sikkim electrical department. CHEP agreed to carry out in March, 2017.

Members may update.

Deliberation in the meeting

Members updated the list as above.

Testing of DG sets meant for Black start

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

Constituents may kindly ensure compliance.

Deliberation in the meeting

Members noted.

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

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

In 126th OCC requested all the generators to share their governor response with ERLDC in the group (https://in.groups.yahoo.com/neo/groups/er_gov_respons/info). Members may also send their request for joining the group to erldcprotection@gmail.com.

ERLDC had uploaded the unit wise responses in the group "er_gov_respons@yahoogroups.co.in." i.r.o the following events for monitoring of RGMO response of generator:

- (1) On 05-Feb-17, at 12:24hrs 765kV Mainpuri-Bara ckt tripped along with both running units at Bara TPS (UP). Generation loss of around 1100MW occurred.*
- (2) On 21.02.17, at 1559 hrs, due to tripping of Kalisindh Unit-I & II the generation loss of 900 MW took place.*
- (3) On 23-02-2017 @ 16:15 Hrs During The Testing the unit-II of Kudankulam came from 958 to 650 MW, stabilized for 2 Minutes and then subsequently it tripped.*

ERLDC may update.

Deliberation in the meeting

Members noted.

Item No. B.36: Reactive Power performance of Generators

Generating stations have been monitored for certain sample dates in the month of February, 17.

Power Plant	Max and Min Voltage observed for Feb 17 (KV)	Date for monitoring (Feb 17)
Farakka STPS	424,408	24,25
Khalgaon STPS	424,402	29,08
Talcher STPS	413,402	24,27
Teesta	424,394	28,05
Bakreshwar TPS	412,392	16,25
Kolaghat TPS	427,401	16,18
Sagardighi TPS	--	--
MPL	422,409	27,18
Mejia-B	--	--
DSTPS	427,416	15,11
Adhunik TPS	424,411	24,23

Sterlite	--	--
Barh	--	--
JITPL	--	--
GMR	419,405	01,05
HEL	--	
Kodarma	424,404	27,25

ERLDC may present the reactive performance.

Deliberation in the meeting

ERLDC presented the response of the generators and members noted.

a) Schedule for reactive capability tests

The following was status of regarding reactive capability testing:

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

Members may update.

Deliberation in the meeting

Members noted.

b) Tap Position Optimization at Jeypore

Current Tap position at Jeypore ICT is 14. From scatter plot of 400/220 kV Jeypore S/S for the month February it is seen that 80% of time it is remaining in 1st quadrant and 20 % of time in 2nd quadrant. This means most of the time voltage at both 400 and 220 KV level remains above their nominal value and occasionally 400 kv side voltage going below nominal value. But 220 kv side voltage always remaining on the higher side. Also it is seen that although 80% of time scatter plot is staying in 1st quadrant but Max voltage is within 420 Kv. So if we reduce the Tap position then it will help to reduce 220 Kv voltage and further increase 400 kv side voltage which is remaining below 400 kV for 20% of time and within 400 to 420 kV for 80 % of time. So even after tap change 400 kV side voltage will stay mostly within 420 kV and may occasionally cross 420 kV by a very small margin. We also have reactors at Jeypore and Indravati for controlling high voltage at 400 kV. It is proposed that Tap may set to 12 from 14.

Members may express their opinion in this regards.

Deliberation in the meeting

OCC advised Powergrid to do the tap changing from 12 to 14.

Powergrid agreed to do the tap changing in off load condition.

PART C:: OPERATIONAL PLANNING

Item no. C.1: Anticipated power supply position during April'17

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of April'17 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.1.

Members may confirm.

Deliberation in the meeting

*Modified anticipated power supply position for the month of April, 2017 after incorporating constituents' observations is given at **Annexure-C.1**.*

Item no. C.2: Shutdown proposal of transmission lines and generating units for the month of April'17

Members may finalize the Shutdown proposals of the generating stations for the month of April'17 as placed at Annexure-C.2.

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 April, 2017 is given at **Annexure-C.2**.*

A. Submission of OCC approved outage to ERLDC

The procedure for transmission element outage was approved in 87th ERPC meeting. As per the procedure following need to be adhered by the outage indenting parties while applying OCC approved transmission element outages to ERLDC for approval;-

1. Request for outages which are approved by OCC must be sent by the indenting agency of the transmission asset at least 3 days in advance to respective RLDC by 1000 hours. (For example, if an outage is to be availed on say 10th day of the month, the indenting agency would forward such requests to the concerned RLDC on or before 7th day of the month by 1000 hours.)
2. In case the request for transmission element outage is not received within the timeline prescribed above, it will be assumed that the indenting agency is not availing the outage. However, indenting agency is duty bound to inform ERLDC at least 3 days in advance, if it is not availing the OCC approved outage.

Since last few months it was observed that indenting agencies were deviating from submission dates corresponding to their OCC approval date while submitting their request, which causes a lot of inconvenience to coordinate with multiple agencies and also to carry out system study before approve the outage request. In this regard, it is advised to submit the OCC approved outage request to ERLDC as per the outage procedure (at least 3 days advance) for final approval from ERLDC side. Receipt of the outage request violating the time line may be considered as cancelation of outage. Further, in case of any change of OCC outage schedule date as per the OCC approval, reason of deviation along with rescheduled date shall be mailed to ERPC and ERLDC both for consideration.

ERLDC may elaborate.

Deliberation in the meeting

OCC agreed with ERLDC and advised all the constituents to strictly follow the procedure as advised by ERLDC for availing transmission outage.

OCC also decided that for generators indenting utilities should inform ERLDC seven days in advance of the proposed date of taking shutdown.

Item no. C.3: Prolonged outage of Power System elements in Eastern Region

(i) Generating units:

Generating Station	UNIT NO	CAP(MW)	REASONS FOR OUTAGE	OUTAGE DATE	Restoration
GMR	2	350	PROBLEM IN ASH HANDLING	22-Feb-17	
ADHUNIK	2	270	TURBINE VIBRATION HIGH	5-Mar-17	
JITPL	1	600	CHP PROBLEM	7-Mar-17	
DPL	7	300	TUBE LEAKAGE	2-Feb-17	
BANDEL	5	210	DESYN DUE TO LOW SYSTEM	10-Mar-17	
KOLAGHAT	3	210	TUBE LEAKAGE	22-Feb-17	
KOLAGHAT	1	210	OVER HAULING	16-Feb-17	
KOLAGHAT	2	210	DESYN DUE TO POLLUTION ISSUE	24-Feb-17	
KOLAGHAT	6	210	BOILER TUBE LEAKAGE	7-Mar-17	
TENUGHAT	2	210	TURBINE MAINTENANCE	7-Nov-16	
BOKARO A	1	500	DESYN DUE TO LOW SYSTEM	13-Mar-17	
BOKARO B	3	210	BOILER TUBE LEAKAGE	15-Dec-16	
BOKARO B	2	210	BOILER TUBE LEAKAGE	5-Mar-17	
BOKARO B	1	210	TUBE LEAKAGE	13-Feb-17	
WARIA	4	210	TUBE LEAKAGE	8-Mar-17	
MEJIA	1	210	DESYN DUE TO LOW SYSTEM	28-Feb-17	
MEJIA	2	210	DESYN DUE TO LOW SYSTEM	1-Mar-17	
MEJIA	4	210	DESYN DUE TO LOW SYSTEM	7-Mar-17	
RAGHUNATHPUR	1	600	L.P. DIFFERENTIAL EXPANSION	27-Jan-17	
KODERMA	1	500	BOILER TUBE LEAKAGE	19-Jan-17	

(ii) Transmission elements

Name of the Line/Element	Outage	Reason
400 KV MEERAMANDALI- MENDHASAL S/C	23/05/16	TOWER COLLAPSED NEAR MENDHASAL, LOC NO 180,181,182.
400 KV PATNA-KISHANGANJ D/C	26/07/16	TOWER COLLAPSED AT LOC NO 51
400 KV BIHARSARIFF-PURNEA- I & II	23/08/16	Three numbers of tower badly damaged at location
220KV WARIA - BIDHANNAGAR-II	10/09/16	LINE UNDER B/D, TOWER COLLAPSED AT LOC NO 28
220 KV MERAMUNDALI – BHANJNAGAR-I	25/11/16	CONDUCTOR REPLACEMENT WORK
315 MVA ICT-I AT MEERAMUNDALI	12/11/16	UNDER B/D AS ICT GOT BURNT DUE TO B

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

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 February'17**

System frequency touched a maximum of 50.34Hz at 18:02Hrs of 17/02/17 and a minimum of 49.76Hz at 07:11Hrs of 01/02/17, 21:05Hrs of 03/02/17, 11:09Hrs of 23/02/17 and 22:09Hrs of 27/02/17. Accordingly, no report of operation of UFR has been received from any of the constituents.

Members may note.

Deliberation in the meeting

Members noted.

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

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

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

No report from any constituent has yet received. Hence, ERLDC would be considering 'Nil' report for all constituents for January'17.

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.3: Grid incidences during the month of February, 2017

SI no	Disturbance Place	Date	Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	Arrah	02-02-2017	00:22	0	110	At 00:22 hrs, B-N fault occurred at 220 kV Arrah – Sasaram S/C (Sasaram end: B-N, Z-I, F/C 7.35 kA, A/R started; Arrah end: Carrier received). A/R operation started at both end. But after 1000 ms, other two phase breakers tripped at Sasaram end on pole discrepancy resulting loss of total power supply at Arrah and its surrounding area i.e. Dumraon & Jagdishpur (all were being radially fed from Sasaram).	GD - I
2	Lalmatia	06-02-2017	16:40	0	66	At 16:40hrs, blasting of 132 kV Y & B phase CT of 132 kV bus sectionalizer at Lalmatia resulted tripping of multiple elements. 132 kV Kahalgaon and Dumka – II tripped from Lalmatia end on Z-IV protection. 132 kV Dumka – I feeder tripped from both end. 220 kV Farkka Lalmatia tripped from Farakka end. 220/132 and 132/33 kV ATR also tripped	GD - I
3	Bakreswar	13-02-2017	09:55	456	0	As 220 kV Bus-II was under shutdown, all the elements were connected to 220 kV Bus – I at Bakreswar. At 09:55 hrs, operation of bus bar protection at bus – II resulted tripping of all 220 kV feeders and 400/220 kV IBTs. Unit #3, 4 & 5 (units connected to 220 kV bus) were remain in service with house load. But unit #3 tripped after 22 sec due to drum level low because of not opening of bypass valve. Other two units sustained with house-load.	GD - I
4	CESC	23-02-2017	09:53	720	745	At 09:53 hrs, 132 kV Chakmir – Taratala – I tripped from both end due to B-N fault. Though fault was cleared by both ends in 300 ms, 132 kV BBGS – Chakmir Q/C tripped only from BBGS end in Z-II. Tripping of 132 kV BBGS – Chakmir Q/C resulted instant shutdown of all radially fed substations i.e. SRS (fed from Majherhat), P. ST(fed from Taratala), BBD Bag (fed from Taratala), Majherhat & Chakmir. Tripping of these s/s resulted load approx. 400 MW load loss. So power injected by BBGS flowed through 220 kV BBGS – 220 KV EMSS -132 KV EMSS – 132 KV Kasba (WBSETCL) resulted hunting in BBGS machines. At this time, 132 kV EMSS – Kasba(WBSETCL) T/C tripped from WBSETCL end in O/C protection and from CESC end due to carrier received from WBSETCL end and CESC system got islanded. BBGS U#1 and U#2 tripped due to over speed and U#3 tripped due to under frequency.	GD - I
5	Chandil	24-02-2017	09:05	0	97	At 09:05hrs, 220 kV Ranchi – Chandil S/C tripped due to Y phase CT burst at Chandil end. At the same time, 220 kV STPS – Chandil S/C tripped from Chandil end & 220 kV Ramchandrapur – Chandil S/C and 220 kV Ramchandrapur – Joda S/C tripped from Ramchandrapur end.	GD - I

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.4: Additional Agenda

1. Retention of power by NTPC from Barh-II for development of Market in line with the provision mentioned in the PPA —Agenda by GRIDCO

As per MoP, GoI allocation notification dtd 03.07.2012, GRIDCO have allocation of 12.57% out of firm allocation of 85% from Barh-II. The notification stipulates that allocation will be operative for pro-rata distribution to the quantum of electricity mentioned along with distribution of un-allocated power from the declared capacity of the generating station (Point no 2 of notification). The notification of MoP further stipulates that, the above allocation will further be subject to the Power Purchase Agreement entered into between NTPC Limited with State power utilities of Eastern Region.(Point no 3). The allocation was revised by ERPC vide letter dtd. 24.12.14 with reference to MoP order due to the cancellation of allocation of power to Madhya Pradesh from un- allocated share of power 15% from Barh-II and the same was apportioned among Eastern Region beneficiaries and thus the share of GRIDCO has become 14.788235% out of 100% of share allocation. In this context, it is to mention that, as per the clause 2.2.3 of the PPA signed between NTPC and GRIDCO, it is mentioned that in line with the provisions of National Electricity Policy, upto 15% power from the station shall be retained by NTPC for development of market. Thus share of Barh-II includes firm allocation 70%, 15% un-allocated quota and 15% for merchant purpose as in the case of Farakka-III. Hence, with the surrender of power from un-allocated quota by Madhya Pradesh, the share of GRIDCO should have been 12.57% out of 85% instead of 14.788235% out of 100%. Hence, it seems that instead of selling the power in the power market, NTPC have thrust upon its power by raising the allocation of firm beneficiaries thus violating the directives as mentioned in the National Electricity Policy and also against the provisions mentioned in the PPA. Hence, NTPC may be directed to retain 15% of power for its market development as in case of Farakka-III and accordingly to bear its fixed cost upto 15% and beneficiaries to pay their dues as per their share allocation from 85%.

Deliberation in the meeting

OCC advised GRIDCO to take up the issue with appropriate authority.

Meeting ended with vote of thanks to chair.

ANNEXURES

Annexure- A

Participants in 131st OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 20.03.2017 (Monday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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Participants in 131st OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 20.03.2017 (Monday)

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Participants in 131st OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 20.03.2017 (Monday)



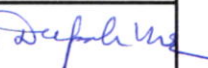
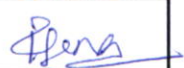

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Participants in 131st OCC Meeting of ERPC

Venue: ERPC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 20.03.2017 (Monday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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65	Amrit chowdhury	Engineer, ERLDC	8044834926	amitchowdhury31@gmail.com	
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Annexure-B.3 (I)

Schemes of Eastern Region funded under PSDF

State / UT	Sr. No.	Details of the Scheme	Nos. of Schemes	Grant Sanctioned (in Rs Crores)	Date of Sanction	Funds released (in Rs Crores) as on 30.11.2016	% age of fund Disbursed against Grant sanctioned
West Bengal	1.	Renovation and Upgradation of protection system of substations	2	108.60	31/12/2014	11.04	10.16%
	2.	The Renovation and Modernization of 220/132 kV STPS switch yard and implementation of Substaion Automation System.		23.48	5/9/2016	0	0%
Bihar	3.	Renovation and Upgradation of protection system of substations	2	64.22	11/05/2015	18.68	29.09%
	4.	Installation of capacitor bank for Improvement of Voltage profile in BSPTCL, Bihar.		18.88		0	0%
Odisha	5.	Renovation and Upgradation of protection system of substations	1	162.50	11/05/2015	19.52	12.01%
Eastern Regional Power Committee (ERPC)	6.	Creation and Maintanance of Web based Protection Database Management System and Desktop based Protection Setting Calculation Tool for Eastern Regional Grid.	1	20.00	17/03/2016	4.94	24.7%
POWERGRID	7.	Installation of STATCOMs in ER at Ranchi- New,Rourkela, Kishanganj and Jeypore substation of POWERGRID.	1	630.28	5/1/2016	0	0%
TOTAL			7	1027.96			

Reporting Format to the PSDF Project Monitoring Group				
1. Name of the Scheme				
1.1 Name of the substation and its Location				
1.2 Executing Agency				
1.3 State/Region				
2. Date of Sanction order				
2.1 Date of Agreement of Entity with State Govt./NLDC				
2.2 Total Approved Cost of the Scheme				
2.3 Approved Grant by Monitoring Committee (Rs. In Lakhs)				
2.4 Date of Requisition by the Entity				
2.4.a) date and Reference of LOA				
2.4.b) Amount of LOA				
2.5 Date of Disbursement and amount				
2.5.1 : 1st Installment				
2.5.2: IIrd installment				
2.5.3: IIIrd installment				
2.6 Date of Scheduled completion of Work				
2.7 Date of handing over of Site to entity (in case of turnkey projects)				

Report for the Month of MM / YY							
No.	Supply Description	Qty. AS PER LOA	Quantity Received during Month	CUMMULATIVE PROGRESS Till date		BALANCE	Remarks
				Sch.	Act.		
1	item Details						
1.1							
1.2							
....							
	Erection Description	works as per LOA	Progress During Month	CUMMULATIVE PROGRESS Till date		Balance	
2	work details						
2.1							
2.2							
....							
3	Others						
Signature with seal of the Nodal Officer							

A meeting between ERLDC, Teesta – III and Teesta – V was held at ERLDC, Kolkata on 08-03-2017, to discuss various issues like water requirement of respective stations for generation, generation pattern during lean season, water sharing methodology between Teesta – III & V, technical parameters of respective stations and issues to be considered during water release for silt flushing and also for other emergency work.

GM, ERLDC welcomed all officers from, Teesta – III of Teesta Urja Limited and Teesta – V of NHPC Ltd. and sensitized both generating companies about issues likely to be faced in future and need for close co-ordination between Teesta – III and Teesta – V on daily basis regarding water inflow, release and generation pattern. Further, both parties were requested to flag their issues and inform their technical parameters / characteristics. The basic operation philosophies of the two hydro stations are:

1. Teesta – III entire power is being sold in Power Exchange, so its generation pattern is uncertain and it is market driven. Whereas entire capacity of Teesta – V is allocated to Eastern Region beneficiaries through Ministry of power share allocation and Teesta – V declares its availability to ERLDC on daily basis and ERLDC prepares its schedule as per requisition received from its beneficiaries. Teesta – V generation pattern is fixed and during lean season Teesta - V only generates during peak hour (18:00 Hr to 22:00 Hr). Since the water released by Teesta-III essentially becomes the inflow for Teesta-V, the Generation pattern and release by Teesta – III needs to be co-ordinated with Teesta – V to enable the latter meet the obligation of generating full capacity during peak hours.
2. Water release by Teesta – III in case of planned and unplanned flushing, any maintenance work, administrative issues etc. also needs to be duly informed to Teesta-V.

Further, TUL and NHPC shared the following information pertaining to their respective plants:

Technical parameter

Teesta – III (Teesta Urja Limited)

- Installed Capacity: $6 \times 200 \text{ MW} = 1200 \text{ MW}$.
- Situated on the up-stream of Teesta – V, NHPC Ltd. Project.
- Intake River: Teesta River with Diversion Dam at Chungthang.
- Run of the River (RoR) with 4 and half hour pondage. Underground Power Station.
- Vertical Pelton Turbine for High Head low Discharge.
- Water Discharge detail:
 - Mandatory water release for environmental requirement: **3 cumecs**
 - 175 Cumecs water release for 1200 MW Generation.
 - 29.167 Cumecs water release for 200 MW Generation.
 - 0.14583 Cumecs water release for 1 Mw Generation.
 - (Cumecs => Cubic Meter flow per Sec i.e. volume release rate of water)**
 - Total water Release for 1 MWhr Generation = $0.14583 \times 3600 = 525 \text{ Cubic Mtr.}$
 - Mandatory Water Release for 1 Hour: $3 \times 3600 = 10800 \text{ Cubic mtr.}$
- FRL: 1585 Mtr

- MDDL: 1565 Mtr.
- Reservoir Live Storage:
MCM = Million Cubic Meter
20 Mtr[=difference :FRL – MDDL] equivalent to **3.33 MCM** (Million Cubic Meter)
Mandatory water release for 1 day = $3 \times 24 \times 3600 = 259200$ Cubic Mtr \cong **0.25 MCM**
Maximum vol. of water available for generating power = $(3.33 - .25)$ MCM water = **3.08 MCM**

Equivalent Electrical Energy

$$= (3080000 / 525) \cong 5866 \text{ MWHr}$$

Duration at full capacity $\cong (5866 / 1200) \cong 4.89$ Hr

\cong Around 5 Hr Generation at 1200 MW capacity.

- For 1 Mu generation / day by Teesta – III total water release required
 $= 525 \times 1000 = 525000 = .525 \text{ MCM} + 0.25 \text{ MCM}$ (Mandatory water release)

Teesta – V (NHPC Limited)

- Installed Capacity: $3 \times 170 \text{ MW} = 510 \text{ MW}$.
- Situated on the Down-stream of Teesta – III, TUL Project. Around 1543 sq.km catchment area between Teesta – III and Teesta – V. Travel Time from Teesta-III TRT to Teesta-V is around 1 Hr 45 min during peak generation and during flushing the travel time from Teesta-III dam to Teesta-V is about 4 Hr (this shall be verified after receiving river cross-sections between Teesta-III dam its TRT outlet and carrying out routing study)
- Intake River: Water Released from Teesta – III and Dikchu Nala and Kanak River. Approximate 60 % water from Teesta – III and 40 % from catchment area of Teesta – III and Teesta – V.
- Run of the River (RoR) with 3 Hour pondage. Underground Power Station.
- Vertical Francis Turbine for Medium Head, high Discharge.
- Water Discharge detail:
97.5 Cumecs water release required for 170 MW Generation.
0.5735 Cumecs water release for 1 Mw Generation.
(Cumecs \Rightarrow Cubic Meter per Sec water flow rate)
Total water Release for 1 MWhr Generation = $0.5511 \times 3600 \cong$ **2065 Cubic Mtr.**
- FRL: 579Mtr
- MDDL: 568Mtr.
- Reservoir Live Storage:
MCM = Million Cubic Meter
11Mtr[difference: FRL – MDDL] equivalent to **5.4MCM** (Million Cubic Meter)

Energy Equivalent at FRL = 5.4 MCM water

$$= (540000 / 2065) \cong 2615 \text{ MWHr}$$

Duration at full capacity $\cong (2615 / 510) \cong 5.12$ Hr

≅ Around 5 Hr Generation at full capacity 510 MW.

- Environmental flow of 1 cumec needs to be considered at Teesta-V also.
- For 1 Mu generation / day by Teesta – V total water release
= $2065 * 1000 = 2065000 = 2.065 \text{ MCM}$

Points discussed during meeting are as follows:

1. Teesta-V power station has been in operation since 2008 and it has a fixed generation pattern. Considering that entire power from Teesta III HEP is being sold through exchange, Teesta-III may have a random peaking pattern which may disturb the set peaking pattern of Teesta-V. NHPC emphasized that since all beneficiaries of Teesta-V heavily rely on the support provided by the stations during peak hours of the dry season, it needs to be ensured that the present generation pattern of Teesta-V remains undisturbed. For this Teesta – V was also purposed that, the total inflow into Teesta-III reservoir in a day should be released from the reservoir within 24 hours. To further reduce the uncertainties of water availability at Teesta-V, it was discussed and agreed that TUL will establish communication system with Teesta-V and provide water level data on real time basis to NHPC (Teesta-V) through telemetry. Based on these information and schedule of generation of Teesta-III for the entire day, day-ahead schedule for Teesta-V can be prepared more accurately. The same was agreed to by TUL. NHPC's main concern is to deliver power as per its schedule during low discharge between mid of October to mid of May. Teesta – III also requested Teesta - V NHPC in turn, may also provide real time reservoir data of Teesta V HEP to TUL.
2. Teesta-V has time tested and efficient silt flushing procedure since commissioning. Now TUL has to make silt flushing procedure for Teesta-III considering that the existing flushing procedure at Teesta-V does not get disturbed. As such after preparing silt flushing procedure by TUL, same shall be shared with NHPC for any modifications/clarifications. After finalizing the procedure by both the parties, the same shall be shared with ERLDC. The procedure may also incorporate Emergency conditions such as sudden increase in silt concentration due to high flood, landslide etc. However, the efficacy of in-tandem flushing at Teesta-III and Teesta-V shall be established after taking few sediment samples in between the two projects preferably in the upstream of Teesta-Tolungchu confluence to assess whether sediment being flushed out from Teesta-III reservoir reaches Teesta-V in the same high concentration or dilutes itself. After validating the same in current monsoon, the procedure for in-tandem and co-ordinated flushing shall be modified. All eventualities of emergency nature w.r.t. depletion of their reservoir shall be duly communicated by TUL. TUL also needs to provide River Cross Section d/s of Teesta III Dam up to its Tail Race (TRT) outlet to ascertain the travel time during flushing operation.
3. Any information regarding unit start & stop for maintenance work, sudden water release for any construction related work or for any other reason, machine tripping should also be intimated by Teesta-III to Teesta –V and ERLDC on immediate basis.
4. TUL to provide its salient feature to NHPC. A copy of Reservoir Elevation Area capacity curve of Teesta-III was handed over to NHPC during the meeting.
5. Monthly Co-ordination Meeting will be held between TUL and NHPC to sort out coordination issues, if any, related to operation, silt flushing etc. of Teesta III HEP and Teesta V HEP.

Annexure-B.9

S.No	MAKE	Date/Year of SEM Installation	ERLDC_ID	NEW MTR NO	LOCATION	Time Drift (Min)
1	L&T	2006	EM-07	NP-5086-A	BINAGURI(PG)	11
2	L&T	2006	EM-09	NP-5088-A	BINAGURI(PG)	12
3	L&T	2006	EM-10	NP-5888-A	BINAGURI(PG)	13
4	L&T	2008	ER-85	NP-5962-A	JEYPORE(PG)	49
5	L&T	2008	ER-34	NP-5957-A	JEYPORE(PG)	52
6	L&T	2008	ER-35	NP-5958-A	JEYPORE(PG)	55
7	L&T	2008	ER-53	NP-5946-A	SILIGURI(PG)	10
8	L&T	2008	ER-40	NP-6464-A	BIRPARA(PG)	-11
9	L&T	2008	ER-59	NP-6478-A	MALDA(PG)	-16
10	L&T	2008	ER-12	NP-6451-A	MAITHON(PG)	-11
11	L&T	2008	ER-41	NP-6490-A	BIRPARA(PG)	-10
12	L&T	2011	ER-44	NP-5892-A	BIRPARA(PG)	35
13	L&T	2012	EM-96	NP-5068-A	DALKHOLA(PG)	23
14	L&T	2013	EP-56	NP-5233-A	MUZAFFARPUR(PG)	13
15	L&T	2013	EP-57	NP-5234-A	MUZAFFARPUR(PG)	15
16	L&T	2013	ER-58	NP-7555-A	MALDA(PG)	18
17	L&T	2013	EP-72	NP-7935-A	SUBHASGRAMA(PG)	11
18	L&T	2013	EP-55	NP-7969-A	DALKHOLA(PG)	16
19	L&T	2013	EP-83	NP-7828-A	PURNEA(PG)	12
20	L&T	2013	EP-84	NP-7829-A	PURNEA(PG)	16
21	L&T	2013	EP-93	NP-7612-A	BERHAMPORE(PG)	19
22	L&T	2013	EP-94	NP-7993-A	BERHAMPORE(PG)	17
23	L&T	2014	EN-16	NP-7938-A	SUBHASHGRAM(PG)	12
24	L&T	2015	EN-96	NP-7881-A	RANCHI(PG)	15

West Bengal State Electricity Transmission Company Limited

(A Government of West Bengal Enterprise)

CIN: U40109WB2007SGC113474; Website: www.wbsetcl.in; Phone / Fax No. (033) 2334 9020

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



OFFICE OF THE CHIEF ENGINEER STATE LOAD DESPATCH CENTRE

Memo no: SLDC/HOW/18/1787

Dated: 07.03.17

To

The Member Secretary,
ERPC, Tollygange, Kolkata:

Sub. A report on total load connected with KTPP 132 kv bus during summer peak hours:

(Ref: Discussion in the last OCC regarding feasibility of synchronising Kol-Kol (DVC) tie)

Sir,

In reference to above following status of connected load on 132 KV bus of KTPP is given for further load study and for appraisal related to the above mentioned matter.

Sub-station	Loading
Uluberia	110 MW
Bagnan	60 MW
Kolaghat	112 MW (including traction)
tamluk	81 MW (including traction)
KTPP station load (2*31.5 MVA reserve transformers)	25 MW
Feed extension of traction from Balichak, Haldia sometimes without pre-intimation in eve peak to Kolaghat / Tamluk s/stns	16 MW
total	404 MW
Considering a 7% load growth this year total	404 MW + 28 MW= 432 MW

With existing 3 numbers of 160 MVA auto transformers at KTPP this loading is nearing to full loading of the transformers and it will not satisfy (n-1) condition in evening peak hours.

In addition to above it may also be noted that the loading of 2x315 MVA (400 / 220 kv) IBTs at KTPP reached already 410 Amps at HV side per transformer due to sudden forced outage of KTPS Stg-I units (unit number 1,2,3) connected at 220 kv bus as per verdict of Honourable NGT (National Green Tribunal) of Supreme Court. It is apprehended that during ensuing peak summer season the loading of each transformer will reach to the tune of full load or will exceed the full load in absence of any generation at 220 kv bus connected machines of KTPP. So under such circumstances it would not be wise to connect any additional load on KTPP 132kv bus (i.e. through Kolaghat (WBSETCL)- Kolaghat (DVC) tie during evening peak hours to avoid network congestion / untoward hazardous situation in the system. However as per existing practice we always co-operate with DVC for drawing some radial load through Kolaghat-Kolaghat (DVC) tie line during hours other than peak hours on prior / real time request from DVC. This is for your kind information and necessary actions please.

Thanking you

Yours sincerely

Chief Engineer, SLDC,
WBSETCL

Annexure- B.13.2

SI No	Details of the activity	Resource Status	Target date of Completion	Remarks
A	TOWER ERECTION(4 Nos are to be Completed)	Manpower/Material Availability		
	Location 9/0	Manpower is available, last lot of material is in transit and will be received by 10.03.2017.	25.03.2017	Foundations for all the 64 towers are complete and 59 towers have been erected. Erection work of three more towers is in progress. All the erection work will be completed by 29.03.2017
	Location 36/0		29.03.2017	
	Location 38/0		25.03.2017	
	Location 39/0		29.03.2017	
B	STRINGING OF CONDUCTOR ALONG WITH OPGW CABLE			
	GANTRY - Loc 1/0	Stringing gangs are available.	25.03.2017	9 Kms of stringing completed and 2 Kms is in progress. Stringing will be completed by 04.04.2017
	Loc 1/0 - Loc 3/0		25.03.2017	
	Loc 3/0 - Loc 6/0		28.03.2017	
	Loc 6/0 - Loc 9/0		25.03.2017	
	Loc 9/0 - Loc 11/0		22.03.2017	
	Loc 11/0 - Loc 15/0		22.03.2017	
	Loc 23/0 - Loc 24/0		21.03.2017	
	Loc 24/0 - Loc 25/0		21.03.2017	
	Loc 25/0 - Loc 26/0		22.03.2017	
	Loc 29/0 - Loc 30/0		26.03.2017	
	Loc 30/0 - Loc 31A/0		25.03.2017	
	Loc 31A/0 - Loc 32/0		28.03.2017	
	Loc 32/0 - Loc 33/0		28.03.2017	
	Loc 33/0 - Loc 36/0		04.04.2017	
	Loc 36/0 - Loc 39/0		04.04.2017	
	Loc 39/0 - Loc 42/0 - LILO LOC 008		04.04.2017	
C	SUBSTATION BAY ACTIVITIES	Work is in progress.		Information is already sent to M/s SIEMENS the OEM for testing and commissioning of C & R panels. CEA will be intimated for inspection after completion of the testing.
	Erection Of Control & Relay Panel		15.03.2017	
	Cabling. Termination and loop checking		25.03.2017	
	Establishment of voice communication and intertripping.		10.04.2017	
	Testing & Commissioning		31.03.2017	
	Intimation to CEA for bay inspection & charging clearance.		01.04.2017	
D	Application to CEA for inspection and charging clearance of the transmission line.	Application to CEA for inspection and accord charging clearance for the line.	05.04.2017	CEA will be intimated for inspection after completion of the stringing.

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

1. State/Centre :
2. Month :
3. Year :

[illegible]

Long term issues with real time data availability in eastern region:-

- Another **31 days gone but JITPL** data yet be restored by JITPL.(JITPL Stopped reporting to ERLDC since **Dec 13,2016**)
- No redundant Communication channel in eastern region for real time telemetry over IEC 101, IEC 104 as well as over ICCP protocol.

No VOICE over VOIP

- IPP : JITPL, GMR, IBEUL.
- POWERGRID : Bolangir , Indravati , Jeypore , Keonjhar, Purnea 400 kV, Purnea 220 , Baharampur 400kV , Rourkela , Lakhisarai, Rengali, Dalkhola (PG), Birpara, Kishanganj,,Pandiabili.
- NTPC : Nabinagar.

Non availability of Unit side data

- Farakka Unit #6, Unit #5 (erroneous data).
- Barh Unit #5 HV data.
- Sagardighi Unit #3.
- Teesta V HPS unit data.
- Rangit HPS GT Data.

OLTC

1. NEW SASARAM @ 1500 MVA 765/400 kV ICT 1
2. ANGUL @ 1500 MVA 765/400 kV ICT 1
3. ANGUL @ 1500 MVA 765/400 kV ICT 3
4. ANGUL @ 1500 MVA 765/400 kV ICT 4
5. JHARSUGUDA @ 1500 MVA 765/400 kV ICT 1
6. JHARSUGUDA @ 1500 MVA 765/400 kV ICT 2
7. BOLANGIR @ 315 MVA 400/220 kV ICT 1
8. BIHARSHARIF @ 315 MVA 400/220 kV ICT 1
9. BIHARSHARIF @ 315 MVA 400/220 kV ICT 3
10. INDRAVATI (2ND ICT) @ 315 MVA 400/220 kV ICT 1
11. INDRAVATI (2ND ICT) @ 315 MVA 400/220 kV ICT 2
12. KEONJHAR @ 315 MVA 400/220 kV ICT 1
13. KEONJHAR @ 315 MVA 400/220 kV ICT 2
14. MALDA @ 315 MVA 400/220 kV ICT 1
15. MUZAFFARPUR @ 315 MVA 400/220 kV ICT 3
16. RANCHI @ 315 MVA 400/220 kV ICT 1

OLTC

19. RANCHI @ 315 MVA 400/220 kV ICT 2
20. RENGALI @ 315 MVA 400/220 kV ICT 2
21. ROURKELA @ 315 MVA 400/220 kV ICT 3
22. CHAIBASA @ 315 MVA 400/220 kV ICT 1
23. CHAIBASA @ 315 MVA 400/220 kV ICT 2
24. CHAIBASA @ 315 MVA 400/220 kV ICT 3
25. SUBHASGRAM @ 315 MVA 400/220 kV ICT2
26. KISHANGUNJ @ 500 MVA 400/220 kV ICT 1
27. KISHANGUNJ @ 500 MVA 400/220 kV ICT 3
28. BARH @ 200 MVA 400/132 kV ICT 1
29. BARH @ 200 MVA 400/132 kV ICT 2
30. LAKHISARAI @ 200 MVA 400/132 kV ICT 3
31. ARRAH @ 100 MVA 220/132 kV ICT 1
32. ARRAH @ 100 MVA 220/132 kV ICT 2

NTPC

- Lalmatia: **Partial data is coming.**
- Farakka STPS:
 - Unit #5 MW and MVAr data not matching with site data (As per inputs from NTPC, This will be done during overhauling of Unit#5)
 - Unit # 6 LV side not available.
- Nabinagar NTPC :
 - Alternate Data channel not provided.
 - Unit HV side data.
 - **No VOIP.**
- Barh STPS:
 - MW/MVAr flow of Patna – 1, Patna – 2 , Gorakhpur – 2, Kahalgaon –2, HV side of Unit #5.

POWERGRID

- **Data Intermittent /not available:**
 - Purnea 400kV (Frequent Failure of RTU)
 - Ranchi 400kV, Baripada, Gaya, Angul, Chaibasa, Banka, Lakhisarai.
- **VOIP for following station not yet provided:**
 - Bolangir , Indravati , Jeypore , Keonjhar
- **VOIP not Working:**
 - Purnea 220 , Baharampur 400kV , Rourkela , Lakhisarai, Rengali,, Dalkhola , Birpara, Kishanganj, ,Pandiabili.

IPP

- **IBEUL** : Data and Voice is not available after opening LILO connection. Stand by channel upto Back up ERLDC not provided.
- **JITPL** : No data as well voice communication available between JITPL and ERLDC.
- **TEESTA #3** : VOIP started working. Stand by channel not yet provided.

WBSETCL

➤ Following station data not available:

- Dharampur 220,
- Krishnanagar 220,
- Hura 220,
- Foundry Park 220.
- Dalkhola
- Bantala
- Lakshmikantapur
- New Town
- Sagardighi :
 - Data intermittent.
- **Kolaghat TPS** : Kharagpur #1 MW/MVAR flow not available.

BSPHCL

➤ Data Intermittent /not available:

- Dumraon, Sonenagar, Khagaul ,
Darbhanga, Dehri , sultangaunj ,
Lakhisarai, Karmanasa, Kahalgaon,
Jamaui , Banka, Gopalganj, Kisanganj,
Arrah ,Rajgir,Sipara ,Hajipur(New),
Pusauli, Valmikinagar, Koshi, Begusarai,
Gopalganj, Hajipur

JSUNL

➤ Data Intermittent / not available:

- Hatia New 220,
- Dumka 220.
- Patratu
- Deoghar
- Garwh
- Goelkera
- Jamtarta
- Kendoposi

DVC

➤ Data Intermittent / not available:

- Kolaghat
- Kharagpur
- Jamuria

➤ Data Not provided:

- Giridhi 220,
- Durgapur TPS (DSTPS): Highly intermittent.

GRIDCO

- MW/MVAr flow of Meeramandali – GMR line.
- NALCO Data is not available.

PMU Installation and commissioning status of ER as on 16.02.2017

S.No	Region	State	Sub-Station	Owner/ Utility	S/S type	PMU	TOTAL PANEL QTY	PMU Delivery status	Cable Delivery status	Erection	Cable laying	CT/PT/DI termination	Commiss ioning	Integration	SAT	Remarks
			78			286	175	59	59	42	35	31	31	16	27	
1	ER-II	West Bengal	Arambagh	WBSETCL	CR	3	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
2	ER-II	West Bengal	BAKRESHWAR TPS	WBSETCL	CR	4	1	Yes	Yes	done	pending	pending	pending	Pending	pending	Panel erected. Cable laying pending due to permission issue.
3	ER-II	West Bengal	Bidhannagar	WBSETCL	CR	3	1	Yes	Yes	done	done	pending	pending	Pending	pending	Panel erected. Cable laying and termination at PMU panel completed. CT/ PT/ DI interfacing pending due to permission issue.
4	ER-II	West Bengal	JEERAT	WBSETCL	CR	2	1	Yes	Yes	done	pending	pending	pending	Pending	pending	After stoppage of work for 2 months due to permission issue, WBSETCL has provided interfacing point details on 16.02.17. CT cable shortage issue may arise as star point CT connection not available at Jeerat.
5	ER-II	West Bengal	Kolaghat TPS	WBSETCL	CR	4	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
6	ER-II	West Bengal	KASBA	WBSETCL	CR	3	1	Yes	Yes	done	pending	pending	pending	Pending	pending	After stoppage of work for 2 months due to permission issue, WBSETCL has provided interfacing point details on 15.02.17. But sub-station in-charge informed us that they will not allow us to work from 10.02.17 to 03.03.17.
7	ER-II	DVC	DSTPS	DVC	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
8	ER-II	DVC	Kodarma TPS	DVC	CR	3	1	Yes	Yes	done	done	done	done	Pending	done	Communication panel does not exist.
9	ER-II	DVC	MEJIA-B	DVC	CR	2	1	Yes	Yes	done	done	done	done	done	done	Integrated on 07.12.2016
10	ER-II	DVC	Maithon RB TPS	DVC	CR	2	1	Yes	Yes	pending	pending	pending	pending	Pending	pending	Work started on 04.07.2016. Panel shifted. Team demobilised due to access issue and panel location issue.
11	ER-II	DVC	Raghunathpur TPS	DVC	CR	3	1	Yes	Yes	done	done	done	done	Pending	done	Communication link was not available during work.
12	ER-II	DVC	MEJIA	DVC	CR	5	2	Yes	Yes	done	done	done	done	Pending	done	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mtrs. Will be integrated on Mar 2017.
13	ER-II	DVC	Bokaro	DVC	CR	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 24.06.2016
14	ER-II	DVC	CTPS(Chanderpura)	DVC	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mtrs. Will be integrated on Mar 2017.
15	Odisha	Orissa	Budhipadar	OPTCL	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.
16	Odisha	Orissa	MENDHASAL	OPTCL	CR	2	1	Yes	Yes	done	under progress	pending	pending	Pending	pending	
17	Odisha	Orissa	MERAMANDALI	OPTCL	CR	6	2	Yes	Yes	done	under progress	pending	pending	Pending	pending	
18	Odisha	Orissa	RENGALI	OPTCL	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Integration delayed because CAT-6 cable is faulty.
19	Odisha	Orissa	U.KOLAB	OPTCL	CR	2	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
20	Odisha	Orissa	BALIMELA(H)	OPTCL	CR	3	1	Yes	Yes	done	done	pending	pending	Pending	pending	DC supply issue resolved. CT/ PT/ DI interfacing permission required.
21	ER-II	West Bengal	Durgapur	Powergrid	CR	5	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 30.05.2016.
22	ER-II	West Bengal	FARRAKA	NTPC	CR	5	2	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	Road permit requested for cable.
23	Odisha	Orissa	Indrawati	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
24	Odisha	Orissa	Indrawati HPS	OPTCL	CR	1	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
25	Odisha	Orissa	JEYPORE	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
26	ER-II	West Bengal	MAITHON	Powergrid	CR	7	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 21.06.2016.
27	ER-II	West Bengal	MALDA	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 24.06.2016
28	Odisha	Orissa	Rengali	Powergrid	Kiosk	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 04.05.2016

PMU Installation and commissioning status of ER as on 16.02.2017

S.No	Region	State	Sub-Station	Owner/ Utility	S/S type	PMU	TOTAL PANEL QTY	PMU Delivery status	Cable Delivery status	Erection	Cable laying	CT/PT/DI termination	Commissioning	Integration	SAT	Remarks
29	Odisha	Orissa	ROURKELA	Powergrid	Kiosk	5	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 21.04.2016
30	ER-II	West Bengal	Binaguri	Powergrid	CR	7	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 28.07.2016
31	ER-II	West Bengal	SUBHASHGRAM	Powergrid	Kiosk	2	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 22.06.2016
32	Odisha	Orissa	Baripada	Powergrid	CR	3	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 30.01.2017.
33	Odisha	Orissa	Bolangir	Powergrid	CR+Kiosk	2	3	Yes	Yes	done	done	done	done	Pending	done	Communication Link not available.
34	Odisha	Orissa	ANGUL	Powergrid	Kiosk	10	11	Yes	Yes	done	under progress	pending	pending	Pending	pending	Work started from 31.01.2017.
35	Odisha	Orissa	Keonjhar	Powergrid	CR	2	3	Yes	Yes	done	done	done	done	done	done	PMU integrated on 18.01.2017.
36	Odisha	Orissa	Jharsuguda	Powergrid	Kiosk	8	9	Yes	Yes	done	done	done	done	done	done	PMU integrated on 29.07.2016
37	Odisha	Orissa	GMR	GMR	Kiosk	3	4	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
38	ER-II	Sikkim	RANGPO	Powergrid	CR	4	1	Yes	Yes	done	done	done	done	Pending	done	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mtrs. Will be integrated on Mar 2017.
39	ER-II	West Bengal	Baharampur	Powergrid	CR	2	3	Yes	Yes	done	done	done	done	done	done	PMU integrated on 10.05.2016
40	ER-II	West Bengal	Birpara	Powergrid	CR	4	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 15.07.2016.
41	ER-II	DVC	CTPS B	DVC	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
42	ER-II	DVC	KALYANESWARI	DVC	CR	4	1	Yes	Yes	done	done	done	done	done	done	PMU integrated on 02.01.2017.
43	ER-II	DVC	PARULIA	DVC	CR	5	2	Yes	Yes	done	done	under progress	pending	Pending	pending	Work started again from 31.01.2017.
44	ER-II	West Bengal	Purulia PSP	WBSETCL	CR	2	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
45	ER-II	Jharkhand	Bokaro TPS	DVC	CR	1	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
46	ER-II	West Bengal	Durgapur TPS	DVC	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
47	Odisha	Orissa	TTPS(Talcher)	OPTCL	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
48	Odisha	Orissa	TALCHER	NTPC	CR	5	2	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
49	ER-II	Sikkim	TEESTA	Powergrid	CR	1	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
50	Odisha	Orissa	Uttara	Powergrid	CR	2	1	Yes	Yes	done	done	done	done	Pending	pending	Communication link from s/s to ERLDC and NTAMC to be provided by PGCIL.
51	Odisha	Orissa	Jindal	JITPL	CR	2	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
52	Odisha	Orissa	Monnet	Monnet	CR	1	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
53	Odisha	Orissa	Strelite	Strelite	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
54	Odisha	Orissa	Ind barath	Ind barath	Kiosk	1	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
55	ER-II	Sikkim	New Melli	Powergrid	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.
56	ER-II	Sikkim	TT Pool	Powergrid	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.
57	ER-II	West Bengal	Alipurduar	Powergrid	CR	6	7	Yes	Yes	partially done	partially done	pending	pending	Pending	pending	Work started on 22.12.2016. 4 PMU panels and network panel installed. Rest 2 PMU panels could not be erected because location not finalised. Cable laying and termination at PMU panel completed for 6 feeders. CT/PT Interfacing pending due to unavailability of shutdown. PGCIL is asking to take DI points from field, which is not in scope. Work is held up. Team demobilised.
58	ER-II	West Bengal	Rajarhat	Powergrid	CR	2	1	Yes	Yes	done	pending	pending	pending	Pending	pending	Work withheld due to localite agitation Issue.
59	ER-I	Jharkhand	JAMSHEDPUR	Powergrid	CR	6	2	Yes	Yes	done	done	done	done	done	done	PMU integrated on 14.02.2017
60	ER-I	BIHAR	Kahalgaoon(KHSTPP)	NTPC	CR	6	2	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Scheduled to start from 20.02.2017
61	ER-I	BIHAR	Purnea	Powergrid	CR	6	2	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	
62	ER-I	BIHAR	PATNA	Powergrid	Kiosk	6	7	Yes	Yes	pending	pending	pending	pending	Pending	pending	Work started from 16.02.2017.

PMU Installation and commissioning status of ER as on 16.02.2017

S.No	Region	State	Sub-Station	Owner/ Utility	S/S type	PMU	TOTAL PANEL QTY	PMU Delivery status	Cable Delivery status	Erection	Cable laying	CT/PT/DI termination	Commis sioning	Integration	SAT	Remarks
63	ER-I	Jharkhand	RANCHI	Powergrid	Kiosk	12	13	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	1 panel not delivered. Way bill requested.
64	ER-I	BIHAR	SASARAM(Pusauli)	Powergrid	CR+Kiosk	9	3	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Panel not delivered due to road permit issue.
65	ER-I	BIHAR	BARH	NTPC	CR	4	1	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	Panel delivered. Road permit for cable pending.
66	ER-I	BIHAR	LakhiSarai	Powergrid	Kiosk	4	5	Yes	Yes	done	done	done	done	Pending	done	SAT completed. PMU not integrated because FO cable was not delivered due to road permit issue.
67	ER-I	BIHAR	BANKA	Powergrid	Kiosk	4	5	Yes	Yes	done	done	done	done	Pending	pending	SAT pending. PMU not integrated because switch was not delivered to site. Switch in transit.
68	ER-I	Jharkhand	Chaibasa	Powergrid	Kiosk	4	5	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Road permit pending for FO cable and switch.
69	ER-I	BIHAR	765kv Gaya	Powergrid	Kiosk	11	12	Yes	Yes	done	done	done	done	Pending	pending	Splicing of FO is under progress.
70	ER-I	Jharkhand	765/400kV Ranchi (N)	Powergrid	Kiosk	8	9	Yes	Yes	done	done	under progress	pending	Pending	pending	CT interfacing was allowed from 15.02.2017.
71	ER-I	Bihar	Biharshariff	Powergrid	CR	9	3	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Panel not delivered due to road permit issue.
72	ER-I	Bihar	MUZAFFAPUR	Powergrid	CR	5	2	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
73	ER-I	Jharkhand	Daltonganj	Powergrid	Kiosk	2	3	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Road permit for Switch is pending.
74	ER-I	Bihar	Kishanganj (karandegh)	Powergrid	CR	4	1	Yes	Yes	done	done	done	done	Pending	under progress	S/S couldn't be integrated because distance between PMU panel and SDH is more than 100 mts.
75	ER-I	Jharkhand	Jharkhand Pool (Chand)	Powergrid	Kiosk	4	1	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Scheduled to start from 22.02.2017
76	ER-I	Jharkhand	Patratu	Jharkhand	CR	3	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
77	ER-I	Jharkhand	Tenughat	Jharkhand	CR	2	1	No	No	N/A	N/A	N/A	N/A	N/A	N/A	
78	ER-I	Bihar	Barauni PP	Bihar	CR	0	0	No	No	N/A	N/A	N/A	N/A	N/A	N/A	BOQ not finalized.

ER PMU site activity Summary:

Sl. No.	Region	Utility	As per approved BOQ		Supplied		Installed		Commissioned		Integrated to ERLDC/ SLD	
			No. of Substations	No. of PMU	S/S	PMU	S/S	PMU	S/S	PMU	S/S	PMU
1	ER-I	Powergrid	15	94	12	71	6	37	5	29	1	6
2	ER-I	NTPC	2	10	2	10	0	0	0	0	0	0
3	ER-I	Jharkhand	2	5	0	0	0	0	0	0	0	0
4	ER-I	Bihar	1	0	0	0	0	0	0	0	0	0
	ER-I	Total	20	109	14	81	6	37	5	29	1	6
1	ER-II	Powergrid	13	42	10	41	10	39	8	33	7	29
2	ER-II	NTPC	1	5	1	5	0	0	0	0	0	0
3	ER-II	DVC	13	37	11	31	9	28	8	23	3	8
4	ER-II	WBSETCL	7	21	6	19	4	12	0	0	0	0
	ER-II	Total	34	105	28	96	23	79	16	56	10	37
1	Odisha	Powergrid	10	38	10	38	10	38	9	28	5	20
2	Odisha	OPTCL	8	19	6	16	4	13	1	2	0	0
3	Odisha	NTPC	1	5	0	0	0	0	0	0	0	0
4	Odisha	IPP	5	10	1	3	0	0	0	0	0	0
	Odisha	Total	24	72	17	57	14	51	10	30	5	20
	ER	Total	78	286	59	234	43	167	31	115	16	63

Status of PDS system Installation and commissioning at ER as on 16.02.2017

Sl. No.	Site Name	Work Progress
1	ERLDC	Installed, powered up, functioning and integrated with DVC, WBSETCL and OPTCL PDS system.
2	Backup-NLDC	POSOCO did not provide space for PDS system installation.
3	SLDC, Maithon	Installed, powered up, functioning and integrated with ERLDC PDS system.
4	SLDC, Bhubaneswar	Installed, powered up, functioning and integrated with ERLDC PDS system.
5	SLDC, Howrah (WBSETCL)	Installed, powered up, functioning and integrated with ERLDC PDS system.

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.

Anticipated Power Supply Position for the month of
Apr-17

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	BIHAR		
i)	NET MAX DEMAND	4000	2150
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	500	135
	- Central Sector	2891	1548
iii)	SURPLUS(+)/DEFICIT(-)	-609	-467
2	JHARKHAND		
i)	NET MAX DEMAND	1150	800
ii)	NET POWER AVAILABILITY- Own Source (including bilateral)	380	249
	- Central Sector	650	302
iii)	SURPLUS(+)/DEFICIT(-)	-120	-249
3	DVC		
i)	NET MAX DEMAND (OWN)	2760	1656
ii)	NET POWER AVAILABILITY- Own Source	4799	2618
	- Central Sector	531	323
	Long term Bi-lateral (Export)	1300	936
iii)	SURPLUS(+)/DEFICIT(-)	1270	349
4	ORISSA		
i)	NET MAX DEMAND	4300	2520
ii)	NET POWER AVAILABILITY- Own Source	3207	1896
	- Central Sector	1201	683
iii)	SURPLUS(+)/DEFICIT(-)	108	59
5	WEST BENGAL		
5.1	WBSEDCL		
i)	NET MAX DEMAND (OWN)	6280	3691
ii)	CESC's DRAWAL	0	0
iii)	TOTAL WBSEDCL's DEMAND	6280	3691
iv)	NET POWER AVAILABILITY- Own Source	3466	2063
	- Import from DPL	0	-14
	- Central Sector	3149	1480
v)	SURPLUS(+)/DEFICIT(-)	335	-162
vi)	EXPORT (TO B'DESH & SIKKIM)	5	4
5.2	DPL		
i)	NET MAX DEMAND	270	195
ii)	NET POWER AVAILABILITY	450	181
iii)	SURPLUS(+)/DEFICIT(-)	180	-14
5.3	CESC		
i)	NET MAX DEMAND	2020	1103
ii)	NET POWER AVAILABILITY - OWN SOURCE	800	496
	FROM HEL	530	328
	FROM CPL/PCBL	40	29
	Import Requirement	650	250
iii)	TOTAL AVAILABILITY	2020	1103
iv)	SURPLUS(+)/DEFICIT(-)	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
i)	NET MAX DEMAND	8570	4989
ii)	NET POWER AVAILABILITY- Own Source	4716	2740
	- Central Sector+Others	4369	1808
iii)	SURPLUS(+)/DEFICIT(-)	515	-441
7	SIKKIM		
i)	NET MAX DEMAND	85	34
ii)	NET POWER AVAILABILITY- Own Source	5	3
	- Central Sector+Others	127	69
iii)	SURPLUS(+)/DEFICIT(-)	47	38
8	EASTERN REGION At 1.03 AS DIVERSITY FACTOR		
i)	NET MAX DEMAND	20257	12149
	Long term Bi-lateral by DVC	1300	936
	EXPORT BY WBSEDCL	5	4
ii)	NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	23377	12374
iii)	PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	1815	-715

<p align="center">Maintenance Schedule of Thermal Generators of ER during April, 2017 (as finalised in 131st OCC)</p>
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System	Station	Unit	Size (MW)	Period		No. of Days	Reason
				From	To		
DVC	MTPS	5	210	05.04.17	20.04.17	15	Annual Maintenance
	CTPS	2	130	01.04.17	21.04.17	21	Burner Replacement
Odisha	TTPS	2	60	10.04.17	24.04.17	15	Boiler Overhaul

Annexure- C.2

EASTERN REGIONAL LOAD DESPATCH CENTRE

KOLKATA

TRANSMISSION ELEMENTS OUTAGE APPROVED IN 131ST OCC MEETING OF ERPC

Sr. No	NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
1	400 KV Indravati-Rengali line at Indravati	20-03-2017	09:00	20-03-2017	13:00	ODB	ER-II/Odisha	For removal of 50MVAR LR of Rengali-Indravati Line from service (by removing Jumpers) for replacement of insulating oil. And Testing of 50MVAR L/R in Rengali Line before replacement of Oil.	
2	50MVAR L/R of 400KV Indravati-Rengali Line at Indravati	20-03-2017	13:00	28-03-2017	10:00	OCB	ER-II/Odisha	Replacement of insulating Oil. During this period, only 50MVAR LR will be out of service but the 400KV Indravati-Rengali line will remain in charged condition and there will be no power interruption.	
3	400 KV Rourkela-Sundargarh-I & Sundargarh-Indbarath-I (both circuits together) at Sundergarh	20-03-2017	09:00	21-03-2017	18:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line	NLDC
4	765KV Bus Reactor-1 at Angul	20-03-2017	08:00	20-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
5	315 MVA, 400/220 KV ICT#2 AT BARIPADA	20-03-2017	08:00	27-03-2017	18:00	OCB	ER-II/Odisha	For Replacement of Bushings.	
6	220 KV SIDE OF 315 MVA ICT-I, BAY-208 at Baripada	21-03-2017	09:00	24-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. FOR OVERHAULING OF 220 KV CGL CB OPERATING MECHANISM	
7	220KV ICT-I Bay(Bay no- 207) at Rengali	21-03-2017	10.00Hrs.	21-03-2017	17.00Hrs.	ODB	ER-II/Odisha	Rectification of Isolator and CB compressor.	
8	765KV Bus Reactor-2 at Angul	21-03-2017	08:00	21-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
9	500 MVA, 400/220 KV ICT-I AT SSRM	21-03-2017	09:30	21-03-2017	17:30	ODB	ER-I	AMP work & PRD modification.	BIHAR
10	220 KV SIDE OF 315 MVA ICT-II, BAY-204 at Baripada	22-03-2017	09:00	24-03-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. FOR OVERHAULING OF 220 KV CGL CB OPERATING MECHANISM	
11	765kV Line Reactor-1 at Angul (Angul-Sng Line)	22-03-2017	08:00	22-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
12	400kV Bus-I at Rengali	22-03-2017	09.00Hrs.	24-03-2017	17.00Hrs.	ODB	ER-II/Odisha	For erection of Beam structure of New Bay extension work at Rengali.	
13	220 KV Budhipadar-Vasundhara (MCL) (OPTCL line) at Sundergarh	22-03-2017	09:00	22-03-2017	18:00	OCB	ER-II/Odisha	Stringing work of 765KV Jharsuguda - Darlipali transmission line	ODISHA
14	4000 KV Indbarath - Sundargarh at Sundergarh	23-03-2017	09:00	24-03-2017	18:00	OCB	ER-II/Odisha	Stringing work of 765KV Jharsuguda - Darlipali transmission line	NLDC
15	765KV Line Reactor-2 at Angul (Angul-Sng Line)	23-03-2017	08:00	23-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
16	765/400kV, 3*500MVA ICT# 1 at Angul	24-03-2017	08:00	24-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
17	220 KV Bus-I Patna	24-03-2017	09:00	25-03-2017	17:30	ODB	ER-I	Maintainance work	
18	400KV RTPS-Ranchi Ckt-I and Maithon-Ranchi	24-03-2017	08:00	25-03-2017	17:00	OCB	DVC	stringing work of 400KV D/C RTPS-Ranchi Ckt-II & III	
19	765/400kV, 3*500MVA ICT# 2 at Angul	25-03-2017	08:00	25-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
20	400 KB Rourkela-Sundargarh-II & Sundargarh-Raigarh-II (both circuits together) at Sundergarh	25-03-2017	08:00	26-03-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line	NLDC
21	400kV Bus-II at Rengali	25-03-2017	09.00Hrs.	27-03-2017	17.00Hrs.	ODB	ER-II/Odisha	For erection of Beam structure of New Bay extension work at Rengali.	
22	400KV Rourkela-Chaibasa#1 L/R Bay at Rourkela (Bay No.- 416LR)	25-03-2017	09:00	25-03-2017	18:00	ODB	ER-II/Odisha	AMP Work.	
23	Non-Auto mode of A/R in 400KV Rourkela-Sundergarh line-I	25-03-2017	09:00	10-04-2017	17:30	ODB	ER-II/Odisha	For PID testing of Insulator of Rourkela-Sundergarh-I (LILO portion) and A/R switch is to be made Non Auto mode at both end	
24	200 MVA ICT-1 AT LAKHISARAI	25-03-2017	10:00	25-03-2017	18:00	ODB	ER-I	Attending Oil Leakage	BIHAR
25	132 KV MAIN BUS AT PURNEA	25-03-2017	09:00	25-03-2017	10:00	ODB	ER-I	FOR DISCONNECTION OF MAIN BUS BETWEEN TBC AND ICT-1 BAY TO FACILITATE DISMANTLING OF TOWER BEAM OVER ICT-3 BAY . Under GIS construction work.	

26	132 KV PURNEA - PURNEA BSPTCL-1	25-03-2017	09:00	06-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF BSEB-1, BSEB-2 & ICT-3 BAY. CHARGING OF THESE BAYS WILL BE THROUGH GIS SYSTEM.	BIHAR
27	160 MVA ICT-3 PURNEA	25-03-2017	09:00	06-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF BSEB-1, BSEB-2 & ICT-3 BAY. CHARGING OF THESE BAYS WILL BE THROUGH GIS SYSTEM.	BIHAR
28	132 KV PURNEA - PURNEA BSPTCL-2	25-03-2017	09:00	06-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation.	BIHAR
29	220 kV Bus-1 JUSNL Ramchandrapur S/s	25-03-2017	09:00	25-03-2017	17:30	ODB	ER-I	Bay Construction work	
30	400 KV Rourkela-Chaibasa#1 Main Bay at Rourkela (Bay No.- 416)	27-03-2017	09:00	27-03-2017	18:00	ODB	ER-II/Odisha	AMP Work.	
31	400kV Rengali-Talcher-I Line at Rengali	27-03-2017	11.00Hrs.	27-03-2017	15.00Hrs.	ODB	ER-II/Odisha	Retrofitting of DP Relay	
32	Main Bay-707 of 765KV Sundargarh-Angul Line #II at Sundergarh	27-03-2017	08:00	31-03-2017	18:00	OCB	ER-II/Odisha	REFURBISHMENT OF 765KV CB FOR DCRM PROBLEM(CONSTRUCTIONAL DEFECT)	
33	765/400kV, 3*500MVA ICT# 3 at Angul	27-03-2017	08:00	27-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
34	MAIN BAY OF 400KV MALDA-I AT NEW PURNEA	27-03-2017	10:00	29-03-2017	18:00	ODB	ER-I	Y-Ph CT to be replaced and CB Overhauling.LINE WILL BE REMAIN CHARGED THROUGH TIE BAY	
35	400KV BUS-I at Gaya S/S	27-03-2017	10:00	27-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extn. package	
36	50MVAR Bus Reactor-1 AT BSF	27-03-2017	10:00	03-04-2017	18:00	OCB	ER-I	Extension of jack Bus for upcoming 125MVAR Bus Reactor-1	
37	BUS-3 AT BSF	27-03-2017	10:00	30-03-2017	18:00	OCB	ER-I	Bus bar Commissioning work	
38	200 MVA ICT-2 AT LAKHISARAI	27-03-2017	10:00	27-03-2017	14:00	ODB	ER-I	Attending Oil Leakage	BIHAR
39	220 kV Bus-2 JUSNL Ramchandrapur S/s	27-03-2017	09:00	27-03-2017	17:30	ODB	ER-I	Bay Construction work	
40	400KV KHL BARH II	27-03-2017	09:00	28-03-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	
41	220 KV Bus-II Patna	27-03-2017	09:00	28-03-2017	17:30	ODB	ER-I	On daily basis , for bus extension and jumper connection of new bays	
42	765/400kV, 3*500MVA ICT# 4 at Angul	28-03-2017	08:00	28-03-2017	18:00	ODB	ER-II/Odisha	RTV Coating Work on Trench make Bushings	NLDC
43	400kV Rengali-Talcher-II Line at Rengali	28-03-2017	11.00Hrs.	28-03-2017	15.00Hrs.	ODB	ER-II/Odisha	Retrofitting of DP Relay	
44	400 KV Indravati-Rengali line at Indravati	28-03-2017	10:00	28-03-2017	18:00	ODB	ER-II/Odisha	Testing of 50MVAR L/R in Rengali Line before charging. Connection of Jumpers to bushings of L/R. And taking the LR & Line into service	
45	400 KV Rourkela - Chaibasa#1 at Rourkela	28-03-2017	09:00	28-03-2017	14:00	ODB	ER-II/Odisha	AMP Work.	
46	400KV KEONJHAR LINE MAIN BAY (401) AT BARIPADA	28-03-2017	09:00	01-04-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TIE BAY.	
47	400KV BUS-II at Gaya S/S	28-03-2017	10:00	28-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extn. package	
48	400kV Bus-2 AT BSF	28-03-2017	11:00	28-03-2017	16:00	ODB	ER-I	Jumper opening of bay no.17 from jack bus of bay no. 13 connected to Bus-2 for Tenughat main bay equipment erection work	
49	BSF-Lakhisarai-2 Tie Bay AT BSF	28-03-2017	12:00	12-04-2017	15:00	OCB	ER-I	Tenughat main bay no.-16 equipment erection and commissioning work	
50	400 KV BSF - BALIA - I	28-03-2017	09:00	29-03-2017	18:00	ODB	ER-I	for replacement of porcelain insulator with polymer insula	NLDC
51	765KV BUS-I AT NEW RANCHI	28-03-2017	09:00	28-03-2017	18:00	ODB	ER-I	For AMP works	NLDC
52	80 MVAR Bus Reactor AT LAKHISARAI	28-03-2017	10:00	28-03-2017	18:00	ODB	ER-I	Attending Oil Leakage	
53	315 MVA ICT-2 Jamshedpur	28-03-2017	09:00	28-03-2017	17:30	ODB	ER-I	Bay Construction work	JHARKHAND
54	125 MVAR BUS REACTOR Ranchi Ranchi	28-03-2017	09:00	28-03-2017	17:30	ODB	ER-I	AMP Work	
55	400KV PTN BARH III	28-03-2017	09:00	29-03-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	
56	400KV Rourkela-Talcher#2 at Rourkela	29-03-2017	09:00	31-03-2017	18:00	ODB	ER-II/Odisha	Replacement of insulators at different locations.	
57	3x105MVA ICT#2 at Indravati	29-03-2017	10:00	31-03-2017	18:00	ODB	ER-II/Odisha	Installation of Insulation Sleeves on 33kV bus and conductors	ODISHA
58	765kV side of ICT#2 Main Bay (707) at Angul	29-03-2017	09:00	31-03-2017	18:00	OCB	ER-II/Odisha	FOR DCRM REFURBISHMENT OF CB.	NLDC
59	765KV BUS-I at Gaya S/S	29-03-2017	10:00	29-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extn. package	NLDC
60	765KV BUS-II AT NEW RANCHI	29-03-2017	09:00	29-03-2017	18:00	ODB	ER-I	For AMP works	NLDC

61	765KV Tie Bay of PSL_FTP Line & ICT AT SSRM	29-03-2017	10:00	29-03-2017	18:00	ODB	ER-I	Modification in drive mechanism box to avoid unwanted opening. there will no any power flow in 765KV PSL-FTP line however line may be idle charged with 707 Main Bay & Line Reactor	NLDC
62	MAIN BAY OF BSF-II AT LAKHISARAI	29-03-2017	10:00	29-03-2017	14:00	ODB	ER-I	AMP WORK	
63	400 kV Bus-I Jamshedpur	29-03-2017	09:00	29-03-2017	17:30	ODB	ER-I	Bay Construction work	
64	400 KV Ranchi-Raghunathpur-I Line	29-03-2017	09:00	29-03-2017	17:30	ODB	ER-I	Tightening of line isolator connecto	
65	315 MVA ICT-2 Patna	29-03-2017	09:00	29-03-2017	17:30	ODB	ER-I	Application of heat sleeves in 33KV side	BIHAR
66	220 KV Muz- Kanti line-1	29-03-2017	09:00	30-03-2017	17:30	ODB	ER-I	AMP	BIHAR
67	400 kV Jeypore-Indravati S/C Line at Jeypore	30-03-2017	06:00:00	31-03-2017	18:00:00	ODB	ER-II/Odisha	For Replacement of PID Defective Insulators in Jey-Ivt Line	ODISHA
68	Non-Auto mode of A/R in 400kV Rourkela-Sundergarh line-II	30-03-2017	09:00	15-04-2017	17:30	ODB	ER-II/Odisha	For PID testing of Insulator of Rourkela-Sundergarh-II (LILO portion and A/R switch is to be made Non Auto mode at both end	
69	TIE BAY OF 400KV MALDA-I AT NEW PURNEA	30-03-2017	10:00	01-04-2017	18:00	ODB	ER-I	AMP WORK ,LINE WILL BE REMAIN CHARAGED THROUGH MAIN BAY	
70	765KV BUS-II at Gaya S/S	30-03-2017	10:00	30-03-2017	18:00	ODB	ER-I	for isolator rectification work under S/S extn. package	NLDC
71	400 KV BSF - BALIA - II	30-03-2017	09:00	30-03-2017	18:00	ODB	ER-I	for replecement of porcelain insulator with polymer insula	NLDC
72	400 kV Bus-II Jamshedpur	30-03-2017	09:00	30-03-2017	17:30	ODB	ER-I	Bay Construction work	
73	220 KV side ICT-II Bay (BAY 209) Ranchi	30-03-2017	09:00	30-03-2017	17:30	ODB	ER-I	AMP Work	
74	400KV PTN BARH IV	30-03-2017	09:00	31-03-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	
75	TIE BAY OF BSF-II & ICT-2 AT LAKHISARAI	31-03-2017	10:00	31-03-2017	14:00	ODB	ER-I	AMP WORK	
76	315 MVA ICT-1 Jamshedpur	31-03-2017	09:00	31-03-2017	17:30	ODB	ER-I	Bay Construction work	JHARKHAND
77	400 KV Muz- Bsf line-1	31-03-2017	09:00	31-03-2017	17:30	ODB	ER-I	AMP	NLDC
78	220kv STPS-Chandil	31-03-2017	09:00	31-03-2017	16:00	ODB	WBSETCL	Auto Reclosure testing	JHARKHAND
79	Tie Bay-708 of 765KV Sundargarh-Angul Line #II at Sundergarh	01-04-2017	08:00	05-04-2017	18:00	OCB	ER-II/Odisha	REFURBISHMENT OF 765KV CB FOR DCRM PROBLEM(CONSTRUCTIONAL DEFECT)	
80	400kV Indravati Main Bay(Bay no- 412) at Rengali	01-04-2017	09.00Hrs.	01-03-2017	17.00Hrs.	ODB	ER-II/Odisha	AMP work	
81	Non-Auto mode of A/R in 400kV Sundergarh-Raigarh line-I	01-04-2017	09:00	15-04-2017	17:30	ODB	ER-II/Odisha	For PID testing of Insulator of Sundergarh-Indbharat-I (LILO portion A/R switch is to be made Non Auto mode at both end	
82	Non-Auto mode of A/R in 400kV Sundergarh-Raigarh line-II	01-04-2017	09:00	15-04-2017	17:30	ODB	ER-II/Odisha	For PID testing of Insulator of Sundergarh-Raigarh-II (LILO portion) A/R switch is to be made Non Auto mode at both end	
83	400 KV NRNC-CHANDWA -1	01-04-2017	09:00	03-04-2017	17:00	ODB	ER-I	For replacement of broken Insulators by Miscreants. (Tower No-	
84	400kV NSLG-Rangpo Ckt-I & 400 KV BUS -I AT BINAGURI	01-04-2017	09:00	01-04-2017	17:00	ODB	ER-II	Insulator replacement at crossing & dropper strenthenning from single moose to twin moose .	TEESTA - III GEN. MAY BE REVIEWED.
85	400KV Bus-I AT BINAGURI	01-04-2017	07:00	04-04-2017	17:00	ODB	ER-II	To facilitate hot spot rectification in Purnea-3 & 4 Line	
86	132 KV MAIN BUS AT MALDA S/S.	01-04-2017	09:00	01-04-2017	15:00	ODB	ER-II	FOR ATTENDING HOT SPOT AT MAIN BUS. COMPLETE POWER INTERRUPTION AT 132 KV LEVEL.	
87	400 KV BARI PADA LINE AT NEWDUBURI (OPTCL) SS	02-04-2017	09:00	02-04-2017	18:00	ODB	ER-II/Odisha	RECTIFICATION OF LINE EARTH SWITCH STOCK UP PROBLEM, WHICH CAUSED 14 HOUR DELAY IN RESTORATION LAST TIME.	
88	MAIN BAY OF ICT-II AT LAKHISARAI	02-04-2017	10:00	02-04-2017	14:00	ODB	ER-I	AMP WORK	
89	400kV NSLG-Rangpo Ckt-II & 400 KV BUS -I AT BINAGURI	02-04-2017	09:00	02-04-2017	17:00	ODB	ER-II	Insulator replacement at crossing & dropper strenthenning from single moose to twin moose .	TEESTA - III GEN. MAY BE REVIEWED.
90	400KV Tala-I L/R along with Line	02-04-2017	09:00	02-04-2017	17:00	ODB	ER-II	Repeat tan delta of 400kV R Phase Bushing & Neutral Bushing Replacement / oil leakage arrest.	
91	132KV Bus of Gangtok S/s	02-04-2017	9:00 Hrs.	02-04-2017	17:00 Hrs.	ODB	ER-II	All bus isolator AMP and 132KV Bus AMP, proper alignment checking of all Bus isolator is required very urgently otherwise during operation criticality may be occurred	SIKKIM
92	50 MVA ICT-IV AT MALDA	02-04-2017	09:00	02-04-2017	16:00	ODB	ER-II	AMP work.	
93	400 KV SUBHASGRAM-JEERAT	02-04-2017	09:00	04-04-2017	16:00	ODB	ER-II	FOR LA/CVT REPLACEMENT AT JEERAT	WEST BENGAL

94	400 KV Chaibasa#1 & Sundargarh#1 Tie Bay at Rourkela (Bay No.-417).	03-04-2017	09:00	03-04-2017	18:00	ODB	ER-II/Odisha	AMP Work.	
95	765kV Bus Reactor-1 Main Bay (712) at Angul	03-04-2017	09:00	05-04-2017	18:00	OCB	ER-II/Odisha	FOR DCRM REFURBISHMENT OF CB.	NLDC
96	220KV BALASORE LINE-I BAY-201 AT BARIPADA	03-04-2017	09:00	06-04-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. FOR OVERHAULING OF 220 KV CGL CB OPERATING MECHANISM	
97	ICT-I (3x 105 MVA) at Jeypore	03-04-2017	10:30:00	03-04-2017	11:30:00	ODB	ER-II/Odisha	For changing ICT-I combination form Unit-I,II, IV to Unit-I,II and III for charging Unit-III after Oil Refilling Works due to H2 violation	
98	MAIN BAY OF 400KV MALDA-II AT NEW PURNEA	03-04-2017	10:00	05-04-2017	18:00	ODB	ER-I	AMP WORK ,LINE WILL BE REMAIN CHARAGED THROUGH TIE BAY	
99	BUS-4 AT BSF	03-04-2017	10:00	07-04-2017	18:00	OCB	ER-I	Bus bar commissioning work	
100	50MVAR BR-I Jamshedpur	03-04-2017	09:00	03-04-2017	17:30	ODB	ER-I	Bay Construction work	
101	408 th Bay(Tie bay of Chaibasa 1 & Maithon) Jamshedp	03-04-2017	09:00	10-04-2017	17:30	OCB	ER-I	BHEL CB replacement work	
102	220KV Ara- Khagual main bay-I at Khagaul	03-04-2017	09:00	08-04-2017	17:30	OCB	ER-I	On continuous basis for CB overhauling	
103	132kv Kurseong - Rangit	03-04-2017	09:00	05-04-2017	17:00	ODB	ER-II	Insulator fitting	
104	400kv NSLG-Kishanganj-2 Line	03-04-2017	07:00	03-04-2017	17:00	ODB	ER-II	Hot spot rectification	
105	400kv NSLG-Bangaigaon Ckt-1	03-04-2017	07:00	05-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	NLDC
106	400kv NSLG-Tala Ckt-4	03-04-2017	07:00	03-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	NLDC
107	66 KV Bus of Gangtok S/s	03-04-2017	9:00 Hrs.	03-04-2017	17:00 Hrs.	ODB	ER-II	All bus isolator AMP and 132KV Bus AMP, proper alignment checking of all Bus isolator is required very urgently otherwise during operation crticality may be occurred	
108	400 KV MALDA-FARAKKA-D/C (One circuit at a time)	03-04-2017	09:00	08-04-2017	17:00	ODB	ER-II	FOR ATTENDING BALANCE PUNCH POINT OF RECONDUCTORING WORK. S/D CONTINUOUSLY DEFERRED DUE TO SYSTEM CONSTRAINT.	NLDC/ 400 kv FARAKKA - MALDA SHUTDOWN ALONGWITH APDR HVDC TESTING IS NOT POSSIBLE. WOULD BE REVIEWED SUBJECT TO REAL TIME CONDITION
109	220 KV MAIN BUS-I AT BIRPARA	03-04-2017	09:00	03-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
110	132kv Rangit – Rangpo S/C & 132kv Milli – Siliguri S/C	03-04-2017	08:00	09-04-2017	17:00	OCB	TPTL	For carrying out stringing (600 meter) of our 400kv Teesta III – Kishanganj transmission line in Sikkim (tough hilly terrain),	
111	220KV Bus-I at Rourkela	04-04-2017	09:00	04-04-17	18:00	ODB	ER-II/Odisha	AMP Work.	
112	132KV S/C Sambalpur-Rairakhol TL (OPTCL)	04-04-2017	08:00	04-04-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line	ODISHA
113	ICT-I Main Bay(407) at Jeypore	04-04-2017	09:30:00	04-04-2017	17:30:00	ODB	ER-II/Odisha	For AMP works	
114	220KV BUS-II at Gaya S/S	04-04-2017	10:00	04-04-2017	18:00	ODB	ER-I	For KHIJARSARAI bay commisioning work	BIHAR
115	400kv BSF- Muzaffarpur-1 line	04-04-2017	10:00	04-04-2017	14:00	ODB	ER-I	Line bay AMP work	NLDC
116	400 KV NRNC-CHANDWA -2	04-04-2017	09:00	06-04-2017	17:00	ODB	ER-I	For replacement of broken Insulators by Miscreants. (Tower No-172,174,178,184 &195)	
117	400KB BUS-I AT NEW RANCHI	04-04-2017	09:00	04-04-2017	18:00	ODB	ER-I	Commissioning of tie Bays of 400kv Ranchi-Patratu D/C line under JCP	
118	MAIN BAY OF KAHALGAON-II AT LAKHISARAI	04-04-2017	10:00	04-04-2017	14:00	ODB	ER-I	AMP WORK	
119	Farakka - Kahalgaon Ckt. #III & IV	04-04-2017	09:00	06-04-2017	18:00	OCB	ER-I	III & IV (Loc. No.:259 to 260), by construction of new line (14/0 to	
120	400KV PTN BARH I	04-04-2017	09:00	05-04-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	
121	400kv NSLG-Kishanganj-1 Line	04-04-2017	07:00	04-04-2017	17:00	ODB	ER-II	Hot spot rectification	
122	220 KV BIRPARA-MALBASE	04-04-2017	09:00	04-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	NLDC
123	Barh Patna Line 1	04-04-2017	09:30hrs	05-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	
124	220 KV KANIHA - TTPS	04-04-2017	09:00	06-04-2017	17:00	OCB	NTPC	BAY MAINTENANCE WORK	
125	132kv NBU-Siliguri(PG)	04-04-2017	09:00	04-04-2017	15:00	ODB	WBSETCL	O.D.B.preventive Maintenance	
126	132kv NBU-Siliguri(PG)	04-04-2017	09:00	04-04-2017	15:00	ODB	WBSETCL	O.D.B.preventive Maintenance	
127	400kv KTPP-Kharagpur#1	04-04-2017	08:00	04-04-2017	15:00	ODB	WBSETCL	O.D.B.Panel checking at KTPP	
128	315 MVA ICT-II at Jeypore	05-04-2017	09:30:00	05-04-2017	17:30:00	ODB	ER-II/Odisha	For AMP & LA Replacement Works	ODISHA
129	220KV Bus-II at Rourkela	05-04-2017	09:00	05-04-2017	18:00	ODB	ER-II/Odisha	AMP Work.	

130	765kV S/C Gaya-Ballia line	05-04-2017	09:00	05-04-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant 208,209	NLDC
131	220KV BUS-I at Gaya S/S	05-04-2017	10:00	05-04-2017	18:00	ODB	ER-I	For KHIJARSARAI bay commissioning work	BIHAR
132	400kV BSF- Ballia-1 line	05-04-2017	10:00	05-04-2017	14:00	ODB	ER-I	Line bay AMP work	NLDC
133	400KB BUS-II AT NEW RANCHI	05-04-2017	09:00	06-04-2017	18:00	ODB	ER-I	BUS BAR testing / Isolator alingement for main & tie bays of 400KV Ranchi- Patratu D/C line under JCP project.	
134	400 KV BONGAIGAON-NSLG Ckt-I&II	05-04-2017	08:00	15-04-2017	17:00	OCB	ER-II	Destrining,Erection of 03 Nos new tower ,ReStringing, Desmantli of 02 Nos of tower in the section of 465 to 468.(Railway Deposit work)	
135	BNG-IV L/R AT BINAGURI	05-04-2017	09:00	05-04-2017	17:00	ODB	ER-II	AMP	
136	400KV NSLG-Tala Ckt-1	05-04-2017	07:00	05-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	NLDC
137	160 MVA ICT-I OF BIRPARA	05-04-2017	09:00	05-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	WEST BENGAL
138	400 KV Bus Reactor#1 Kahalgaon	05-04-2017	09:30hrs	05-04-2017	17:30 hrs	ODB	NTPC	CT replacement	
139	400KV D/C Binaguri-Bongaigaon TL (One circuit at a time	05-04-2017	8:00 Hrs	25-04-2017	17:00 Hrs	ODB	ER-II	Porcelain Insulator replacement work, One ckt S/D shall be taken,	
140	765/400KV ICT-I at Sundergarh	06-04-2017	08:00	06-04-2017	18:00	ODB	ER-II/Odisha	AMP Work and Commissioning of CSD in 400KV site of the ICT	NLDC
141	400KV Rourkela-SEL#2 Main Bay at Rourkela (Bay No.- 426)	06-04-2017	09:00	06-04-2017	18:00	ODB	ER-II/Odisha	AMP Work.	
142	765kV Angul-Srikakulam Line-1 at Angul	06-04-2017	08:00	06-04-2017	18:00	ODB	ER-II/Odisha	Improvement & strenghthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.	NLDC
143	ICT-II Main Bay (418) at Jeypore	06-04-2017	09:30:00	06-04-2017	17:30:00	ODB	ER-II/Odisha	For AMP works	
144	TIE BAY OF 400KV MALDA-II AT NEW PURNEA	06-04-2017	10:00	08-04-2017	18:00	ODB	ER-I	AMP WORK ,LINE WILL BE REMAIN CHARAGED THROUGH MAIN BAY	
145	765kV S/C Gaya-Varanasi-1 line	06-04-2017	09:00	07-04-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant 122,124	NLDC
146	TIE BAY OF KAHALGAON-II& B/R AT LAKHISARAI	06-04-2017	10:00	06-04-2017	14:00	ODB	ER-I	AMP WORK	
147	132kV Siliguri - Melli	06-04-2017	09:00	15-04-2017	17:00	ODB	ER-II	Insulator fitting	
148	400kV NSLG-Bangaigaon Ckt-2	06-04-2017	07:00	10-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	NLDC
149	160 MVA ICT-II OF BIRPARA	06-04-2017	09:00	06-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	WEST BENGAL
150	Barh Kahal Line 1	06-04-2017	09:30hrs	07-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	
151	220 kV Ramchandrapur - Joda and 400 kV Ramchandrapur - Chandil	06-04-2017	09:00	20-04-2017	17:00	OCB	JHARKHAND	Commissioning of 220 kV Ramchandrapur - Chaibasa - D/C	ODISHA
152	Gajuwaka-II Main Bay (413) at Jeypore	07-04-2017	09:30:00	07-04-2017	17:30:00	ODB	ER-II/Odisha	For AMP works	
153	765kV Angul-Srikakulam Line-2 at Angul	07-04-2017	08:00	07-04-2017	18:00	ODB	ER-II/Odisha	Improvement & strenghthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.	NLDC
154	400KV SEL#2 - 125MVAR B/R Tie Bay at Rourkela (Bay No.- 427)	07-04-2017	09:00	07-04-2017	18:00	ODB	ER-II/Odisha	AMP Work.	
155	765/400KV ICT-II at Sundergarh	07-04-2017	08:00	07-04-2017	18:00	ODB	ER-II/Odisha	AMP Work and Commissioning of CSD in 400KV site of the ICT	NLDC
156	400KV D/C IB-Meramundali TL (OPTCL) at Sundergarh	07-04-2017	08:00	08-04-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line	
157	220KV BALASORE LINE-II BAY-202 AT BARIPADA	07-04-2017	09:00	10-04-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. FOR OVERHAULING OF 220 KV CGL CB OPERATING MECHANISM	
158	400KV D/C Maithon Gaya-I line	07-04-2017	09:00	07-04-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant 29,32	
159	400 KV CHANDWA-GAYA -1	07-04-2017	09:00	09-04-2017	17:00	ODB	ER-I	Changing of Insulators Damaged by Miscreants(T No- 131, 151,122	
160	132 KV PURNEA - PURNEA BSPTCL-3	07-04-2017	09:00	19-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF BSEB-3, KISHANGANJ, ICT-1 & ICT-2 BAY. CHARGING OF THESE BAYS WILL BE THROUGH GIS SYSTEM.	BIHAR

161	132 KV PURNEA - KISHANGANJ	07-04-2017	09:00	19-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF BSEB-3, KISHANGANJ, ICT-1 & ICT-2 BAY. CHARGING OF THESE BAYS WILL BE THROUGH GIS SYSTEM.	BIHAR
162	160 MVA ICT-2 PURNEA	07-04-2017	09:00	19-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF BSEB-3, KISHANGANJ, ICT-1 & ICT-2 BAY. CHARGING OF THESE BAYS WILL BE THROUGH GIS SYSTEM.	BIHAR
163	160 MVA ICT-1 PURNEA	07-04-2017	09:00	19-04-2017	16:00	OCB	ER-I	Construction of GIS bus duct & SF6 to air bushing foundation. Dismantling of 132 kv EXISTING AIS BAY EQUIPMENTS AND HV TESTING AND FINAL CONNECTION OF BSEB-3, KISHANGANJ, ICT-1 & ICT-2 BAY. CHARGING OF THESE BAYS WILL BE THROUGH GIS SYSTEM.	BIHAR
164	400kV NSLG-Tala Ckt-2	07-04-2017	07:00	07-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	NLDC
165	220 KV BINAGURI-BIRPARA-I	07-04-2017	09:00	07-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
166	31.5 MVAR B/R-II OF NEW MELLI	07-04-2017	09:00	07-04-2017	16:00	ODB	ER-II	AMP	
167	400 KV SUBHASGRAM-SAGARDIGHI	07-04-2017	09:00	07-04-2017	16:00	ODB	ER-II	FOR LA REPLACEMENT	WEST BENGAL
168	765KV 240MVAR Angul Line Reactor-I at Sundergarh	08-04-2017	08:00	08-04-2017	18:00	ODB	ER-II/Odisha	AMP Work and Commissioning of CSD in Line Reactor as Bus Reactor (Line ISO open condition)	NLDC
169	765kv Angul-Sundargarh Line-1 at Angul	08-04-2017	08:00	08-04-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.	NLDC
170	400kV D/C Maithon Gaya-II line	08-04-2017	09:00	08-04-2017	17:00	ODB	ER-I	For replacement of insulators damaged by miscreant 29,32	
171	MAIN BAY OF KAHALGAON-I AT LAKHISARAI	08-04-2017	10:00	08-04-2017	14:00	ODB	ER-I	AMP WORK	
172	400kV S/C Sagardighi-Farakka TL	08-04-2017	8:00 Hrs	08-04-2017	17:00 Hrs	ODB	ER-II	Insulator change due to damage by miscreants	WEST BENGAL
173	220 KV BINAGURI-BIRPARA-II	08-04-2017	09:00	08-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
174	220 KV RANGPO-NEW MELLI-I	08-04-2017	09:00	08-04-2017	16:00	ODB	ER-II	AMP	
175	220 KV SUBHASGRAM-SUBHASGRAM-I	08-04-2017	09:00	08-04-2017	16:00	ODB	ER-II	FOR LA REPLACEMENT	WEST BENGAL
176	Barh Patna Line 2	08-04-2017	09:30hrs	08-04-2017	18:00 hrs	ODB	NTPC	Modification in logic & Annual testing of Relay	
177	132kv Kurseung(WB)-Siliguri(PG)	08-04-2017	09:00	08-04-2017	15:00	ODB	WBSETCL	Route Clearance O.D.B.	
178	220KV Ara- Khagaul main bay-I at Khagaul	09-04-2017	09:00	12-04-2017	17:30	OCB	ER-I	On continuous basis for CB overhauling	
179	400kV NSLG-Tala Ckt-3	09-04-2017	07:00	09-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	NLDC
180	220kV D/C Dalkhola-Kishaganj TL (One circuit at a time).	09-04-2017	8:00 Hrs	16-04-2017	17:00 Hrs	ODB	ER-II	Porcelain Insulator replacement work, One ckt S/D shall be taken, other ckt shall remain in service	
181	400 KV MALDA-PURNEA-D/C (One circuit at a time)	09-04-2017	09:00	12-04-2017	17:00	ODB	ER-II	FOR ATTENDING HOT SPOT IN LINE & FOR BRINGING 63 MVAR L/R AT MALDA END IN SERVICE. S/D CONTINUOUSLY DEFERRED DUE TO SYSTEM CONSTRAINT.	NLDC
182	220 KV MAIN BUS-I AT DALKHOLA	09-04-2017	09:00	09-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
183	ICT #1 Barh	09-04-2017	09:30hrs	09-04-2017	18:00 hrs	ODB	NTPC	Modification in logic & Annual testing of Relay	
184	132kv Kurseung(WB)-Rangit	09-04-2017	09:00	09-04-2017	15:00	ODB	WBSETCL	Route Clearance O.D.B.	
185	400kv Durgapur(WB)-Arambag line	09-04-2017	07:00	09-04-2017	15:00	ODB	WBSETCL	Route Clearance O.D.B.	
186	765KV 240MVAR Angul Line Reactor-II at Sundergarh	10-04-2017	08:00	10-04-2017	18:00	ODB	ER-II/Odisha	AMP Work and Commissioning of CSD in Line Reactor as Bus Reactor (Line ISO open condition)	NLDC
187	220KV Bus Coupler Bay at Rourkela (Bay No.- 202)	10-04-2017	09:00	10-04-2017	18:00	ODB	ER-II/Odisha	AMP Work.	

188	765kV Angul-Sundargarh Line-2 at Angul	10-04-2017	08:00	10-04-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of	NLDC
189	Gajuwaka-I Main Bay(412) at Jeypore	10-04-2017	09:30:00	10-04-2017	17:30:00	ODB	ER-II/Odisha	For AMP works	
190	220kV Budhi Padar-Korba S/C Line	10-04-2017	09:00	10-05-2017	18:00	OCB	ER-II/Odisha	For diversion of multi circuit line in between 220kV Budhipadar-Korba S/C line from Loc 29 to 39 and 400kV D/C Rourkela-Raigarh line III & IV from 385 to 375 for construction of dedicated MGR (Rail Line) at Village Belpahar, Amdhara & Chualiberna (Depository works on behalf of OPGC)	ODISHA
191	MAIN BAY OF 125MVAR B/R-I AT NEW PURNEA	10-04-2017	10:00	12-04-2017	18:00	ODB	ER-I	AMP WORK ,REACTOR WILL BE REMAIN CHARGED THROUGH TIE BAY	
192	220 kV Gaya - Sonenagar 1	10-04-2017	10:00	10-04-2017	16:00	ODB	ER-I	For Sonenagar Bay extension work	BIHAR
193	400 KV KHG - LKS - I	10-04-2017	09:00	10-04-2017	18:00	ODB	ER-I	for replacement of porcelain insulator with polymer insula	
194	400 KV CHANDWA-GAYA - 2	10-04-2017	09:00	12-04-2017	17:00	ODB	ER-I	Changing of Insulators Damaged by Miscreants (T No- 131, 151,122)	
195	TIE BAY OF KAHALGAON-I & FUTURE AT LAKHISARAI	10-04-2017	10:00	10-04-2017	14:00	ODB	ER-I	AMP WORK	
196	500 MVA ICT-3 Muzaffarpur	10-04-2017	09:00	15-04-2017	17:30	OCB	ER-I	For replacement of gaskets of all bushings and turrets by OEM due to construction defects.	AS ALSO PLANNED FOR THIS MONTH.MAY BE CONSIDERED, IF
197	Tala-2 L/R AT BINAGURI	10-04-2017	07:00	10-04-2017	17:00	ODB	ER-II	CSD Commissioning / Tan Delta in Variable Frequency	
198	315 MVA ICT-V & 400 KV Bus-II AT MALDA.	10-04-2017	8:00 Hrs	10-04-2017	17:00 Hrs	ODB	ER-II	Isolator alignment works.	
199	400 KV ANDAL-JAMSHEDPUR-D/C (ONE CIRCUIT AT A TIME)	10-04-2017	09:00	13-04-2017	17:00	ODB	ER-II	FOR REPLACEMENT OF INSULATOR DAMAGED BY MISCREANTS.	
200	220 KV MAIN BUS-II AT DALKHOLA	10-04-2017	09:00	10-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
201	132 KV MALDA-MALDA-I	10-04-2017	09:00	12-04-2017	16:00	ODB	ER-II	FOR ISOLATOR REPLACEMENT WORK	WEST BENGAL
202	315 MVA ICT-II OF BINAGURI	10-04-2017	09:00	10-04-2017	16:00	ODB	ER-II	FOR PROVIDING INSULATING SLEEVES TO TERTIARY.	
203	220 KV DVC-I AT DURGA PUR	10-04-2017	09:00	10-04-2017	16:00	ODB	ER-II	FOR CB REPLACEMENT WORK UNDER ADDCAP.	
204	220 KV RANGPO-NEW MELLI-II	10-04-2017	09:00	10-04-2017	16:00	ODB	ER-II	AMP	
205	220 KV SUBHASGRAM-NEW TOWN	10-04-2017	09:00	10-04-2017	16:00	ODB	ER-II	FOR LA REPLACEMENT	WEST BENGAL
206	Barh Kahal Line 2	10-04-2017	09:30hrs	11-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	
207	400kV Angul-Bolangir Line at Angul	11-04-2017	08:00	11-04-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.	
208	220KV Rourkela- Tarkera#1 at Rourkela	11-04-2017	10:00	11-04-2017	12:00	ODB	ER-II/Odisha	Jumper Tightening	
209	220 KV BUS COUPLER BAY-203 AT BARIPADA	11-04-2017	09:00	14-04-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. FOR OVERHAULING OF 220 KV CGL CB OPERATING MECHANISM	
210	765KV BUS Reactor -I at Gaya S/S	11-04-2017	10:00	11-04-2017	18:00	ODB	ER-I	For AMP and Repainting Work	NLDC
211	220 kV Gaya - Sonenagar 2	11-04-2017	10:00	11-04-2017	16:00	ODB	ER-I	For Sonenagar Bay extension work	BIHAR
212	400 KV KHG - LKS -II	11-04-2017	09:00	11-04-2017	18:00	ODB	ER-I	for replacement of porcelain insulator with polymer insulator	
213	400 KV NEW Ranchi- Purulia	11-04-2017	09:00	11-04-2017	18:00	ODB	ER-I	Commissioning work for 400kV Ranchi-Patratu D/C line under JCP	
214	Kahalgaoon - Barh Ckt. # I & II	11-04-2017	09:00	13-04-2017	18:00	OCB	ER-I	Powerline crossing of existing 400KV Kahalgaoon - Barh (Loc. No.: 22 to 23) by construction of new line (14/0 to 15/0, 9/0 to 10/0 and 23/0 to 24/0) for shifting of 400KV Kahalgaoon - Banka Line under bus split scheme at NTPC switchyard, Kahalgaoon.	NLDC
215	Bangaigaon-III L/R AT BINAGURI	11-04-2017	07:00	11-04-2017	17:00	ODB	ER-II	Tan Delta in Variable Frequency	
216	220 KV WBSETCL-I AT DLKHOLA	11-04-2017	09:00	11-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	WEST BENGAL
217	220 KV KANIHA - RENGALI	11-04-2017	09:00	13-04-2017	17:00	OCB	NTPC	Modification in logic & Annual testing of Relay	
218	220KV ICT#1 Incomer Bay at Rourkela (Bay No.- 211)	12-04-2017	10:00	12-04-2017	12:00	ODB	ER-II/Odisha	Jumper Tightening	

219	400kV Angul-Meramundali Line-1 at Angul	12-04-2017	08:00	12-04-2017	18:00	ODB	ER-II/Odisha	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.	ODISHA
220	765KV BUS-I at Sundergarh	12-04-2017	08:00	13-04-2017	18:00	OCB	ER-II/Odisha	Bus bar stability testing of 765KV Darlipali(NTPC) line-I &II(Construction head)	NLDC
221	400 kV Bus-I at Jeypore	12-04-2017	09:30:00	12-04-2017	13:30:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection System	
222	400 kV Bus-II at Jeypore	12-04-2017	14:00:00	12-04-2017	18:00:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection System	
223	765KV BUS-Reactor II at Gaya S/S	12-04-2017	10:00	12-04-2017	18:00	ODB	ER-I	For AMP and Repainting Work	NLDC
224	400kV Bus-2 AT BSF	12-04-2017	10:00	12-04-2017	15:00	ODB	ER-I	Jumper connection of Tenughat main bay no.-16 to Bus-2	
225	400 KV LKS - BSF - I	12-04-2017	09:00	12-04-2017	18:00	ODB	ER-I	for replacement of porcelain insulator with polymer insula	
226	400 KV New Ranchi- Arambag	12-04-2017	09:00	12-04-2017	18:00	ODB	ER-I	Commissioning work for 400kV Ranchi- Patratu D/C line under JC	
227	405 th Bay (Tie bay of Durgapur & Mejia) Jamshedpur	12-04-2017	09:00	18-04-2017	17:30	OCB	ER-I	BHEL CB replacement work	
228	400KV PTN BARH CKT II	12-04-2017	09:00		17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	
229	400 KV Lakhisarai-Biharsarif-I	12-04-2017	10:00	12-04-2017	18:00	ODB	ER-I	To replace porcelain insulators damaged by miscreants	
230	125 MVAR Bus Reactor-I AT BINAGURI	12-04-2017	07:00	12-04-2017	17:00	ODB	ER-II	Tan Delta in Variable Frequency	
231	220 KV WBSETCL-II AT DLKHOLA	12-04-2017	09:00	12-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	WEST BENGAL
232	Barh GKP Line 2	12-04-2017	09:30hrs	14-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	NLDC
233	220 kV Bus-I at Jeypore	13-04-2017	09:30:00	13-04-2017	13:30:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection System	
234	220 kV Bus-II at Jeypore	13-04-2017	14:00:00	13-04-2017	18:00:00	ODB	ER-II/Odisha	For Relay Testing after Retrofitting of BusBar Protection System	
235	765KV , 710 Bay GAYA	13-04-2017	10:00	14-04-2017	18:00	ODB	ER-I	For attending SF6 Gas leakage from 71052 Breaker	NLDC
236	400 KV LKS - BSF -II	13-04-2017	09:00	13-04-2017	18:00	ODB	ER-I	for replacement of porcelain insulator with polymer insula	
237	765 kV NRNC-DMG -2	13-04-2017	09:00	14-04-2017	17:00	ODB	ER-I	For changing of Glass insulators (19 Nos) broken by miscreants at T	NLDC
238	Tie Bay of 765KV NRNC-Dharamjaygarh Line-2 AT NEW RANCHI	13-04-2017	09:00	14-04-2017	18:00	ODB	ER-I	For AMP works	
239	125 MVAR Bus Reactor-II AT BINAGURI	13-04-2017	07:00	13-04-2017	17:00	ODB	ER-II	Tan Delta in Variable Frequency	
240	400kV MTN -Rightbank 1 Line	13-04-2017	10:00	13-04-2017	17:30	ODB	ER-II	Insulator replacement.	MPL
241	400 KV FARAKKA-DURGAPUR-D/C (ONE CIRCUIT AT A TIME	13-04-2017	09:00	16-04-2017	17:00	ODB	ER-II	FOR REPLACEMENT OF INSULATOR DAMAGED BY MISCREANTS.	
242	132 KV MALDA-MALDA-II	13-04-2017	09:00	15-04-2017	16:00	ODB	ER-II	FOR ISOLATOR REPLACEMENT WORK	WEST BENGAL
243	315 MVA ICT-III AT MALDA	13-04-2017	09:00	13-04-2017	16:00	ODB	ER-II	FOR PROVIDING INSULATING SLEEVES TO TERTIARY.	
244	765KV BUS-II at Sundergarh	14-04-2017	08:00	15-04-2017	18:00	OCB	ER-II/Odisha	Bus bar stability testing of 765KV Darlipali(NTPC) line-I &II(Construction head)	NLDC
245	765KV D/C Angul-Jharsuguda TL (Ckt -I & II) at Sundergarh	14-04-2017	08:00	15-04-2017	17:00	OCB	ER-II/Odisha	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line	NLDC
246	220 V Bus-I Muzaffarpur	14-04-2017	10:00	15-04-2017	18:30	ODB	ER-I	For bay construction work	
247	500MVA ICT-I Patna	14-04-2017	09:00	15-04-2017	18:00	ODB	ER-I	To attend leakage and Punch points of the ICT.	BIHAR
248	315MVA ICT#1 AT BINAGURI	14-04-2017	07:00	14-04-2017	17:00	ODB	ER-II	Tan Delta in Variable Frequency / 220kV Bay AMP	
249	Barh GKP Line 1	14-04-2017	09:30hrs	15-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	NLDC
250	401 KV Lakhisarai-Kahalgaoon-II	15-04-2017	11:00	15-04-2017	18:00	ODB	ER-I	To replace porcelain insulators damaged by miscreants	
251	220kV Bus-I AT BINAGURI	15-04-2017	07:00	15-04-2017	17:00	ODB	ER-II	Bus isolator hot spot rectification / CVT replacement	
252	400KV NSLG-Rangpo Ckt-1	15-04-2017	07:00	16-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	TEESTA - III GEN. MAY BE
253	315MVA ICT#2 AT BINAGURI	15-04-2017	07:00	15-04-2017	17:00	ODB	ER-II	Tan Delta in Variable Frequency / 220kV Bay AMP	
254	400KV NSLG-Rangpo Ckt-I	15-04-2017	09:00	16-04-2017	17:00	ODB	ER-II	Sag adjustment	TEESTA - III GEN. MAY BE
255	80 MVAR B/R-I OF BERHAMPUR	15-04-2017	09:00	15-04-2017	16:00	ODB	ER-II	AMP	
256	400 KV BSF - Varanasi -I	16-04-2017	09:00	16-04-2017	18:00	ODB	ER-I	for replacement of porcelain insulator with polymer insula	NLDC
257	221 V Bus-II Muzaffarpur	16-04-2017	11:00	17-04-2017	19:30	ODB	ER-I	For bay construction work	
258	132kV Siliguri - Kurseong	16-04-2017	09:00	20-04-2017	17:00	ODB	ER-II	Jumper Cone Repairing / Insulator fitting	WEST BENGAL
259	500MVA ICT-I at Maithon	16-04-2017	10:00	16-04-2017	17:30	ODB	ER-II	Leakage arresting work.	
260	Barh Patna Line 3	16-04-2017	09:30hrs	16-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	

261	Main Bay-703 of 765/400KV ICT-I at Sundergarh	17-04-2017	08:00	17-04-2017	18:00	ODB	ER-II/Odisha	AMP WORK	
262	MAIN BAY OF 400KV Kishanganj-II AT NEW PURNEA	17-04-2017	10:00	19-04-2017	18:00	ODB	ER-I	AMP WORK ,LINE WILL BE REMAIN CHARGED THROUGH TIE BAY	
263	Main Bay of 765KV NRNC-Dharamjaygarh Line-2 AT NEW RANCHI	17-04-2017	09:00	17-04-2017	18:00	ODB	ER-I	For AMP works	
264	160 MVA ICT 3 Ara	17-04-2017	09:00	17-04-2017	18:00	ODB	ER-I	AMP work	BIHAR
265	315 MVA ICT-I Biharsarif	17-04-2017	09:00	17-04-2017	18:00	ODB	ER-I	Wrapping of insulation sleeves on tertiary side	BIHAR
266	220kV Bus-II AT BINAGURI	17-04-2017	07:00	17-04-2017	17:00	ODB	ER-II	Bus isolator hot spot rectification	
267	400KV NSLG-Rangpo Ckt-2	17-04-2017	07:00	18-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	TEESTA - III GEN. MAY BE
268	400kV MTN -Rightbank 2 Line	17-04-2017	10:00	17-04-2017	17:30	ODB	ER-II	Insulator replacement.	MPL
269	220 KV DVC-I AT DURGAPUR	17-04-2017	09:00	17-04-2017	16:00	ODB	ER-II	FOR CB REPLACEMENT WORK UNDER ADDCAP.	
270	400 KV BERHAMPUR-BHERAMARA-I	17-04-2017	09:00	17-04-2017	16:00	ODB	ER-II	AMP WORK	NLDC
271	Barh Patna Line 4	17-04-2017	09:30hrs	17-04-2017	18:00 hrs	OCB	NTPC	Modification in logic & Annual testing of Relay	
272	Main Bay-706 of 765/400KV ICT-II at Sundergarh	18-04-2017	08:00	18-04-2017	18:00	ODB	ER-II/Odisha	AMP WORK	
273	Tie bay of 765KV B/R-2 AT NEW RANCHI	18-04-2017	09:00	18-04-2017	18:00	ODB	ER-I	For AMP works	
274	Farakka - Kahalgaon Ckt. #I & II	18-04-2017	09:00	21-04-2017	18:00	OCB	ER-I	& II (Loc. No.: 257 to 258) by construction of new line (14/0 to 15/0, 9/0 to 10/0 and 23/0 to 24/0) for shifting of 400KV Kahalgaon - Banka	
275	160 MVA ICT 1 Jamshedpur	18-04-2017	08:00	18-04-2017	18:30	ODB	ER-I	OLTC Overhaul work	JHARKHAND
276	400 KV 315 MVA ICT-II Ranchi	18-04-2017	09:00	18-04-2017	17:30	ODB	ER-I	For fixing of Insulation sleeve in LV Side Bushing & tertiary Syst	JHARKHAND
277	400KV PTN BALIA III	18-04-2017	09:00		17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	NLDC
278	220kV D/C Malda-Dalkhola TL (One circuit at a time).	18-04-2017	8:00 Hrs	31-04-2017	17:00 Hrs	ODB	ER-II	Porcelain Insulator replacement work, One ckt S/D shall be taken, other ckt shall remain in service	
279	400kV MTN Durgapur 2 Line	18-04-2017	10:00	18-04-2017	17:30	ODB	ER-II	AMP work for line Bay.	
280	31.5 MVAR B/R-I OF NEW MELLI	18-04-2017	09:00	18-04-2017	16:00	ODB	ER-II	AMP	
281	401 KV BERHAMPUR-BHERAMARA-II	18-04-2017	09:00	18-04-2017	16:00	ODB	ER-II	AMP WORK	NLDC
282	400 KV/132 KV ICT#1 Kahalgaon	18-04-2017	09:30hrs	21-04-2017	17:30 hrs	OCB	NTPC	CT replacement & Numerical relay retrofitting	
283	220 KV KANIHA - MERAMUNDALI - I	18-04-2017	09:00	21-04-2017	17:00	OCB	NTPC	BAY MAINTENANCE WORK	
284	Main Bay-710 of 765KV Sundergarh- Angul Line-I at Sundergarh	19-04-2017	08:00	19-04-2017	18:00	ODB	ER-II/Odisha	AMP WORK	
285	L/R of 765KV NRNC-Dharamjaygarh Line-1 AT NEW RANCHI	19-04-2017	09:00	19-04-2017	18:00	ODB	ER-I	For AMP works	
286	160 MVA ICT 2 Jamshedpur	19-04-2017	08:00	19-04-2017	18:30	ODB	ER-I	OLTC Overhaul work	JHARKHAND
287	414 th Bay (Tie bay of Chaibasa 2 & Andal 1) Jamshedp	19-04-2017	09:00	25-04-2017	17:30	OCB	ER-I	BHEL CB replacement work	
288	400 KV 315 MVA ICT-I Ranchi	19-04-2017	09:00	19-04-2017	17:30	ODB	ER-I	For fixing of Insulation sleeve in LV Side Bushii	JHARKHAND
289	400KV PTN BALIA IV	19-04-2017	09:00	20-04-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	NLDC
290	Tie Bay-708 of 765KV Sundergarh-Angul Line-II at Sundergarh	20-04-2017	08:00	20-04-2017	18:00	ODB	ER-II/Odisha	AMP WORK	
291	TIE BAY OF 400KV Kishanganj-II AT NEW PURNEA	20-04-2017	10:00	22-04-2017	18:00	ODB	ER-I	AMP WORK ,LINE WILL BE REMAIN CHARGED THROUGH MAIN BAY	
292	L/R of 765KV NRNC-Dharamjaygarh Line-2 AT NEW RANCHI	20-04-2017	09:00	20-04-2017	18:00	ODB	ER-I	For AMP works	
293	Tie bay of 400KV B/R-2 & RNC-NRNC -1 AT NRNC	20-04-2017	09:00	20-04-2017	18:00	ODB	ER-I	For AMP works	
294	315MVA ICT-I Muzaffarpur	20-04-2017	09:00	20-04-2017	18:00	ODB	ER-I	Wrapping of insulation sleeves on tertiary side	BIHAR
295	220 KV BIRPARA-CHUKHA-1 & 2	20-04-2017	09:00	28-04-2017	18:00	OCB	ER-II	For tower shifting work over river sankosh.	NLDC
296	400kV NSLG-Purnea Ckt-1	20-04-2017	07:00	22-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	
297	400KV BINAGURI- ALIPURDUAR CIRCUIT # 1	20-04-2017	07:00	20-04-2017	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR	NLDC
298	315 MVA ICT-II OF DURGAPUR	20-04-2017	09:00	20-04-2017	16:00	ODB	ER-II	FOR PROVIDING INSULATING SLEEVES TO TERTIARY.	
299	400KV PTN BALIA I	21-04-2017	09:00	21-04-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	NLDC
300	315 MVA ICT-I AT SUBHASGRAM	21-04-2017	09:00	21-04-2017	16:00	ODB	ER-II	FOR PROVIDING INSULATING SLEEVES TO TERTIARY.	
301	400KV PTN BALIA II	22-04-2017	09:00	22-04-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	NLDC
302	400KV BONGAIGAON - ALIPURDUAR CIRCUIT # 2	22-04-2017	07:00	22-04-2017	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR	NLDC
303	220 KV DALKHOLA-SILIGURI-I	22-04-2017	09:00	22-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
304	315 MVA ICT-II AT SUBHASGRAM	22-04-2017	09:00	22-04-2017	16:00	ODB	ER-II	FOR PROVIDING INSULATING SLEEVES TO TERTIARY.	

305	220 KV SIDE OF 160 MVA ICT-I, BAY-209 at Baripada	23-04-2017	09:00	26-04-2017	18:00	OCB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. FOR OVERHAULING OF 220 KV CGL CB OPERATING MECHANISM	
306	400KV NSLG-Purnea Ckt-2	23-04-2017	07:00	25-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	
307	400KV BONGAIGAON - ALIPURDUAR CIRCUIT # 2	23-04-2017	07:00	23-04-2017	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR	NLDC
308	221 KV DALKHOLA-SILIGURI-II	23-04-2017	09:00	23-04-2017	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.	
309	500 MVA ICT-V AT SUBHASGRAM	23-04-2017	09:00	23-04-2017	16:00	ODB	ER-II	FOR PROVIDING INSULATING SLEEVES TO TERTIARY.	
310	400kV Angul-Talcher & 400kV Talcher-Meramundali CKT-I	24-04-2017	07:00	29-04-2017	17:00	OCB	ER-II/Odisha	For diversion of 400kV D/C Talcher-Meramundali Line inside GMR, Kamlanga.	GMR/ JITPL GEN MAY BE REVIEWED
311	MAIN BAY OF 400KV Muzaffarpur-I AT NEW PURNEA	24-04-2017	10:00	26-04-2017	18:00	ODB	ER-I	AMP WORK ,LINE WILL BE REMAIN CHARAGED THROUGH TIE BAY	
312	400 KV Bus-I Ranchi	24-04-2017	09:00	24-04-2017	17:30	ODB	ER-I	Fixing of stool for extend hight of CVT in 400 KV BUS-I	
313	400KV KHL BARH I	24-04-2017	09:00	25-04-2017	17:30	ODB	ER-I	Fixing of spacer Cap & repair of Conductor cut	
314	220kV SLG-Kishanganj Ckt-II	24-04-2017	09:00	24-04-2017	17:00	ODB	ER-II	PG clamp removal	
315	400KV BONGAIGAON - ALIPURDUAR CIRCUIT # 1	25-04-2017	07:00	25-04-2017	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR	NLDC
316	220 KV KANIHA - MERAMUNDALI - II	25-04-2017	09:00	27-04-2017	17:00	OCB	NTPC	BAY MAINTENANCE WORK	
317	220kV SLG-Kishanganj Ckt-1	26-04-2017	09:00	26-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	
318	132 KV Kh-Kahalgaon	26-04-2017	09:30hrs	26-04-2017	17:30 hrs	ODB	NTPC	PM works & relay testing	
319	400 KV KEONJHAR LINE at Baripada	27-04-2017	09:00	27-04-2017	18:00	ODB	ER-II/Odisha	MAIN 2 RELAY RETROFICATION WORK	
320	220 KV SIDE OF 160 MVA ICT-II, BAY-210 at Baripada	28-04-2017	09:00	28-04-2017	18:00	ODB	ER-II/Odisha	NO OUTAGE LINE WILL REMAIN IN SERVICE THROUGH TBC BAY. AMP OF BAY	
321	220kV SLG-Kishanganj Ckt-2	28-04-2017	09:00	28-04-2017	17:00	ODB	ER-II	Insulator replacement in crossings	
322	400/220 KV 315 MVA ICT#1 MAIN BAY (403) AT BARIPADA	29-04-2017	09:00	29-04-2017	18:00	ODB	ER-II/Odisha	NO OUTAGE ICT WILL REMAIN IN SERVICE THROUGH TIE BAY. AMP OF BAY	
323	400/220 KV 500 MVA ICT#3 AT BARIPADA	30-04-2017	09:00	30-04-2017	18:00	ODB	ER-II/Odisha	COMMISSIONING OF CSD	
324	125 MVAR, 400 KV BUS REACTOR AT BARIKADA	01-05-2017	09:00	01-05-2017	18:00	ODB	ER-II/Odisha	COMMISSIONING OF CSD	
325	132 KV TRANSFER BUS AT PURNEA	IT IS ALREADY UNDER S/D	09:00	_____		PERMANENT	ER-I	PERMANENT REMOVAL OF TRANSFER BUS IS REQUIRED FOR GIS BUILDING AND ASSOCIATED CIVIL THE 132 KV TRANSFER BUS AND 132 KV TBC BAY WILL BE UNDER PERMANENT S/D FOR CONSTRUCTION WORK OF AIS TO GIS CONVERSION OF ALL LINE AND ICT 132 KV BAYS . Under GIS construction work.	BIHAR

TRANSMISSION ELEMENTS OUTAGE FOR NLDC APPROVAL

SL.NO.	NAME OF THE ELEMENTS	FROM		TO		REMARKS (ODB/OC)	S/D TO BE AVAILED	REASON OF OUTAGE
		DATE	TIME	DATE	TIME			
1	765KV Bus Reactor-1 at Angul	20-03-2017	08:00	20-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
2	765KV Bus Reactor-2 at Angul	21-03-2017	08:00	21-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
3	765kV Line Reactor-1 at Angul (Angul-Sng Line)	22-03-2017	08:00	22-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
4	765kV Line Reactor-2 at Angul (Angul-Sng Line)	23-03-2017	08:00	23-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
5	765/400kV, 3*500MVA ICT# 1 at Angul	24-03-2016	08:00	24-03-2016	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
6	765/400kV, 3*500MVA ICT# 2 at Angul	25-03-2017	08:00	25-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
7	400 KB Rourkela-Sundargarh-II & Sundargarh-Raigarh-II (both circuits together) at Sundergarh	25-03-2017	08:00	26-03-2017	17:00	OCB	ER-II/Odisha/Sundergarh TLC	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line
8	765/400kV, 3*500MVA ICT# 3 at Angul	27-03-2017	08:00	27-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
9	765/400kV, 3*500MVA ICT# 4 at Angul	28-03-2017	08:00	28-03-2017	18:00	ODB	ER-II/Odisha/Angul SS	RTV Coating Work on Trench make Bushings
10	765kV side of ICT#2 Main Bay (707) at Angul	29-03-2017	09:00	31-03-2017	18:00	OCB	ER-II/Odisha/Angul SS	FOR DCRM REFURBISHMENT OF CB.
11	765kV Bus Reactor-1 Main Bay (712) at Angul	03-04-2017	09:00	05-04-2017	18:00	OCB	ER-II/Odisha/Angul SS	FOR DCRM REFURBISHMENT OF CB.
12	765/400KV ICT-I at Sundergarh	06-04-2017	08:00	06-04-2017	18:00	ODB	ER-II/Odisha/Sundergarh	AMP Work and Commissioning of CSD in 400KV site of the ICT
13	765kV Angul-Srikakulam Line-1 at Angul	06-04-2017	08:00	06-04-2017	18:00	ODB	ER-II/Odisha/Angul TLAM	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.

14	Gajuwaka-II Main Bay (413) at Jeypore	07-04-2017	09:30:00	07-04-2017	17:30:00	ODB	ER-II/Odisha/ /Jeypore	For AMP works
15	765kV Angul-Srikakulam Line-2 at Angul	07-04-2017	08:00	07-04-2017	18:00	ODB	ER-II/Odisha/Angul TLAM	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.
16	765/400KV ICT-II at Sundergarh	07-04-2017	08:00	07-04-2017	18:00	ODB	ER-II/Odisha/ Sundergarh	AMP Work and Commissioning of CSD in 400KV site of the ICT
17	765KV 240MVAR Angul Line Reactor-I at Sundergarh	08-04-2017	08:00	08-04-2017	18:00	ODB	ER-II/Odisha/ Sundergarh	AMP Work and Commissioning of CSD in Line Reactor as Bus Reactor (Line ISO open condition)
18	765kV Angul-Sundargarh Line-1 at Angul	08-04-2017	08:00	08-04-2017	18:00	ODB	ER-II/Odisha/Angul TLAM	Improvement & strengthening of line jumpers to prevent swing during high speed wind to avoid tripping in future & improvement of line availability & reliability.
19	765KV 240MVAR Angul Line Reactor-II at Sundergarh	10-04-2017	08:00	10-04-2017	18:00	ODB	ER-II/Odisha/ Sundergarh	AMP Work and Commissioning of CSD in Line Reactor as Bus Reactor (Line ISO open condition)
20	Gajuwaka-I Main Bay(412) at Jeypore	10-04-2017	09:30:00	10-04-2017	17:30:00	ODB	ER-II/Odisha/ /Jeypore	For AMP works
21	765KV BUS-I at Sundergarh	12-04-2017	08:00	13-04-2017	18:00	OCB	ER-II/Odisha/ Sundergarh	Bus bar stability testing of 765KV Darlipali(NTPC) line-I &II(Construction head)
22	765KV BUS-II at Sundergarh	14-04-2017	08:00	15-04-2017	18:00	OCB	ER-II/Odisha/ Sundergarh	Bus bar stability testing of 765KV Darlipali(NTPC) line-I &II(Construction head)
23	765KV D/C Angul-Jharsuguda TL (Ckt -I & II) at Sundergarh	14-04-2017	08:00	15-04-2017	17:00	OCB	ER-II/Odisha/ Sundergarh TLC	Stringing work of 765KV Angul-Jharsuguda D/C (Ckt-III & IV) transmission line
24	400 KV BONGAIGAON-NSLG Ckt-I&II	5.04.17	08:00	15.04.17	17:00	OCB	ER-II	Destringing,Erection of 03 Nos new tower ,ReStringing, Desmantling of 02 Nos of tower in the section of 465 to 468.(Railway Deposit work)
25	220 KV BIRPARA-CHUKHA-1 & 2	20.04.17	09:00	28.04.17	18:00	OCB	ER-II	For tower shifting work over river sankosh.
26	400KV NSLG-Tala Ckt-1	05.04.17	07:00	05.04.17	17:00	ODB	ER-II	Insulator replacement in crossings

27	400kV NSLG-Tala Ckt-2	07.04.17	07:00	07.04.17	17:00	ODB	ER-II	Insulator replacement in crossings
28	400kV NSLG-Tala Ckt-3	09.04.17	07:00	09.04.17	17:00	ODB	ER-II	Insulator replacement in crossings
29	400kV NSLG-Tala Ckt-4	03.04.17	07:00	03.04.17	17:00	ODB	ER-II	Insulator replacement in crossings
30	400KV BONGAIGAON - ALIPURDUAR CIRCUIT # 1	25.04.17	07:00	25.04.17	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR
31	400KV BINAGURI- ALIPURDUAR CIRCUIT # 1	20.04.17	07:00	20.04.17	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR
32	400KV BONGAIGAON - ALIPURDUAR CIRCUIT # 2	23.04.17	07:00	23.04.17	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR
33	400KV BONGAIGAON - ALIPURDUAR CIRCUIT # 2	22.04.17	07:00	22.04.17	16:00	ODB	ER-II	FOR BALANCE CONSTRUCTION ACTIVITY AT ALIPURDUAR
34	400kV D/C Binaguri-Bongaigaon TL (One circuit at a time).	11.04.17	8:00 Hrs	31.04.17	17:00 Hrs	ODB	ER-II	Porcelain Insulator replacement work, One ckt S/D shall be taken, other ckt shall remain in service
35	400 KV MALDA-FARAKKA-D/C (One circuit at a time)	03.04.17	09:00	08.04.17	17:00	ODB	ER-II	FOR ATTENDING BALANCE PUNCH POINT OF RECONDUCTORING WORK. S/D CONTINUOUSLY DEFERRED DUE TO SYSTEM CONSTRAINT.
36	400 KV MALDA-PURNEA-D/C (One circuit at a time)	09.04.17	09:00	12.04.17	17:00	ODB	ER-II	FOR ATTENDING HOT SPOT IN LINE & FOR BRINGING 63 MVAR L/R AT MALDA END IN SERVICE. S/D CONTINUOUSLY DEFERRED DUE TO SYSTEM CONSTRAINT.
37	220 KV BIRPARA-MALBASE	04.04.17	09:00	04.04.17	16:00	ODB	ER-II	FOR NTAMC ADAPTATION WORK OF ISOLATORS.
38	400 KV BERHAMPUR-BHERAMARA-I	17.04.17	09:00	17.04.17	16:00	ODB	ER-II	AMP WORK
39	401 KV BERHAMPUR-BHERAMARA-II	18.04.17	09:00	18.04.17	16:00	ODB	ER-II	AMP WORK
40	765kV S/C Gaya-Balia line	05.04.2017	09:00	05.04.2017	17:00	ODB	POWERGRID / GAYA	For replacement of insulators damaged by miscreant 208,209
41	765kV S/C Gaya-Varanasi-1 line	06.04.2017	09:00	07.04.2017	17:00	ODB	POWERGRID / GAYA	For replacement of insulators damaged by miscreant 122,124
42	765KV BUS-I at Gaya S/S	29.03.2017	10:00	29.03.2017	18:00	ODB	POWERGRID / GAYA	for isolator rectification work under S/S extn. package
43	765KV BUS-II at Gaya S/S	30.03.2017	10:00	30.03.2017	18:00	ODB	POWERGRID / GAYA	for isolator rectification work under S/S extn. package
44	765KV BUS Reactor -I at Gaya S/S	11.04.2017	10:00	11.04.2017	18:00	ODB	POWERGRID / GAYA	For AMP and Repainting Work

45	765KV BUS-Reactor II at Gaya S/S	12.04.2017	10:00	12.04.2017	18:00	ODB	POWERGRID / GAYA	For AMP and Repainting Work
46	765KV , 710 Bay	13.04.2017	10:00	14.04.2017	18:00	ODB	POWERGRID / GAYA	For attending SF6 Gas leakage from 71052 Breaker
47	400kV BSf- Muzaffarpur-1 line	04.04.2017	10:00	04.04.2017	14:00	ODB	POWERGRID / BSF	Line bay AMP work
48	400kV BSf- Balia-1 line	05.04.2017	10:00	05.04.2017	14:00	ODB	POWERGRID / BSF	Line bay AMP work
49	400 KV BSF - Varanasi -I	16.04.17	09:00	16.04.17	18:00	ODB	POWERGRID / BSF	for replcement of porcelain insulator with polymer insulator
50	400 KV BSF - BALIA - I	28.03.22	09:00	29.03.17	18:00	ODB	POWERGRID / BSF	for replcement of porcelain insulator with polymer insulator
51	400 KV BSF - BALIA - II	30.03.23	09:00	30.03.17	18:00	ODB	POWERGRID / BSF	for replcement of porcelain insulator with polymer insulator
52	765 kV NRNC-DMG -2	13.04.17	09:00	14.04.17	17:00	ODB	POWERGRID / NEW RANCHI	For changing of Glass insulators (19 Nos) broken by miscreants at T No- 130,136,145,158,195,243, 324, 325, 447)
53	765KV BUS-I AT NEW RANCHI	28.03.2017	09:00	28.03.2017	18:00	ODB	POWERGRID / NEW RANCHI	For AMP works
54	765KV BUS-II AT NEW RANCHI	29.03.2017	09:00	29.03.2017	18:00	ODB	POWERGRID / NEW RANCHI	For AMP works
55	765KV Tie Bay of PSL_FTP Line & ICT AT SSRM	29.03.17	10:00	29.03.17	18:00	ODB	POWERGRID / SSRM	Modification in drive mechanism box to avoid unwanted opening. there will no any power flow in 765KV PSL-FTP line however line may be idle charged with 707 Main Bay & Line Reactor
56	400KV PTN BALIA III	18.04.2017	09:00	18.04.2017	17:30	ODB	POWERGRID /Patna	Fixing of spacer Cap & repair of Conductor cut
57	400KV PTN BALIA IV	19.04.2017	09:00	20.04.2017	17:30	ODB	POWERGRID /Patna	Fixing of spacer Cap & repair of Conductor cut
58	400KV PTN BALIA I	21.04.2017	09:00	21.04.2017	17:30	ODB	POWERGRID /Patna	Fixing of spacer Cap & repair of Conductor cut
59	400KV PTN BALIA II	22.04.2017	09:00	22.04.2017	17:30	ODB	POWERGRID /Patna	Fixing of spacer Cap & repair of Conductor cut