



Minutes of **160th OCC Meeting**

Date: 29.08.2019
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata: 700 033

Eastern Regional Power Committee

Minutes of 160th OCC Meeting held on 9th August, 2019 at ERPC, Kolkata

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

Item no. 1: Confirmation of minutes of 159th OCC meeting of ERPC held on 19.07.2019

The minutes of 159th OCC meeting were uploaded in ERPC website and circulated vide letter dated 26.07.2019 to all the constituents.

Members may confirm the minutes.

Deliberation in the meeting

Members confirmed the minutes of 159th OCC meeting.

PART A : ER GRID PERFORMANCE

Item no. A1: ER Grid performance during July, 2019

The average consumption of Eastern Region for July- 2019 was 464 Mu. Eastern Region energy consumption reached a monthly maximum of 510 Mu on 14th July - 2019. Total Export schedule of Eastern region for July – 2019 was 1579 Mu, where as actual export was 1582 Mu.

ERLDC may present the performance of Eastern Regional Grid covering the followings:

- 1. Frequency profile**
- 2. Over drawal/under injection by ER Entities**
- 3. Performance of Hydro Power Stations during peak hours**
- 4. Performance of ISGS during RRAS**
- 5. Reactive Power performance of Generators**
- 6. Restricted Governor /Free Governor Mode Operation of generators in ER**

A meeting to discuss and deliberate on the performance of governor response of ISGS and IPPs generating power plants of Eastern Region, was organised by ERLDC On 12th July 2019. Performance of each ISGS and IPPs Power plant for the six frequency events which happened from March to June 2019, were discussed in the meeting. The summary of the discussions with generators is provided **Annexure-A1.6**.

Member may discuss.

Deliberation in the meeting

*ERLDC presented the performance of the Eastern Regional Grid during July 2019. Presentation is enclosed at **Annexure- A1**.*

OCC observed that the % of time of grid frequency greater than 50.05 Hz was 23 % and it has increased 12% compared to last year.

ERLDC explained that due to inform power injected by new generating entities (i.e OPGC, NPGC and Mangdichu generating plants), surplus generation was available in the region, this might have resulted into the high frequency.

ERLDC presented a detailed analysis of the drawal pattern of the Eastern Regional constituents. It emerged from the presentation that Odisha and West Bengal had overdrawn from the Grid for significant times.

OCC advised Odisha and West Bengal to maintain drawal within the schedule.

Farakka and GMR had been continuously under generating w.r.t. their schedule.

ED, ERLDC informed that such generation pattern against schedule could be construed as gaming and is a gross violation of grid discipline. Farakka and GMR should revise the DC, if they could not generate as per the schedule.

OCC advised Farakka and GMR to declare the DC faithfully.

Item no. A2: Effect of cyclone FANI on Odisha system

In 159th OCC, Odishawas advised to give a presentation in next OCC Meeting on effect of FANI cyclone on transmission and distribution system in Odisha along with the restoration status.

Odisha agreed to give the presentation in next OCC Meeting.

Odisha may give a presentation.

Deliberation in the meeting

Odisha informed that they would give the presentation in next OCC Meeting.

PART B: ITEMS FOR DISCUSSION

Item No. B.1: Persistent Low Voltage at 400/220 kV Nodes in West Bengal System -- ERLDC

Low voltage chronic issues have been observed in few pockets of West Bengal System. These pockets include

1. 400 kV Rajarhat, 400 kV Shubhasgram, 400 kV Jeerat and their downstream area,
2. 132 kV Malda and downstream areas

The chronic low voltage problem is still persisting and momentarily reliefs are observed only on the days of load crash in south Bengal due to inclement weather. Many letters are also written to WBSETCL highlighting the severity of the condition. However till date any improvement in low voltage problem is not observed.

The matter was also discussed in last OCC meeting where OCC advised SLDC, WB to prepare a plan for implementation of Under-Voltage Load Shedding (UVLS) in WBSETCL system to avoid voltage stability problem.

In 158th OCC, ERLDC elaborated that due to significant increase in demand at Subashgram, Jeerat and Malda areas, the voltage has been coming down below 370 kV during peak hours.

OCC observed that low voltage had been persisting in West Bengal system due to significant demand at Malda, Subashgram and Jeerat area and insufficient reactive power support by WBPDCCL generating units (i.e. from Sagardhigi, Bakreswar and Kolaghat TPS units). OCC opined that this might be leading to voltage instability problem, if necessary preventive actions are not taken in advance.

OCC advised WBPDCCL provide MVAR generation during low voltage condition as per the capability curve. OCC advised SLDC, WB to implement Under-Voltage Load Shedding (UVLS) in WBSETCL system to avoid voltage stability problem.

OCC decided to discuss the issue of low voltage in West Bengal system and the proposal of installing SVC at Subashgram in a separate meeting with the concerned members from WBSETCL, WBPDCCL, SLDC-WB, WBSEDCL, CESC, Powergrid ER-II, ERLDC and ERPC.

Accordingly, the meeting was conducted at ERPC, Kolkata on 8th July 2019.

In 159th OCC, WBPDCCL informed that they are generating reactive power during low voltage by maintaining the generator terminal voltage at 1p.u. and also submitting the data on daily basis.

ERLDC informed that WBPDCCL generators are providing the VAR during low voltage but still there is a scope for improvement. ERLDC added that reactive power performance of Farakka unit 2 and 4 is not satisfactory and not generating sufficient VAR during low voltage.

OCC advised NTPC Farakka to take appropriate action to generate VAR during low voltage.

OCC advised SLDC, West Bengal to monitor the voltage and take appropriate action to control the voltage.

OCC also advised ERLDC and SLDC, WB to analyze the improvement in voltage profile due to reactive power support from WBPDCCL.

Members may discuss.

Deliberation in the meeting

ERLDC informed that voltage at 400 kV Shubhasgram and 400 kV Jeerat S/s was less than 380 kV during 16th to 20th July 2019.

SLDC, West Bengal informed that reactive power provided by WBPDCCL generating stations during low voltage condition had been improved in July 2019.

OCC opined that the low voltage would be predominant during Durga puja. Therefore, OCC advised SLDC, West Bengal to implement Under-Voltage Load Shedding (UVLS) scheme in WBSETCL system to avoid voltage stability problem.

OCC referred the issue to TCC for further guidance.

Item No. B.2: Rectification of bent Tower leg & bracing at Loc. No. 170 (DD+0) of 400kV D/C Nabinagar-Sasaram Line--Powergrid

Powergrid informed that during line patrolling, the main leg-A and connected bracing between Leg-A & Leg-D was found deformed and bend inside, following the summer cyclone in the month of May 2019.

It is proposed to replace the bend bracing by de-stringing of conductor and after that replacement of leg with support of derrick / hydra with proper guying arrangements. The above lines shall be under shut-down to carry out such rectification work for a period of about ten days. To avoid collapse of said tower, POWERGRID has provided stitching with additional tower member to safeguard the tower and kept under regular vigil. Due to severe bending of leg members, collapse of the said tower cannot be overruled and hence required to be replaced the bend members at the earliest.

The replacement of deformed / bulged leg & bracing has been planned from 1st to 10th July' 2019 for which shutdown requisition has already been proposed. Since this tower has been deformed due to severe cyclone, the rectification period of the subject tower may be considered as force majeure condition for the purpose of calculation of availability.

In 158th OCC, it was informed that no evacuation path would be available for Nabinagar generation plant during the shutdown period of 400kV D/C Nabinagar-Sasaram Line.

In view of above, OCC advised Powergrid to restore the line using ERS and complete the tower repairing work.

In 159th OCC, Powergrid informed that restoration of the line using ERS would take more than 10 days as it requires destringing of 3.6 km line. The replacement of deformed / bulged leg & bracing would take 10 days.

OCC decided to discuss the issue in separate meeting with concerned utilities i.e. Eastern Railway, Bihar, BRBCL, Powergrid, ERLDC and ERPC.

*In line with OCC decision, a special meeting was convened at ERPC on 2nd August 2019. Minutes of the meeting are enclosed at **Annexure-B2**. In the meeting, Powergrid was advised to explore temporary connection of BRBCL power station with nearby 400kV transmission lines (i.e. 400kV Daltanganj-Sasaram D/C line or 400kV NPGC-Patna D/C line) using ERS during repair works of the defective tower of 400kV BRBCL-Sasaram D/C line. Powergrid agreed to explore the possibility for the same.*

Powergrid may place the scheme. Members may discuss.

Deliberation in the meeting

Powergrid gave a detailed presentation on the interim arrangement to provide evacuation path for BRBCL generators during the shutdown of 400kV D/C Nabinagar-Sasaram Line.

Powergrid informed that 400kV Daltanganj-Sasaram D/C line is 800 meters away from 400kV D/C Nabinagar-Sasaram Line. One circuit of 400kV Daltanganj-Sasaram D/C line can be utilized for evacuation of BRBCL generation by tapping one circuit of 400kV D/C Nabinagar-Sasaram Line using four ERS towers. Powergrid added that they need 12 hrs shutdown of 400kV D/C Nabinagar-Sasaram Line to implement the interim arrangement.

BRBCL informed that during the shutdown of both 400kV D/C Nabinagar-Sasaram Line for 12 hrs, they will keep their units in standby mode and run their auxiliary equipment using DG set.

ERLDC informed that loads at Daltanganj to be shifted by JUSNL during the interim arrangement.

JUSNL agreed to shift the loads.

OCC agreed and decided to take up the tower repairing work during December 2019.

OCC advised Powergrid and BRBCL to coordinate and decide the dates. OCC advised BRBCL to inform the dates to their beneficiaries Bihar and Railways at least 10 days in advance.

Item No. B.3: Outage of important transmission lines

In 159th OCC, Powergrid informed that 400 kV Kishanganj-Patna D/C lines would be restored by end of December 2019.

ENCIL vide mail dated 5th August 2019 informed that 400 kV Purnea-Bihar Shariff D/c would be restored by end of November 2019.

Members may update.

Deliberation in the meeting

Powergrid informed that 400 kV Kishanganj-Patna D/C lines would be restored by end of December 2019.

ENCIL informed that they were planning for the permanent restoration of the line using special high-performance conductor (HPC with ACCC conductor) between tower AP46/9A and AP47/1. 400 kV Purnea-Bihar Shariff D/c would be restored by end of November 2019.

Item No. B.4: Implementation of non-scheduling of power due to failure of Payment security mechanism (PSM)--ERLDC

As per Govt order: 1. "23/22/2019-R&R" dated: 28th June, 2019; 2. "23/22/2019-R&R" dated: 17th July, 2019; 3. "23/22/2019-R&R" dated: 23rd July, 2019, Non scheduling of power to the default beneficiary in case of failure of Payment security mechanism has been successfully implemented by PSOCO w.e.f. from 1st August 2019.

To facilitate the non-scheduling of power by the generator to any beneficiaries for non-maintenance of any valid Payment Security Mechanism (PSM), a web portal (Payment Security Administration portal link: <https://psa.posoco.in>) has been introduced by POSOCO on 31st July 2019. Using this portal beneficiaries and generators can update their payment security status for ISGS/LTA/MTOA transactions for the day ahead by 08:00 Hrs of the 'D-1' day using their user

credential. As per the declaration in this portal, entitlement of the beneficiaries is being calculated at 09:00 Hrs of 'D-1' day for the day 'D' and uploaded inscheduling portal of ERLDC.

ERLDC may explain. Members may note.

Deliberation in the meeting

Members noted.

Item No. B.5: Action Plan for Power Supply during Durga Puja, 2019 (4th October to 8th October, 2019)

The Hon'ble Minister-in-charge, Department of Power & Non-Conventional Energy Sources, Govt. of West Bengal has convened a meeting on 20/8/2019 regarding Action Plan for meeting the power demand during the Durga Puja festival, 2019 i.e. the period from 04/10/19 (MahaSasthi) to 08/10/19 (MahaDashami).

ERPC has assessed the expected **Availability** vis-à-vis projected **Demand** for West Bengal as well as Eastern Region during the above period. The details are given in the **Annexure-B5**.

Members may kindly discuss and finalize.

Deliberation in the meeting

It was informed that a meeting on "Action plan for power supply during Durga Puja 2019" would be taken by Honorable Ministry of Power, Govt. of West Bengal.

OCC advised all the constituents to send the updated details to ERPC within two days.

NTPC informed that Darlipalli unit 1 would be commissioned by August 2019.

Item No. B.6: Review of Indian Electricity Grid Code (IEGC)

An Expert Group has been formed for comprehensive review of the Indian Electricity Grid Code (IEGC). The Expert Group requested the inputs of RPCs to address the operational and regulatory issues pertinent to system operation.

Members may submit their views.

Deliberation in the meeting

OCC advised all the constituents to send their inputs to ERPC Secretariat within a week.

Item No. B.7: Installation of Earth Switch for 400KV Talcher-Rourkela D/C and 400KV D/C Talcher-Rengali lines at NTPC end --Powergrid

400KV D/C Talcher-Rourkela and 400KV D/C Talcher-Rengali lines belong to POWERGRID and it is being maintained by POWERGRID. The 400KV bays for both the lines at NTPC end belong to NTPC. There is no line side earth switch available for these lines at NTPC end for earthing any of these lines during shutdown maintenance activities. Only one circuit is allowed for shutdown for maintenance of these lines which leads to severe induction due to other circuit in service. Though localized earthing is being done during maintenance by POWERGRID, it is not sufficient for the safety of the working person against induction.

In view of this NTPC is requested to install the earth switch for these lines at the earliest.

Members may discuss.

Deliberation in the meeting

It was informed that earth switches are not available for the transmission lines at old NTPC substations (Talcher, Farakka and Kahalgaon).

OCC opined that earth switches are mandatory for the safety of the working persons doing the maintenance. OCC advised NTPC to install the earth switches at the earliest.

Talcher, NTPC informed that they are in process of installing earth switches at Talcher.

OCC referred the issue to TCC for further guidance.

Item No. B.8: WIDE DEVIATION OF REAL TIME GENERATION/SCHEDULE GENERATION(SG) OF TALA AND CHUKHA HEP WITH RESPECT TO DECLARED CAPACITY--WBSEDCL

Due to wide deviation between Declared capacity & real time generation of Tala HEP & Chukha HEP the day ahead & intraday planning of the beneficiaries are getting dislocated on regular basis specially during the monsoon season.

In practice distribution utilities like WBSEDCL tunes the day ahead LGBR by trading through Exchange platform, based on the day ahead availability received from different power stations under long/Medium term PPA within 12.00hrs of every day. But in real time it is observed that the Schedule Generation (SG) of Tala HEP & CHEP differs widely w.r.t that of day ahead DC. So, for such unrealistic day ahead DC prediction from Bhutan side the beneficiaries are failing to plan their power purchase portfolio on economic principle.

Moreover, it is also observed that Bhutan S.O. is not serious in revising the DC of Tala HEP & CHEP in accordance with the real time ongoing generation trend. So, due to uncertainty of SG for such approach, beneficiaries are facing severe problem to take proper decision for load generation balancing under prevailing stringent DSM regime.

In 159th OCC, DGPC informed that the hydro flow is changing rapidly, accordingly they are revising the DC. DGPC added that they are submitting the revised DC to NLDC, Bhutan.

OCC advised NLDC, Bhutan to adhere to the schedule, any deviation schedule due to change in hydro inflow should be taken care by revising the schedule. The day ahead schedule should be accurate so that the Beneficiaries can plan their availability as per the demand. Otherwise, the beneficiaries incurred with huge penalty under DSM due to deviation in the schedule of Bhutan power.

NLDC, Bhutan informed that accessing the ERLDC site requires high speed internet which is not available at NLDC, Bhutan therefore, they could not punch the revised schedule. However NLDC, Bhutan agreed to pass the information to ERLDC in time.

ERLDC and Bhutan may update.

Deliberation in the meeting

ERLDC informed that NLDC, Bhutan is punching the day ahead schedule in ERLDC site on daily basis and revised the schedule in few occasions.

OCC advised NLDC, Bhutan to revise the schedule in ERLDC website as per the hydro availability on real time basis.

It was informed that the issue would be discussed in a separate meeting with NLDC, Bhutan at NLDC, Delhi.

Item No. B.9: Operationalization of 400 kV Durgapur Bus Splitting Scheme

In 158th OCC, OCC decided to put the Bus Splitting Scheme at 400 kV Durgapur S/s in operation in 1st week of July 2019.

DVC vide letter dated 10th July 2019 informed that after commissioning of 3rd ICT, any unit tripping of MTPS may lead to imposing restriction on loading of the tie lines.

DVC requested to adjudge the viability of keeping the 3rd ICT in service before commissioning of the bus-split at Durgapur(PG).

In 159th OCC, ERLDC informed that the bus splitting scheme was charged for 15 minutes at 15:00 hrs on 18th July 2019 on trial basis. ERLDC had placed the observations in the meeting.

It was observed that the loading on 220kVDurgapur(PG)-Parulia(DVC) D/C line and 220kV Waria-Bidhanagaris increasing with bus splitting scheme. The loading on both the lines is further increasing with 3rd ICT at Durgapur (PG) in service.

OCC advised SLDC, WB to shift the loads to minimize the loading on 220kV Waria-Bidhanagar D/C line.

SLDC, WB informed that there is no scope for shifting the loads.

OCC opined that in view of increasing fault level at 400kV Durgapur, it is necessary to put the Bus splitting scheme in service.

OCC decided to put the Bus Splitting scheme in service for one day on trial basis without 3rd ICT at Durgapur (PG). Based on the real time observations, the further course of action would be decided.

ERLDC may place the details. Members may decide.

Deliberation in the meeting

ERLDC informed that in line with decision taken during 159th OCC meeting, the 400 kV Durgapur bus was operated in bus split condition from 31st July 12:41 Hrs to 1st August 19:35 Hrs. The Bus Splitting Scheme has been kept in service.

It was observed that the loading on 220kV Durgapur(PG)-Parulia(DVC) D/C line and 220kV Waria-Bidhanagar were increasing with bus splitting scheme. The real time flows were almost matching with the study report submitted in the OCC.

OCC advised WBSETCL and DVC to place the action plan to resolve the overloading issues in their network along with target date of implementation.

Item No. B.10: Bypassing arrangement of 400 kV Kishanganj S/S due to recent flood in North Bihar area—ERLDC

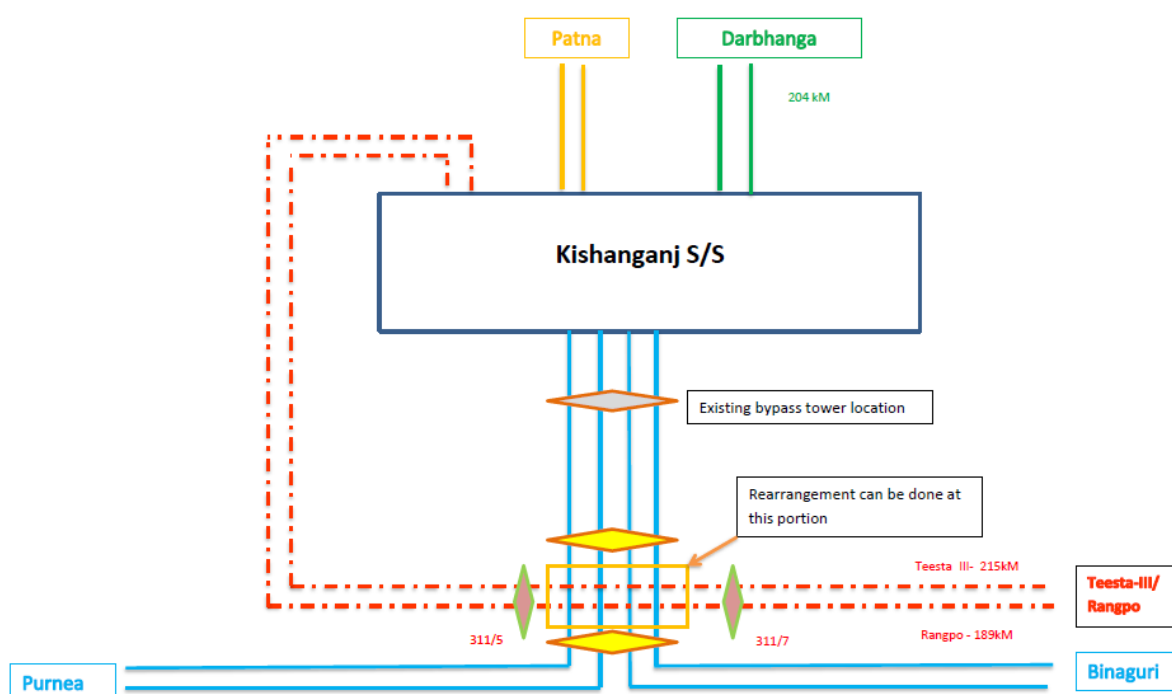
Due to heavy rain in North Bengal and North Bihar for last 2 weeks, flood like situation has arisen in different districts like Kishanganj, East Champaran, Madhubani, Sitamari, Supaul, Araria of Bihar and North Dinajpur of W. Bengal. On 13/07/19 it was gathered that water had accumulated in 400/220kV Kishanganj GIS substation & its adjacent areas had risen to alarming levels.

Earlier during 2017, Kishanganj(PG) S/Stn had to be completely shut down for a couple of days, on account of water-logging. To avoid such type of situation in future, after discussion in different OCC meetings, temporary arrangement was made to keep the major outgoing/incoming lines in service by making bypass arrangement outside of the Kishanganj S/s. Accordingly arrangement

for reconfiguring 400kV Binaguri-Kishanganj D/C & 400 KV Purnea-Kishanganj D/C at Kishanganj S/S as 400 kV Binaguri –Purnea – III & IV was planned & commissioned by cross jumpering above two lines at the LILO portion during March-2018. Subsequently, 400kV Teesta_III-Kishanganj& 400 KV Rangpo-Kishanganj were commissioned on 04/01/2019 & 11/02/2019 respectively and with their commissioning, restriction on generation by the hydro station in Sikkim was withdrawn. At present, 2300MW of Sikkim hydro generation is being evacuated through Kishanganj and Binaguri S/S. Bypassing arrangement of these lines were not envisaged during that period due to non-commissioning of these lines during that period.

In the event of recurrence of a similar emergency flood like situation, for facilitating evacuation of bulk hydro generation of Sikkim it is necessary to explore some methodology to interconnect 400kV Teesta – III – Kishanganj&Rangpo –Kishanganj lines, with other lines of adjacent S/Stns . A new re-configuration scheme needs to be explored instead of the existing Kishanganj S/S bypass scheme In the event of recurrence of a similar emergency.

For finalizing the above scheme an emergency meeting was held at ERLDC with concerned Transmission licenses on 16-07-2019. Transmission licensees viz. TPTL, ATL, ER-II (PGCIL) are present in the meeting and ER-I (PGCIL), NLDC participated the meeting through VC.



In 159th OCC, Powergrid informed that since 400kV Teesta III-Rangpo lines crossing the LILO portion of 400kV Purna-Kishangaj-Binaguri line perpendicularly with vertical line configuration, it is not possible to make the bypass arrangement.

OCC opined that site visit with the concerned transmission licensees is required to find out a plan for bypass arrangement.

OCC decided to form a Committee with members from Powerlinks, Powergrid, TPTL and ENICL. The Committee would visit the site and prepare a feasible plan for the bypassing arrangement.

*Accordingly, the Committee visited the site and submitted the report. The report is enclosed at **Annexure-B10**.*

Members may discuss.

Deliberation in the meeting

After detailed deliberation, OCC advised Teesta III representative present in the meeting to coordinate with TPTL and Powerlinks to do the detail survey of 400kVTeesta III-Rangpo line and 400kV Purna-Kishangaj-Binaguri line and submit the line crossing details to ERLDC.

Item No. B.11: Implementation of SPS for disconnection o Bhutan interconnection at Alipurduar Substation - NLDC

NLDC, POSOCO vide letter dated 23rd July 2019 to POWERGRID proposed to design and implement a suitable SPS scheme at 400 kV Alipurduar substation to trip both 400 kV Alipurduar-Jigmedling D/C in the event of tripping of both the HVDC poles at Alipurduar. Considering the grid security during high hydro condition with depleted outgoing 400 kV lines from New Purnea and Kishanganj this SPS needs to be implemented urgently.

Members may discuss.

Deliberation in the meeting

OCC opined that Bhutan consent is required for implementing the SPS.

OCC referred the issue to TCC.

Item No. B.12: Renewal of Maintenance and Support Contract for PSS/E User licenses--ERLDC

It has been decided in the 30thFOLD meeting held on 19.07.2019 that RLDCs shall coordinate with SLDCs of respective regions and confirm their approval for renewal of AMC of PSS/E. On receipt of the confirmation from RLDCs, NLDC will intimate the negotiation price details to SLDCs so that SLDCs can place award accordingly. The award needs to be placed by 30th September, 2019 to avoid any further rise in price.

In view of the above ERLDC had written a letter to all SLDCs of Eastern Region with request to communicate their approval for renewal of AMC along with the no. of licenses required by 9th August, 2019.

SLDCs may update

Deliberation in the meeting

Bihar had given their consent.

OCC referred the issue to TCC.

Item No. B.13: Levy of transmission charges for overload capacity scheduled to long-term beneficiaries--TUL

1. The agenda is with reference to CERC Order dated 12.02.2019 in Petition No. 205/MP/2018 under which LTA customers are not required to avail additional LTA for scheduling of overload up to 10%. CERC under its Order dated 12.02.2019 has *inter-alia* held as below:

"23.hydro generating stations irrespective of ownership (private or government) are not required to obtain LTA corresponding to overload capacity (upto 10%) and the injection of the same should be allowed by concerned RLDC. In our view, even in case of a hydro generating station in the private sector, the RLDCs cannot compel them to obtain LTA/

*MTOA/ STOA for overload capacity up to 10% of existing LTA during high inflow period. Accordingly, RLDCs are directed to allow injection of power corresponding to overload capacity upto 10% of LTA without obtaining additional LTA/ MTOA/ STOA for the overload capacity. Needless to mention, the RLDCs shall allow the Declared Capacity declared by the generator for the purpose of PAF calculation of the generating station. In order to ensure that the CTU and RLDCs receive their respective charges, we also think it appropriate to clarify that **in case of scheduling of overload capacity up to 10% beyond granted LTA, the hydro generating station or the beneficiary, as the case may be, shall be required to pay additional LTA charges and additional RLDC fees & charges for the overload capacity.** These additional charges shall be in proportion to the existing LTA charges and RLDC fees & charges respectively. CTU and respective RLDCs shall raise bills accordingly.*

2. Few of our long-term customers have raised concern over the computation of LTA charges for such overload capacity. As per Regulation 11(4) of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulation 2010, LTA charges are computed as under:

*"POC transmission rate for demand zone in Rs/ MW/ month x Approved Withdrawal"(MW)
(i.e. Approved Withdrawal being LTA quantum in MW)*

3. Few customers are interested in availing the 10% overload capacity for few days in a month instead of continuously for the whole month. They are concerned that by availing overload for few days (say 3-4 days in a month), they will be liable to pay additional LTA charges for the whole month which will result into very high charges per unit of electricity actually scheduled. They are of the view that the same should be charged proportionately for the number of days for which overload capacity is availed.
4. Therefore, clarification is required regarding levy of transmission charges for scheduling the overload capacity to long-term beneficiaries under LTA. The billing for the same should be calculated on the basis of Rs/ MW/ time-block as is being done in case of Central Generating Stations and be levied on concerned LTA customers. A similar formula has been given under Regulation 11(7) of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulation 2010 which is to be used for somewhat different conditions. The similar methodology for determining transmission charges for overload scheduling can be adopted as given below:

POC Transmission rates for the generation zone in Rs / MW/ time block x Average MW injected during time blocks.

In 159th OCC, TUL informed that few of their long-term customers have raised concern over the computation of LTA charges for such overload capacity.

OCC opined that the issue might be placed in NR forum by their beneficiaries.

However, ERPC Secretariat agreed to look into the issue.

Members may discuss.

Deliberation in the meeting

OCC referred the issue to TCC for further guidance.

Item No. B.14: 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.

A. Projects approved:

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 (inRs.)	Latest status
1	WBSETCL	Renovation & up-gradation of protection system of 220 kV & 400 kV Substations in W. Bengal	31-12-14	April 2018 Extended till March 2019	108.6 Cr	37 Cr.	Project has been completed. Final value of the project is 51.22 Cr.
2		Renovation & modernisation of transmission system for relieving congestion in Intra-State Transmission System.	22-05-17	March 2020	70.13	63.12 Cr	Order has been placed . Work is in progress.
3		Installation of switchable reactor at 400kV & shunt capacitors at 33kV	22-05-17	November 2019	43.37	11.69 Cr	Order had been placed and work is in progress.
4		Installation of Bus Reactors at different 400kV Substation within the state of West Bengal for reactive power management of the Grid			71.74 Cr		
5		Project for establishment of reliable communication and data acquisition at different substation at WBSETCL.			31.19 Cr		
6	WBPDC	Implementation of Islanding scheme at Bandel Thermal Power Station	10.04.17	March 2018	1.39 Cr	1.25 Cr	The islanding scheme had been implemented and in operation wef 15.11.2018
7		Upgradation of Protection and SAS		April 2020	23.48	2.348 Cr	Bid opened and order has been placed. Work started.
8	OPTCL	Renovation & Up-gradation of protection and control systems of Sub-stations in the State of Odisha in order to rectify protection related deficiencies.	11.05.15	31.03.19	162.5 Cr.	37.79 Cr	90% work has been completed. Total expenditure may not exceed 68 Cr.
9		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.17		25.61 Cr.	2.56 Cr	Agreement signed on 03.01.2018. Tender has been floated.
10		Installation of 125 MVAR Bus Reactor along with construction of associated bay each at 400kV Grid S/S of Mendhasal, Meramundali& New Duburi for VAR control & stabilisation of system voltage	27.07.18		27.23 Cr	2.72 Cr	Tender has been floated.
11	OHPC	Renovation and up-gradation of protection and control system of 4 nos.OHPC substations.		U.Kolab, Balimela, U.Indravati, Burla, Chiplima March 2019	22.35 Cr.	2.235 Cr	Placed the work order.
12	BSPTCL	Renovation and up-gradation of 220/132/33 KV GSS Biharshariff, Bodhgaya, Fatuha, Khagaul, Dehri -on-sone& 132/33 kV GSS Kataiya	11/5/15	31.07.2018	64.02 crore	56.04 crore	90% of work has been completed. The work would be completed by Dec 2019.
13		Installation of capacitor bank at different 35 nos. of GSS under BSPTCL	5/9/2016	31 st March 2019	18.88 crore	Nil	Work awarded for all GSS. Work had been completed for 27 substations
14		Renovation & up-gradation of protection and control system of 12 nos. 132/33 KV GSS under BSPTCL.	02.01.17	31 st March 2018	49.22 Cr.		75% work completed for seven no. GSS as part of R & M work. Revised DPR is to be submitted for rest 5 no. GSS.
15	JUSNL	Renovation and up-gradation of protection system	September 2017	15 Months	138.13 crores	39.02 Cr	LOA placed to Siemens on 28 th Sep 2018.

16	DVC	Renovation and upgradation of control & protection system and replacement of Substation Equipment of 220/132/33 kV Ramgarh Substation	02.01.17	01.06.2019	25.96 Cr	2.596 Crore on 01.06.2017	Work awarded for 28.07 Cr. Work would be completed by May 2019.
17		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	27.11.17	24 Months from the date of release of fund.	140.5 Cr.	1 st installment of 14.05 Cr. received on 21.12.2017	Work awarded for 77.97 Cr.
18	POWERGRID	Installation of STATCOM in ER		June 2018	160.28 Cr	16.028 Cr	Work is in progress, expected to complete by June 2018. STATCOM at Rourkela has been commissioned.
19	ERPC	Creation & Maintenance of web based protection database and desktop based protection calculation tool for Eastern Regional Grid	17.03.16	Project is alive from 30 th October 2017	20 Cr.	4.94 Cr. + 9.88 Cr.	1) Protection Database Project has been declared 'Go live' w.e.f. 31.10.17. 2) Pending training on PDMS at Sikkim and 3 rd training on PSCT has been also completed at ERPC Kolkata.
20a	ERPC	Training for Power System Engineers	27.07.18		0.61 Cr.	Nil	Approved
20b		Training on Power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents	27.07.18		5.46 Cr.	Nil	

B. Projects under process of approval:

SN	Name of Constituent	Name of Project	Date of Submission	Estimated cost (in Rs.)	Latest status
1	Sikkim	Renovation & Upgradation of Protection System of Energy and Power Department, Sikkim.	09-08-17	68.95 Cr	The proposal requires third party protection audit. Issue was discussed in the Monitoring Group meeting in Siliguri on 8.6.2018. Sikkim was asked to coordinate with ERPC.
2		Drawing of optical ground wire (OPGW) cables on existing 132kV & 66kV transmission lines and integration of leftover substations with State Load Despatch Centre, Sikkim	09-08-17	25.36 Cr	Scheme was approved by Appraisal Committee. It was sent to CERC for concurrence.
3	JUSNL	Reliable Communication & Data Acquisition System upto 132kV Substations.	23-08-17	102.31 Cr	Scheme was approved by Appraisal Committee. It was sent to CERC for concurrence.
4	OPTCL	Implementation of Automatic Demand Management System (ADMS) in SLDC, Odisha	22-12-17	3.26 Cr	Scheme was approved by Appraisal Committee. It was sent to CERC for concurrence.
5		Protection upgradation and installation of SAS for seven numbers of 220/132/33kV Grid substations (Balasore, Bidanasi, Budhipadar, Katapalli, Narendrapur, New-Bolangir & Paradeep).	12-03-18	41.1 Cr.	Scheme examined by TSEG on 20.03.2018. Inputs sought from the entity are awaited.
6	WBSETCL	Implementation of Integrated system for Scheduling, Accounting, Metering and Settlement of Transactions (SAMAST) system in West Bengal	22-12-17	25.96 Cr	Proposal recommended for approval of Appraisal committee
7	BSPTCL	Implementation of Scheduling, Accounting, Metering and settlement of Transaction in Electricity (SAMAST) in SLDC Bihar.	27-02-18	93.76 Cr.	Scheme examined by TSEG on 20.03.2018 & 31.05.2018. Further inputs furnished by BSPTCL on 1.8.2018. Shall be examined in the next meeting of TSEG.

Respective constituents may update the status.

Deliberation in the meeting

Members updated the latest status as mentioned in above table.

Item No. B.15: Finalization Outage Request and processing timeline--ERLDC

The procedure for timeline regarding submission of outage request till approval of the outage formulated by ERLDC has been circulated and discussed in 156th OCC meeting held at NTPC, Kahalgaon. The same had also been presented in 157th OCC meeting held at ERPC, Kolkata for beneficiary's comments/suggestion. Till date ERLDC did not receive any objection/suggestion from the utilities. Under this circumstance, the procedure mentioned through a flow chart in **Annexure-B15** may be approved and minute unless any modification/suggestion recommended.

In 158th OCC, all the constituents were advised to submit their comments on outage procedure within a week.

OCC decided to finalize the procedure in next OCC Meeting.

Members may decide.

Deliberation in the meeting

All the constituents were advised to submit their comments on outage procedure to ERLDC within a week.

Item No. B.16: Ratification of projected Demand and generation for POC transmission charges and loss calculations for Q3(2019-20)-ERLDC

The projected Demand and Generation of ER constituents to be considered in the base case for POC transmission charge and loss calculations for Q3 (Oct 19-Dec 19) are attached at **Annexure B16** for ratification by the constituents.

Members may discuss.

Deliberation in the meeting

Members noted.

Item No. B.17: Updated Operating Procedure of Eastern Region-2019

The Operating Procedure of Eastern Regional power system, developed and maintained by ERLDC in accordance with section 5.1(f) of the IEGC, has been updated taking into consideration the developments that have taken place in the regional power system during the last one year including the amendments incorporated in the IEGC so far by Hon'ble CERC. Draft Operating procedure was circulated to the concerned for their review and suggestion via email dated 10th July 2019.

Based on comments received and other development operating procedure is finalized and same is available at ERLDC website www.erldc.in

Comments received from West Bengal after 20th July is considered in Revision 1 of operating procedure and same is available at ERLDC website www.erldc.in

Member kindly note

Deliberation in the meeting

Members noted.

Item No. B.18: Status of main bay of 400kV Indravati(OHPC)-Indravati(PG) at OHPC (PG) substation

In 159th OCC, OPTCL was advised to submit a detail plan of restoration of the main bay to ERLDC and ERPC.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that fresh contract has been awarded and the work would be completed within six months.

Item No. B.19: Additional agenda

PART C: ITEMS FOR UPDATE

Item no. C.1: Status of UFRs healthiness installed in Eastern Region

UFR Healthiness Certification for the month of July, 2019 has been received from OPTCL, CESC, WBSETCL, DVC, BSPTCL and JUSNL.

Members may note.

Deliberation in the meeting

Members noted.

Item no. C.2: Status of Islanding Schemes healthiness installed 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
5. Farakka Islanding Scheme, NTPC
6. Bandel Islanding Scheme, WBPDC

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

The healthiness certificate for Islanding Scheme for July, 2019 has been received from CTPS, DVC, NTPC, West Bengal, JUSNL, WBPDC and CESC.

Members may note.

Deliberation in the meeting

Members noted.

Item no. C.3: Healthiness of SPS existing in Eastern Region

The Status of healthiness certificate for July, 2019 is given below:

Sl. No.	Name of the SPS	Healthiness certificate received from	Healthiness certificate not received from
1.	Talcher HVDC	NTPC, GMR,	JITPL, Powergrid,
2.	SPS in CESC system	CESC	Nil
3.	SPS at Chuzachen	Chuzachen	Nil

Members may update.

Deliberation in the meeting

Members noted.

Item no. C.4: Implementation of Automatic Demand Management Scheme (ADMS)-ERLDC

The latest status along with proposed logic as follows:

SI No	State/Utility	Logic for ADMS operation	Implementation status/target	Proposed logic (if different from under implementation logic)
1	West Bengal	F <49.7 AND deviation > 12 % or 150 MW	Implemented on 25.11.16	F <49.9 AND deviation > 12 % or 150 MW
2	DVC	F <49.7 AND deviation > 12 % or 150 MW	Implemented on 17.06.2016	
3	Bihar	F <49.7 AND deviation > 12 % or 150 MW	They would place the order to Chemtrol for implementation.	F <49.9 AND deviation > 12 % or 150 MW
4	Jharkhand	1. System Frequency < 49.9 Hz AND deviation > 12 % or 25 MW 2. System Frequency < 49.9 Hz AND deviation > 12 % or 50 MW 3. System Frequency < 49.9 Hz AND deviation > 12 % or 75 MW	9 Months Tendering for RTU installation is in progress. Offer received from Chemtrol for implementation.	Condition 1: Block I feeders will be selected for load shedding Condition 2: Block I & II feeders will be selected for load shedding Condition 3: Block I, II & III feeders will be selected for load shedding
5	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. DISCOM over-drawl > (40 MW)	10 Months Sent for PSDF approval.	Logic 2 and 3 is AND or OR, in case it is AND then ADMS may not operated when discom are in schedule but GRIDCO is overdrawing due to less generation at state embedded generators
6.	Sikkim			Sikkim informed that they have submitted a proposal to PSDF Committee for installation of OPGW cables which is under approval stage. Sikkim added that ADMS scheme would be implemented after installation of OPGW.

In 142nd OCC, it was opined that uniform logic should be implemented for all the states. OCC decided to review the logic of ADMS after implementation of the scheme by all the states.

In 40th TCC, ERLDC informed that in SCADA O&M Meeting held on 6th March 2019, Chemtrol has agreed to implement ADMS in Bihar and Jharkhand system without any additional charges. However necessary consent for making payment of Rs 4 lakhs(excluding GST) for remaining period of maintenance contract shall be given before implementing the same.

In the TCC Meeting, both Bihar and Jharkhand gave consent for making necessary payment.

In 159th OCC, JUSNL informed that testing of ADMS had been completed and the ADMS would be kept in service in 1st week of August 2019.

BSPTCL informed that installation of ADMS had been completed and the testing would be done by 26th July 2019.

Members may update.

Deliberation in the meeting

BSPTCL informed that installation of ADMS had been completed and the testing would be done by 15th August 2019.

Item no. C.5: Shut down plan of 400 KV Rangpo-Binaguri for Reconductoring work-- Powergrid

Under ERSS-XX, reconductoring work of 400 KV Rangpo-Binaguri-D/C from existing twin moose to Twin HTLS has been approved with scheduled completion target of May-2020. Previously, there are only Rangpo-Binaguri-D/C connectivity was present for transferring power from Sikkim to rest of the grid, accordingly, the S/D for reconductoring work was kept on hold till commissioning of 400 KV Rangpo-Kishanganj & 400 KV Teesta-3-Kishanganj circuit.

After commissioning of above links by M/S. TVPTL, both 400 KV Rangpo-Binaguri S/D was allowed but with a condition that, in case of any breakdown of available links, any one circuit required to be brought back within 24 Hours of intimation.

As all aware that Rangpo-Binaguri, line corridor is completely passing through hilly terrain (Almost 70% of the line) & mostly populated by angle towers. Height of the towers in the peaks also make the task double difficult as approach and carrying of T&P's are itself a gigantic task. Although the work commenced on 19.03.2019 after getting approval of S/D till 25.04.2019, but as the returning conditions are there, work cannot be speed up as in every span, respective gangs used to complete one after another circuit and moving for next span.

However, due to certain issues of generation back down, the double circuit S/D was asked to return and finally both the circuit again charged on 26.05.2019. Merely two month period of S/D was allowed in which due to condition of return of S/D the work could not take pace as envisaged.

After that numerous communications made from ER-II end for further S/D but citing system security & constraints the S/D deferred continuously. In this regard a letter from ED/ER-II dated 17.05.19 also given to POSOCO (Enclosed). It may be noted that, the work is very tedious and time taking activity as most of the work will be carried out at Hills. Again, entire work will take 10-12 months and allowing a small window in lean period will not serve the purpose.

As such again, the S/D for reconductoring is placed as below, for completion of scheduled scope:

SL NO	Name of Element	From	To	Nature	Remarks
01.	400 KV Rangpo-Binaguri-Circuit-I	01.09.2019	30.07.2020	OCB	Other Rangpo-Binaguri Circuit will be charged.
02.	400 KV Rangpo-Binaguri-Circuit-II.	01.11.2019	30.05.2020	OCB	Both the Rangpo-Binaguri D/C will be under shut down.

In continuation, it may be noted, that during S/D of circuits of Rangpo-Binaguri, SPS will be implemented at Rangpo end for maintaining safe operating limits, in case of any eventuality. S/D for both circuits asked in lean period only.

In 159th OCC, it was informed that the issue was discussed in shutdown meeting held on 18th July 2019 wherein it was opined that one circuit of 400 KV Rangpo-Binaguri D/C line could be allowed from September/October 2019 depending on the hydro generation availability in Sikkim.

Members may discuss.

Deliberation in the meeting

ERLDC informed that it was not possible to give shutdown of one circuit of 400 KV Rangpo-Binaguri D/C line during September 2019 in view of full hydro generation in Sikkim.

OCC decided to review the shutdown proposal in next OCC Meeting.

Item no. C.6: Unavailability of Video Conference facility at Sikkim SLDC--Sikkim

Sikkim vide mail dated 15th May 2019 informed that their Video Conference unit was having problem of HDMI port since last two years and it was not attended by M/s Chemtrols until January 2019. After that they took entire VC unit for repair.

Sikkim added that they raised the issue in last SCADA meeting wherein M/s Chemtrol assured to get it repaired by 30.04.2019 but the same is not yet returned.

In 158th OCC, It was informed that the issue was discussed in SCADA meeting wherein Chemtrol was agreed to repair the VC and requested Sikkim to clear the pending dues.

OCC advised Sikkim to clear the dues and send a copy to ERPC and ERLDC. OCC decided to take up the issue with Chemtrol in monthly SCADA meeting.

In 159th OCC, Sikkim informed that they had cleared the dues.

Members may update.

Deliberation in the meeting

It was informed that the issue was discussed in SCADA meeting wherein Chemtrol was agreed to repair the VC in August 2019.

Item no. C.7: Review of the PSS Tuning of Generators in Eastern Region

On 31st January 2019, PSS Tuning Meeting was held at ERPC. All generating utilities were advised to complete the PSS tuning of their plant at earliest for improvement of damping in the grid during transients. In addition, the tuning reports have also to be submitted to ERLDC/ERPC for their validation.

In line with this ERLDC has communicated to following utilities in view of the recent oscillation observed during various events:

Generating Power Plant	Remarks	Status of Action Plan to be informed to OCC
All Units of DVC Generating Plant	Oscillation Observed at DSTPS on 24 th April 2019 and other Oscillation events in the past.	<i>During overhauling of the units.</i>
Sikkim Hydro Complex (Teesta3, Teesta 5, Chujachen, Dikchu, Tashiding, Jorethang)	In view of Oscillation during the 16 th April 2019 events and changes in Network configuration in Sikkim hydro Complex with augmentation of lines	During lean generation period
MPL Plant	Due to Change in Network configuration due to bus splitting at Maithon.	MPL Unit-2: done in June-2019 in the AOH. MPL Unit-1: Planned in the AOH on Nov-2019.
APNRL Plant	Oscillation with Low Damping during transient and switching observed at the plant	<i>During overhauling of the units in Aug/Sep 19.</i>
Farakka NTPC Power Plant	With Augmentation of new lines and changes in network configuration with upcoming bus split at Kahalgaon.	<i>During overhauling of the units.</i>

NPGC/BRBCL/KBUNL NTPC Power Plant	The new units have been commissioned however there is no details on the PSS tuning activity in line with Indian Electricity Grid Code and CEA Grid Connectivity Standards	
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Members may update.

Deliberation in the meeting

BRBCL informed that PSS tuning of unit 2 had been completed and the same for unit 1 would be carried out during overhauling.

Item no. C.8: 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 lastOCC, 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-Kesinga220 kV D/C line at Bolangir S/S	<i>Only 7 towers left (Severe ROW problem).By Mar,2020.</i>
2.	400/220kV Pandiabil Grid S/s:	
a.	Pratapsasan(OPTCL)-Pandiabil(PG) 220 kV D/C line	By Mar,2020.
3.	400/220 kV Keonjhar S/S	
a	Keonjhar (PG)-Turumunga(OPTCL) 220kV D/C line	By June 2020

OPTCL may update.

Deliberation in the meeting

OPTCL updated the latest status as mentioned in above table.

Item no. C.9: 220 kV inter-connecting lines of JUSNL with 2x315 MVA, 400/220 kV sub-stations at Chaibasa, Daltonganj&Dhanbad

In lastOCC, JUSNL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	Daltonganj 400/220/132kV S/s:	
a.	Daltonganj(POWERGRID)–Latehar220kVD/c	By Dec, 2019.
b.	Daltonganj (POWERGRID) – Garhwa 220kV D/c	The line expected to be completed by May, 2018 but – Garhwa 220kV is expected to be completed by Sep 2019.
c	Daltonganj (POWERGRID) – Chatarpur/Lesliganj 132kV D/c	Tendering is in progress. Expected to be completed by October 2019
2	Chaibasa400/220kVS/s	
A	Chaibasa(POWERGRID)–Noamundi220kVD/c	Not yet started
3	Dhanbad400/220kVS/s	
A	LILo of Govindpur–Jainamore/TTPS 220kVD/c at Dhanbad	ROW issues.Target date April 2020.

JUSNL may update.

Deliberation in the meeting

JUSNL updated the latest status as mentioned in above table.

Item no. C.10: 220 kV inter-connecting lines of WBSETCL with 400/220 kV, 2x315 MVA Subashgram & 2x500 MVA Rajarhat sub-stations

In last OCC, WBSETCL updated the latest status as follows:

Sl. No.	Name of the transmission line	Completion schedule
1.	2x500MVA, 400/220kV Rajarhat---	
a.	Rajarhat-N. Town-2 (WBSETCL) 220 kV D/C line	ROW problem, August 2020
b.	Rajarhat- Barasat (WBSETCL) 220 kV D/C line	The line is charged from Rajarhat and Jeerat. The line would be charged from Barasat end after completion of rest of the work by September 2020.
2	Subashgram 400/220kV S/s	
a	Subashgram-Baraipur 220kV D/C line	January 2020, 80% of work has been completed. The line up to the cable is charged from Subashgram end on anti-theft.

WBSETCL may update.

Deliberation in the meeting

WBSETCL updated the latest status as mentioned in above table.

Item no. C.11: Bypassing arrangement of LILO of 400kV Lines at Angul

LILO of Meramundali-Bolangir/Jeyapore 400 kV S/C line and LILO of one Ckt of Talcher Meramundali 400 kV D/C line has been done at Angul 765/400kV Sub-station. The bypass arrangement for these circuits were under implementation at Angul by Powergrid.

In 158th OCC, Powergrid informed that bypass arrangement would be completed by August 2019.

OPTCL informed that 2nd circuit of 400kV Meramundali-Mendhasal line would be commissioned by 1st week of August 2019.

Powergrid and OPTCL may update.

Deliberation in the meeting

Powergrid informed that bypass arrangement would be completed by end of August 2019.

OPTCL informed that 2nd circuit of 400kV Meramundali-Mendhasal line would be commissioned by end of August 2019.

Item no. C.12: 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.

Major issues are given below:

- i. Regarding frequent intermittent of real time SCADA data from Talcher STPS Stage 1 & 2, NTPC agreed to provide additional ports by March 2019.
- ii. Alternate path for Malda–Farakka OPGW link

In 153rd OCC, Powergrid was advised to implement alternate OPGW link through 400 kV Kishenganj- Darbhanga-Muzaffarpur lines.

In 158th OCC, Powergrid informed that alternate OPGW link through 400 kV Kishenganj- Darbhanga-Muzaffarpur lines would be implemented by July 2019.

In 159th OCC, ERLDC informed that PMU data available at ERLDC is intermittent due to communication issues and PMU data reporting from PDCs at SLDCs is also intermittent.

ERLDC opined that alternate OPGW link is required for reliable communication.

OCC advised Powergrid to take the necessary action to resolve the issue.

Members may update.

Deliberation in the meeting

*ERLDC presented the latest status of telemetry. Presentation is enclosed at **Annexure-C12**.*

OCC advised all the concerned constituents to take appropriate action to ensure data availability to ERLDC.

NTPC informed that additional ports at Talcher STPS would be provided by November 2019.

Powergrid informed that alternate OPGW link through 400 kV Kishenganj- Darbhanga-Muzaffarpur lines had been implemented on 23rd July 2019.

Item no. C.13: Transfer capability determination by the states

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.

Latest status of State ATC/TTC declared by states for the month of November-2019

Sl No	State/Utility	TTC import(MW)		RM(MW)		ATC (Import) MW		Remark
		Import	Export	Import	Export	Import	Export	
1	BSPTCL	5300	--	100	--	5200	--	Oct-19
2	JUSNL	1185	--	32	--	1153	--	Oct-19
3	DVC	1171.6	3142	61.46	48.26	1110.14	3093.7	Sep-19
4	OPTCL	1963	--	80	--	1883	--	Nov-19
5	WBSETCL	3840	--	400	--	3440	--	Sep-19
6	Sikkim	285	--	2.5	--	282.5	--	Nov-19

As per the “Detailed Procedure for Relieving Congestion in Real Time Operation” Following has also been mandated for monitoring of Congestion in Real Time :

1. SLDCs/ RLDCs/ NLDC shall have a display available in their web-sites showing TTC, TRM, ATC declared in advance alongwith Real time power flow in the corridor for which TTC has been declared shall be displayed alongside for comparison. The voltage of the important nodes in the grid downstream/ upstream of the corridor shall also be displayed. Presently the display available for RLDC/NLDC for real time monitoring is :http://wbs.nldc.in:82/Web_TTC_ATC.aspx. As all SLDCs of Eastern region are now declaring ATC/TTC, so, now it would be desired to have the display for Eastern region where states ATC/TTC calculated will be monitored with actual. In order to, harmonise the process a detailed view of ATC/TTC links is given below which ERLDC can utilize for web based monitoring.

SLDC	ATC/TTC Weblink
DVC	http://application.dvc.gov.in:8080/CLD/atcttcmenu.jsp
West Bengal	http://www.wbsldc.in/atc-ttc
Bihar	http://www.bsptcl.in/ViewATCTTCWeb.aspx?GL=12&PL=10
Orissa	Dynamic Link for each month (Static Location for All months ATC/TTC to be kept for easy access)
Jharkhand	Web Link to be prepared by SLDC
Sikkim	Web Link to be prepared by SLDC

In addition , Each SLDC shall also show the same on their website for real time monitoring. Sample display for NLDC is given below.

Updated at : 29-07-2019 16:01:15

S.No.	CORRIDOR / CONTROL AREA	TTC	ATC	ACTUAL FLOW (MW)
Import				
1	NR	17950	17150	12431
2	ER			-3218
3	NER	1150	1105	0
4	SR	10500	9750	3305
5	WR			-12714
6	Punjab	7000	6400	6206
7	DD&DNH	1300	1300	1111
8	S3 (Kerala)	2900	2810	2514
Export				
1	NR	4500	3800	-12431
2	ER			3218
3	NER	2695	2650	-482
4	SR	999999	999999	-3305
5	WR			12714
6	W3	999999	999999	12377

Fig : NLDC display for Real Time congestion

2. State Load Despatch Centre (SLDC) shall assess the Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) on its inter-State transmission corridor considering the meshed intra State corridors for exchange (import/ export) of power with inter-State Transmission System (ISTS). The details of anticipated transmission constraints in the intra State system shall also be indicated separately. Present Status of Mentioning about qassumptionaand LGBR used for ATC/TTC calculation based on the available online information are as follows:

SLDC	ATC/TTC Review
DVC	Constraint and Load/gen Assumption needs to be mentioned
West Bengal	Constraint and Load/gen Assumption needs to be mentioned
Orissa	No Issue, as ATC/TTC, Constraint and assumption are mentioned properly for both import as well as export TTC.
Bihar	Constraint and Load/gen Assumption needs to be mentioned
Jharkhand	Constraint and Load/gen Assumption needs to be mentioned
Sikkim	Constraint and Load/gen Assumption needs to be mentioned

ERLDC may explain. Members may update.

Deliberation in the meeting

ERLDC informed that the base case of West Bengal system including CESC is not updated.

OCC advised SLDC, WB to send the updated the base case PSSE file to ERLDC.

OCC advised all the SLDCs to provide the ATC/TTC figures along with the constraint details and actual flows in their websites.

Item no. C.14: Mock Black start exercises in Eastern Region – ERLDC

Mock black start date for financial year 2019-20 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, 2019	Done on 19 th July 2019	Last Week of January 2020	
2	Maithon	1 st week of June 2019		1st Week of February 2020	
3	Rengali	2 nd week of June 2019	Done on 27 th June 2019	Last week of November 2020	
4	U. Indarvati	3 rd week of June 2019	July 2019	2nd week of February 2020	
5	Subarnarekha	1 st week of October 2019	20 th August 2019	1st week of January 2020	
6	Balimela	3 rd week of October 2019	Done on 17 th July 2019	1st week of March 2020	
7	Teesta-V	2 nd week of May 2019	During winter	Last week of February 2020	
8	Chuzachen	Last Week of Dec 2019		Last week of February 2020	
9	Burla	Last Week of June 2019	July 2019	Last week of February 2020	
10	TLDP-III	1st Week of June 2019		2nd Week of January 2020	
11	TLDP-IV	Last Week of June 2019		1st Week of February 2020	
12	Teesta-III	Last Week of Oct 2019		First Week of March 2020	
13	Jorthang	First Week of May 2019		First Week of Feb 2020	
14	Tasheding	2nd Week of May 2019		2nd Week of Feb 2020	

15	Dikchu	Sep 2019		3rd Week of Feb 2020	
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Members may update.

Deliberation in the meeting

Members noted.

Item no. C.15: Summary of Status Update on Previous agenda items in OCC

OCC	Agenda	Decision	Status Update
152	Installation of PMUs for observation of the dynamic performance of STATCOMs	Powergrid informed that M/s GE had agreed to supply and install of 4 no's PMUs for 4 STATCOMs in the Eastern Region within the quantity variation clause under the existing URTDSM Project.	Powergrid informed that the work would be completed by 15 th August 2019.
155	Collection of modeling data from Renewable as well as conventional energy generators: ERLDC	OCC advised all the constituents to submit the details of renewable power plants of 5 MW and above.	157 th OCC advised all the SLDCs to submit the details to ERPC and ERLDC. Format along with explanation for collection of Wind and Solar Data has been shared by ERLDC to all SLDC.
156	Low frequency Oscillation at MTDC BNC-ALP-Agra	OSS Advised ERTS-2 to submit the analysis report to ERLDC/ERPC	Powergrid informed that the issue was referred to ABB, Sweden. The report is yet to be received from ABB.
156	Item no. C.20: Updated Black Start and Restoration procedure of State--ERLDC	Bihar, Jharkhand, DVC and Orissa have submitted the updated restoration procedure.	Restoration procedure form West Bengal and Sikkim is yet to be received
156	Item No. B.12: Status of Auto-Reclosure on Lines from Tala and Chukha Hydro Power Plant (Bhutan)	DGPC informed that an expert Committee was constituted to enable the autorecloser for transmission lines connected to Tala and Chuka hydro stations. The Committee had recommended for implementation of the autorecloser at Tala and Chuka. DGPC added that they are planning to implement the autorecloser scheme for the transmission lines connected at Chuka by May 2019. Based on the experience gained, they would implement the autorecloser scheme for the transmission lines connected at Tala.	In 159 th OCC, it was informed that autorecloser was implemented for Chuka-Birpara lines. It was successfully operated on 25 th June 2019. DGPC informed that they will implement the autorecloser at Tala end. Regarding 400kV Binaguri-Malbase, it was informed that some configuration issues have to be addressed before putting the autorecloser in operation. OCC advised DGPC to implement 1-ph autorecloser instead of 3-ph.
157	Reliability Indices Submission by PGCIL ERTS-1/ERTS-2 to ERLDC in Line with	PGCIL ERTS-1 and ERTS-2 agreed to provide the details from July 2019.	

	CERC Regulation		
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Deliberation in the meeting

Members updated the status as mentioned in above table.

Item no. C.16: Delay in furnishing information to ERLDC/ERPC regarding of Commissioning of new Transmission Elements/ Generating Units within State and integration of SCADA data with ERLDC--ERLDC

The above matter was deliberated in several past OCC meetings and format for data submission was also circulated. All states and transmission licensees agreed to submit the list of transmissions elements (ISTS & within state) synchronized **for the first time** during last month and new elements to be commissioned during next month, within 7th day of the current month to ERLDC through mail.

For the Month of April-2019, except Odisha no state and transmission licensee has submitted its list of transmission element /generators synchronised **in the previous Month** and List of Transmission element and generators expected to be synchronised during next Month.

The absence of updated information regarding new elements energized in the previous month and elements expected to be commissioned during the next month poses difficulty in integration of SCADA data of intra state lines in ERLDC SCADA system, which in turn severely impairs monitoring and supervising the regional grid – both in real time as well as off-line, at RLDC level. It is also observed that in ERLDC SCADA network and SLDC SCADA network some of the 220 and 132 kV transmission lines and substations are yet to be updated.

ERLDC is in the process of checking and updating the intra-state transmission network models of all states up to 132 KV using SCADA network availability at ERLDC and the transmission map available in the SLDC/STU website. Five groups (one for each state and one group for DVC & Sikkim) have already been formed at ERLDC to validate all state networks up to 132 kV level. In this regard all SLDCs are requested to nominate two executives (one from system operation and one from SCADA side) who shall help and coordinate with ERLDC executives during state network validation process for successful updating of SCADA and off-line models.

In the 157th OCC meeting members were requested to nominate two executives. However, till date nomination has been received from SLDC Jharkhand only.

In the interest of smooth and expeditious execution of this important work of validation / updation of state SCADA models, constituents are once again requested to please cooperate by nominating their concerned representatives.

In the 157th OCC meeting, members were requested to nominate two executives for validation of intra-state transmission network models of all states up to 132 KV in SCADA system. Nomination has been received from SLDC Jharkhand, Odisha and Bihar. Nomination from DVC and West Bengal is yet to be received at ERLDC.

DVC and West Bengal may nominate two executives.

Deliberation in the meeting

Powergrid informed that JUSNL has constructed 132kV Pakur-Rajmahal Line without taking any consent from Powergrid. The line is crossing 400kV Farakka-Gokharnoline with less clearance which is a violation of safety norms.

OCC took serious note of the issue and advised JUSNL to interact with RHQ, Powergrid for necessary action.

Item no. C.17: Issue of Control Room Coordination during Outage and Restoration at Substations having multiple control room and lines with different ownership.--ERLDC

With the introduction of TBCB, multiple utilities are part of the Indian power System. As on date six (7) transmission licensees own various transmission assets of Eastern Region. The entities are **Powergrid, Sterlite (ENICL, PKTCL, OGPTL), Cross Border Power transmission Corp Ltd (CBPTCL), Darbhanga Motihari Transmission Cop Ltd (DMTCL), Powerlinks, Alipurduar Transmission Ltd (ATL) and Teesta Valley power Transmission Ltd (TVPTL)**. Other than Powergrid & Sterlite, no other licensee has any dedicated operational control room for coordination with ERLDC during tripping/shutdown or any other switching operations. Only mobile number of few nodal executives of other transmission licensees is available to ERLDC, which are sometimes unreachable during odd hours. Due to non-availability of dedicated control center, it is very difficult to coordinate with associated transmission licenses during tripping of lines in odd hours, which causes delay in restoration of transmission asset and collection of tripping related information. ERLDC Real time operators are facing few difficulties which are presented on case to case basis:

Case 1: Transmission line owner and substations owner are different: In this case, in case of line tripping, ERLDC has to coordinate with three different utilities for trial attempt or restoration of the line. Also, in case of planned outage the ERLDC has to coordinate with three separate utilities resulting in unavoidable delays

Case 2: In same Substation two different control room: In one of the substations, it is observed that new transmission line integration is coming up with separate control room. This makes it quite difficult to coordinate the charging attempt as Bus/line both owners even though in same substation has to be coordinated. Again, this results in unavoidable delays and confusion among operators in calling two separate operators at same substation.

In view of the above, to avoid any confusion and unwanted delays during real time operation, a strategy and responsibility has to be fixed to ease out the RLDC Real time operator job. following is suggested:

For better co-ordination between transmission licensee and control center, all transmission licenses are requested to formulate their own control center and share the details with all.

For minimizing time and efforts required in coordinating with different agencies and facilitating decision making by ERLDC, it is proposed that representatives of the private transmission licensees in ER may be deployed at RTAMC-1 / RTAMC-2 with their own infrastructure or one executive of the private transmission licensee to be deployed at the substation from which transmission licensees line emanate.

In 158th OCC, ERLDC was advised to give a list of substations along with details of transmission licensees where they are facing the problem.

After detailed deliberation, it was decided to communicate issue to highest authorities of transmission licensees.

In 159th OCC, OCC decided to discuss the issue with all the advised all the private transmission licensees in a separate meeting.

Accordingly, the issue was discussed in a separate meeting with all the private transmission licensees, Powergrid and ERLDC. Minutes of the meeting are yet to be issued.

Members may update.

Deliberation in the meeting

*Minutes of the Special meeting with all the private transmission licensees, Powergrid and ERLDC held on 2nd August 2019 is enclosed at **Annexure-C17**.*

PART D:: OPERATIONAL PLANNING

Item no. D.1: Anticipated power supply position during September 19

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of September 19 were prepared by ERPC Secretariat on the basis of LGBR for 2019-20 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc. is at **Annexure-D.1**.

Members may confirm.

Deliberation in the meeting

*Modified anticipated power supply position for the month of September 2019 after incorporating constituents' observations is given at **Annexure-D.1**.*

Item no. D.2: Shutdown proposal of transmission lines and generating units for the month of September 19

Generator shutdown for September 2019:

System	Station	Unit	Capacity (MW)	From	To	No. of Days	Reason
JHARKHAND	TTPS	2	210	12.08.19	08.09.19	8	Annual Overhauling
DVC	DSTPS	1	500	16.08.19	20.09.19	20	COH (Blr, Turb, Gen.)
ODISHA	Talcher TPS	5	110	09.09.19	28.09.19	20	AOH
WBPDC	Santalaldi TPS	6	250	15.09.19	21.09.19	7	Boiler License renewal

ERLDC may place the list transmission line shutdown discussed on 8th August 2019 through VC.

Members may confirm.

Deliberation in the meeting

Generator shutdown for September 2019:

System	Station	Unit	Capacity (MW)	From	To	No. of Days	Reason
JHARKHAND	TTPS	2	210	12.08.19	08.09.19	8	Annual Overhauling
DVC	DSTPS	1	500	16.08.19	20.09.19	20	COH (Blr, Turb, Gen.)
ODISHA	Talcher TPS	4	110	22.09.19	10.10.19	20	AOH, subject to Odisha consent

*The approved list of shutdown of transmission elements is enclosed at **Annexure-D2**.*

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

(i) Thermal Generating units:

S.No	Station	Location	Owner	Unit No	Capacity	Reason(s)	Outage	Expected Revival Date
1	FARAKKA	WEST BENGAL	NTPC	6	500	ANNUAL MAINTAINANCE	7-Jun-19	7-Aug-19

2	MTHRB	JHARKHAN D	MPL	2	525	ANNUAL OVERHAULING	20- Jun-19	4-Aug-19
3	MTPS II	BIHAR	NTPC	1	195	ANNUAL OVERHAULING	1-Jul- 19	5-Aug-19
4	KAHALGAON	BIHAR	NTPC	4	210	ANNUAL OVERHAULING	11-Jul- 19	12-Aug-19
5	KOLAGHAT	WEST BENGAL	WBPD CL	1	210	POLLUTION CONTROL PROBLEM	10- May- 18	NO DEFINITE PROGRAM
6	KOLAGHAT	WEST BENGAL	WBPD CL	3	210	POLLUTION CONTROL PROBLEM	23- Feb-17	NO DEFINITE PROGRAM
7	KOLAGHAT	WEST BENGAL	WBPD CL	6	210	BOILER OVER HAULING WORK	28-Jul- 19	12-Aug-19
8	BAKRESWAR	WEST BENGAL	WBPD CL	4	210	TBG OVERHAULING	13-Jul- 19	2-Aug-19
9	MEJIA B	WEST BENGAL	DVC	7	500	ANNUAL OVERHAULING	3-Jul- 19	3-Aug-19
10	CTPS	JHARKHAN D	DVC	3	130	TURBINE BLADE DAMAGE	30-Jul- 17	NO DEFINITE PROGRAM
11	TTPS	ODISHA	GRID CO	2	60	ANNUAL OVERHAULING	26-Jul- 19	27-Aug-19
12							Date	
13	JITPL	ODISHA	JITPL	1	600	PA Fan Duct leakage	7-Jul- 19	3-Aug-19
14	TALCHER	ODISHA	NTPC	1	500	COAL SHORTAGE	27-Jul- 19	SUBJECT TO COAL AVAILABILITY
15	APNRL	JHARKHAN D	ADHU NIK	2	270	TURBINE VIBRATION	1-Aug- 19	6-Aug-19
16	STERLITE	ODISHA	GRID CO	2	600	DUE TO PROBLEM IN OLTC SYSTEM OF Unit Transformer	10- Apr-19	8-Aug-19
17	SAGARDIGHI	WEST BENGAL	WBPD CL	3	500	COAL SHORTAGE	4-Jul- 19	SUBJECT TO COAL AVAILABILITY
18	SAGARDIGHI	WEST BENGAL	WBPD CL	2	300	COAL SHORTAGE	23- Jun-19	SUBJECT TO COAL AVAILABILITY
19	MEJIA	WEST BENGAL	DVC	2	210	LOW SYSTEM DEMAND	11-Jul- 19	SUBJECTED TO DVC DEMAND
20	BOKARO B	JHARKHAN D	DVC	3	210	Ash handling problem	30- Jun-19	12-Aug-19
21	BAKRESWAR	WEST BENGAL	WBPD CL	3	210	COAL SHORTAGE	18-Jul- 19	SUBJECT TO COAL AVAILABILITY
22	IBTPS	ODISHA	GRID CO	1	210	Tripped on generator protection	23-Jul- 19	6-Aug-19
23	BANDEL	WEST BENGAL	WBPD CL	5	210	COAL SHORTAGE	22-Jul- 19	SUBJECT TO COAL AVAILABILITY
24	TENUGHAT	JHARKHAN D	JUVN L	1	210	PROBLEM IN FD FAN	30-Jul- 19	3-Aug-19
25	GMR	ODISHA	GRID CO	3	350	Turbine HP control valve problem.	31-Jul- 19	6-Aug-19

26	DPL	WEST BENGAL	WBPD CL	7	250	COAL SHORTAGE	1-Aug-19	SUBJECT TO COAL AVAILABILITY
	Sub Total (SS)				7590			

Generators/ constituents are requested to update the expected date of revival of the units.

(ii) Hydro Generating units:

Sl. No.	Station	Unit No.	Capacity (MW)	Reason (s) of outage	Outage date	Expected Revival Date
1	Balimela	Unit- 1	60	Renovation & Modernization work (Planned)	05-08-2016	30-09-2019
		Unit- 2	60	Renovation & modernization work (Planned).	20-11-2017	30-09-2019
2	Burla	Unit-1	49.5	Turbine & Generator coupling cover water leakage (Forced)	14-03-2018	31-12-2019
		Unit-5	37.5	Renovation. Modernization & up rating work (Planned)	25-10-2016	09-12-2019
		Unit-6	37.5	Renovation, Modernization & up rating work (Planned)	16-10-2016	07-11-2019
		Unit-4	32	Intake Gate Problem (Forced)	25-10-2018	31-07-2019
		Unit-7	49.5	Replacement of GT (Planned)	06-06-2019	30-06-2019
3	Chiplima	Unit-3	24	Renovation & Modernization work (Planned)	15-10-2015	15-06-2019
4	Rengali	Unit-2	50	Capital Maintenance (Planned)	12-12-2018	30-07-2019
5	Indrabati	Unit-4	150	Annual Maintenance	28-06-2019	
6	Upper Kolab	Unit-4	80	Capital Maintenance (Planned)	01-02-2019	31-07-2019
		Unit-3	80	Generator stator Inter turn/ Earth fault	28-03-2019	15-07-2019

It is seen that about 688 MW hydro capacities in Odisha is under forced outage / planned outage in the period of peak monsoon and therefore not available for providing the much needed peaking support during evening peak. SLDC / OHPC may please indicate restoration plan of the units.

(iii) Transmission elements

SL NO	Transmission Element / ICT	Agency	Outage From	Reasons for Outage
1	220 KV BALIMELA - U' SILERU	OPTCL / APSEB	10-03-2018	LINE ANTITHEFT CHARGED FROM UPPER SILERU ON 17-04-18

2	400 KV IBEUL JHARSAGUDA D/C	IBEUL	29-04-2018	TOWER COLLAPSE AT LOC 44,45
3	400KV NEW PURNEA- BIHARSARIFF(PG)-D/C	ENICL	10-08-2018	TOWER COLLAPSE AT LOC 47/0
4	400 KV PATNA KISHANGANJ- I	POWERGRID	01-09-2018	TOWER COLLAPSE AT LOC 129. PILING DAMAGED
5	400 KV PATNA KISHANGANJ- II	POWERGRID	06-07-2019	EMERGENCY HAND TRIPPED DUE TO FRUSTUM OF LOCATION NO: 129A/0 (A LEG) HAS BEEN EXPOSED ON SOIL EROSION.
6	220 KV PANDIABILI - SAMANGARA D/C	OPTCL	03-05-2019	49 NOS OF TOWER COLLAPSED.AS REPORTED BY SLDC OPTCL, TOTAL 60 NOS OF TOWER IN BETWEEN 220KV PANDIABILI – SAMANGARA LINE IN WHICH 48 NOS TOWERS FULLY DAMAGED AND 12 NOS TOWERS PARTIALLY DAMAGED. WORK UNDER PROGRESS.
7	765KV JHARSUGUDA- RAIPUR-1	POWERGRID	22-07-2019	OPENED ON OVER VOLTAGE AT RAIPUR
8	765KV JHARSUGUDA- ANGUL-I	POWERGRID	31-07-2019	OPENED ON OVER VOLTAGE AT JHARSUGUDA
9	132KV KISHANGANJ- BARSOI	BSPHCL	19-07-2019	1 NO TOWER COLLAPSE IN THE LINE AS REPORTED BY SLDC, BIHAR.
10	400KV ALIPURDUAR- JIGMELLING-I	POWERGRID/ BHUTAN	28-07-2019	R-N, 1.5 KA, Z2 FROM ALIPURDUAR; UNDER PATROLLING

(Reported as per Clause 5.2(e) of IEGC)

** Transmission licensees whose line were out due to tower collapse/ bend, may please update the detail restoration plan and as on date work progress status in OCC.

Also Monthly progress report to be submitted to ERLDC/ERPC till restoration of the element.

Members may update.

Deliberation in the meeting

Members noted.

PART E::ITEMS FOR INFORMATION

The following agenda items are placed for information and necessary compliance:

Item No. E.1: 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.

In 142nd OCC, ERLDC informed that, in line with Enquiry Committee Recommendation, cyber security audit is being conducted on regular basis for SCADA system installed at ERLDC and SLDC as well but cyber security audit for telecom infrastructure installed in Eastern Region is not being carried out.

OCC advised all the constituents to conduct the cyber security audit on telecom infrastructure installed in Eastern Region. It is further advised that compliance / mitigation of the points observed during the audit should also be completed for improvement of the telecom infrastructure in ER.

In 37th TCC meeting, it was decided that a workshop would be conducted by CEA at ERPC for further benefit of ER Constituents.

In 144th OCC, ERLDC informed that they have already conducted a workshop with the help of NPTI, Durgapur on 21st March 2018.

A workshop on cyber security was conducted by CEA at ERPC, Kolkata on 09-05-2018.

As suggested by CEA, a format would be circulated among ER constituents for furnishing the information of the their respective systems for discussion in OCC Meeting. The format is enclosed at **Annexure-E1**.

OCC advised all the constituents to submit the information to ERPC as per Annexure-E1.

Item No. E.2: Submission of data in MERIT Order portal--CEA

CEA vide mail dated 9th July 2019 informed that the MERIT Order portal had been launched on 23rd June, 2017 by Honourable Minister of Power. One of the most important advantages of "Merit" Portal is Transparent information dissemination pertaining to marginal variable cost and source wise purchase of electricity and indication of supply side reliability, adequacy, and cost of power procurement.

However, it has been observed that many of the states are not filling the data regularly and sometimes the data filled varies widely from the data available on the respective RLDCs daily reports.

It is requested that the states may be advised to fill the data regularly and check that correct data is filled on the MERIT Portal.

In 159th OCC, all the SLDCs were advised to fill the correct data in MERIT portal on regular basis.

Item No. E.3: 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	46	85.19
NTPC	16	14	87.50
NHPC	1	1	100.00
DVC	40	26	65.00
WB	68	49	72.06
Odisha	59	42	71.19
JUSNL	34	25	73.53
BSPTCL	16	5	31.25
IPP (GMR, Sterlite and MPL)	5	5	100.00

* Pending observations of Powergrid are related to PLCC problems at other end.

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.

Item No. E.4: Commissioning of new transmission elements in Eastern Region

The details of new units/transmission elements commissioned in the month of July-2019 based on the inputs received from beneficiaries

SL NO	Element Name	Owner	Charging Date	Charging Time	Remarks
1	Unit 2 of Mangdhechu (180MW)	DGCL	02-07-2019	12:02	Synchronised for first time
2	400 kV Bidhanagar - New Chanditala	WBSETCL	10-07-2019	19:36	LILO of 400kV Bidhanagr-Arambag at New-Chanditala
3	400 kV New_Chanditala-Arambag	WBSETCL	16-07-2019	14:50	
4	400 KV Patna-NPGC II	PGCIL	17-07-2019	20:23	
5	401 KV Patna-NPGC I	PGCIL	18-07-2019	17:14	
12	Bay of 132kV Rangpo-Chuzachen-2 at Rangpo		24-07-2019	22:05	Rearrangement of 132kv Chuzachen-Gangtok as 132kV Rangpo-Chuzachen-2 & 132kV Rangpo-Gangtok-1 Bay swapping between 132kV Rabgpo-Melli& 132kV Rangpo-gangtok-1
13	Bay of 132kV Rangpo-Melli at Rangpo		24-07-2019	22:39	
6	220 kv Dalkhola-Gazole-1	WBSETCL	25-07-2019	19:09	LILO of 220kV Malda-Dalkhola-DC at Gazole. Only LILO portion is owned by WBSETCL
7	220 kv Gazole-Malda-1	WBSETCL	25-07-2019	19:12	
8	220 kv Dalkhola-Gazole-2	WBSETCL	25-07-2019	19:56	
9	220 kv Gazole-Malda-2	WBSETCL	25-07-2019	19:57	
10	160MVA ICT 1 at Gazole	WBSETCL	25-07-2019	11:54	
11	160MVA ICT 2 at Gazole	WBSETCL	26-07-2019	12:23	

Item No. E.5: UFR operation during the month of July'19

System frequency touched a maximum of 50.32 Hz at 13:06hrs of 07/07/19, 15:50hrs of 15/07/19 & 18:03hrs of 24/07/19 and a minimum of 49.64 Hz at 00:06hrs of 04/07/19. Hence, no report of operation of UFR has been received from any of the constituents.

Item No. E.6: Grid incidences during the month of July, 2019

Sr No	GD/ GI	Date	Time	S/S involved	Summary	Load loss (MW)	Gen loss (MW)
1	GD-I	14-07-2019	10:35	Jorethang, Melli (New) and Tashiding	At 10:35:11 hrs, 220 kvJorethang – New Melli D/C, 220 kvRangpo - Tashiding S/C, 220 kvTashiding – New Melli S/C and 220 kV Melli (New) – Rangpo – S/C tripped due to R-Y fault (Fault location is yet to be received) resulting total power failure at Jorethang, Tashiding and Melli (New) S/S. All the running units at Jorethang and Tashiding tripped due to loss of evacuation path.	0	200
2	GI-I	22-07-2019	03:57	Siliguri	At 03:57 Hrs, 220kV Siliguri-Dalkhola - I tripped along with tripping of 220kV Siliguri-Binaguri - II, 220/132 kV ICT-II at Siliguri and 220 kV Bus-II at Siliguri; At same time, 220 kV Siliguri-Dalkhola - I successfully auto-reclosed at both ends.	0	0
3	GI-II	26-07-2019	10:30	Kahalgau	At 10:30 hrsKhSTPP unit 3 tripped along with Khalgaon bus II. 400 KVKhSTPP - Lakhisarai - II also tripped at the same time due to DT receipt at Lakhisarai end. Unit 3 tripped due to loss of auxiliary supply. Bus tripped due to operation of LBB of main bay of U#3. 400 KV KhSTPPLakhisarai II tripped due to DT receipt at Lakhisarai end.	0	184

Participants in 160th OCC Meeting

Venue: ERPC Conference Hall, Kolkata

Time: 10:30 hrs

Date: 09.08.2019 (Friday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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4	SURAJIT BANERJEE	GM, ERLDC	9423041823	surajit.banerjee@posoco.in	
5	S. K. HAZRA	Sr GM, ^{Powergrid} ERLDC	9433041809	skhazra@powergrid.in	
6	S. K. SINGH	Sr. GM, Powergrid ER-I	8544401030	singhsr@powergrid.in	
7	P. K. DAS	CE-1 (E), SLDC DVC	9831444272	pravas.das@dvce.gov.in	
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"Coming together is a beginning, staying together is progress, and working together is success." —Henry Ford

Participants in 160th OCC Meeting

Venue: ERPC Conference Hall, Kolkata

Time: 10:30 hrs

Date: 08.08.2019 (Friday)

Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford

Participants in 160th OCC Meeting

Venue: ERPC Conference Hall, Kolkata

Time: 10:30 hrs

Date: 08.08.2019 (Friday)

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Sl No	Name	Designation/ Organization	Contact Number	Email	Signature
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Power System Operation Corporation Ltd.



160th OCC Meeting



At ERPC, Kolkata

09th August, 2019

ER Grid Performances

ERLDC POSOCO

Highlights for the month of July-19

Frequency Profile

Average Freq:- 50.00 Hz
Avg FVI:- 0.046
Lowest FVI:- 0.03

Max- 50.32 Hz on 07th,
15th & 24th July' 19
Min- 49.64 Hz on 04th
July'19

68.65% of the time freq
was with in IEGC Band

Peak Demand-

ER: 23401 MW on 21st July
2019 at 23:25 hrs

% Growth in Average Demand
Met w.r.t. last year: 3.76%

BSPHCL : 5381 MW ; ON 31/07/19

JUVNL: 1322 MW; ON 16/07/19

DVC: 3057 MW; ON 04/07/19

GRIDCO: 4828 MW; ON 15/07/19

WB: 9129 MW; ON 20/07/19

SIKKIM: 104 MW; ON 19/07/19

*All data source are from SCADA

Energy met

Max. 504 MU on 18th July 2019

%Growth w.r.t. last year on Max
energy : 3.64%

Avg. 453 MU in July 2019

%Growth w.r.t. last year on Avg.
energy : 2.3%

New Element

Generating Units-

- OPGC #3 (660 MW)
04-07-19
- Mangdechu # 2
(180MW) 02-07-19

Open Access

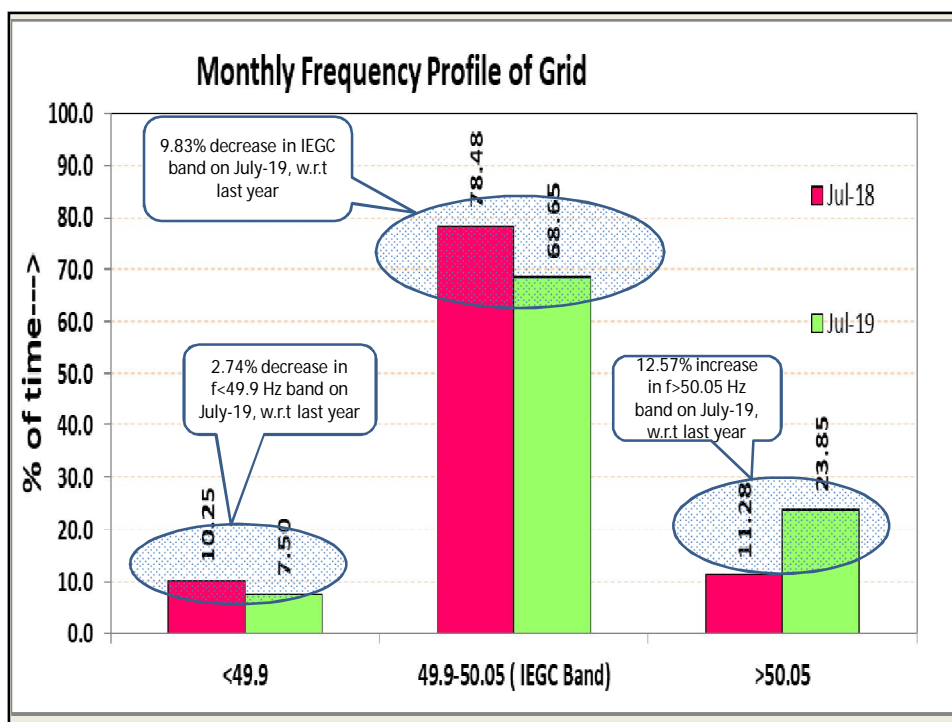
STOA transactions
approved -276 nos.

Energy Approved-
1483.07 MUs

New Element addition during the month:

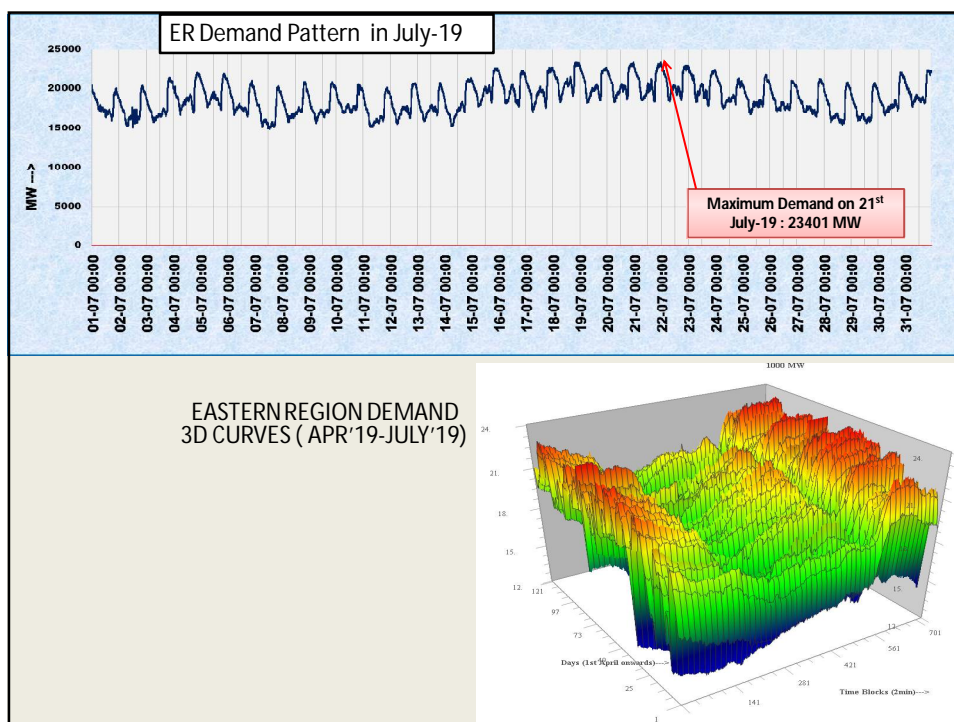
Monthly commissioning List of Transmission element and generators: July 2019

SL NO	Element Name	Owner	Charging Date	Charging Time	Remarks
1	Unit 2 of Mangdhechu (180MW)	DGCL	02-07-2019	12:02	Synchronised for first time
2	OPGC #3 (IB TPS stage-II)	OPGC	04-07-2019	0:00	COD
3	400 kV Bidhanagar - New Chanditala	WBSETCL	10-07-2019	19:36	LILO of 400kV Bidhanagr-Arambag at New-Chanditala
4	400 kV New_Chanditala-Arambag	WBSETCL	16-07-2019	14:50	
5	400 KV Patna-NPGC II	PGCIL	17-07-2019	20:23	
6	401 KV Patna-NPGC I	PGCIL	18-07-2019	17:14	
7	220 kv Dalkhola-Gazole-1	WBSETCL	25-07-2019	19:09	LILO of 220kV Malda-Dalkhola-DC at Gazole. Only LILO portion is owned by WBSETCL
8	220 kv Gazole-Malda-1	WBSETCL	25-07-2019	19:12	
9	220 kv Dalkhola-Gazole-2	WBSETCL	25-07-2019	19:56	
10	220 kv Gazole-Malda-2	WBSETCL	25-07-2019	19:57	
11	160MVA ICT 1 at Gazole	WBSETCL	25-07-2019	11:54	
12	160MVA ICT 2 at Gazole	WBSETCL	26-07-2019	12:23	

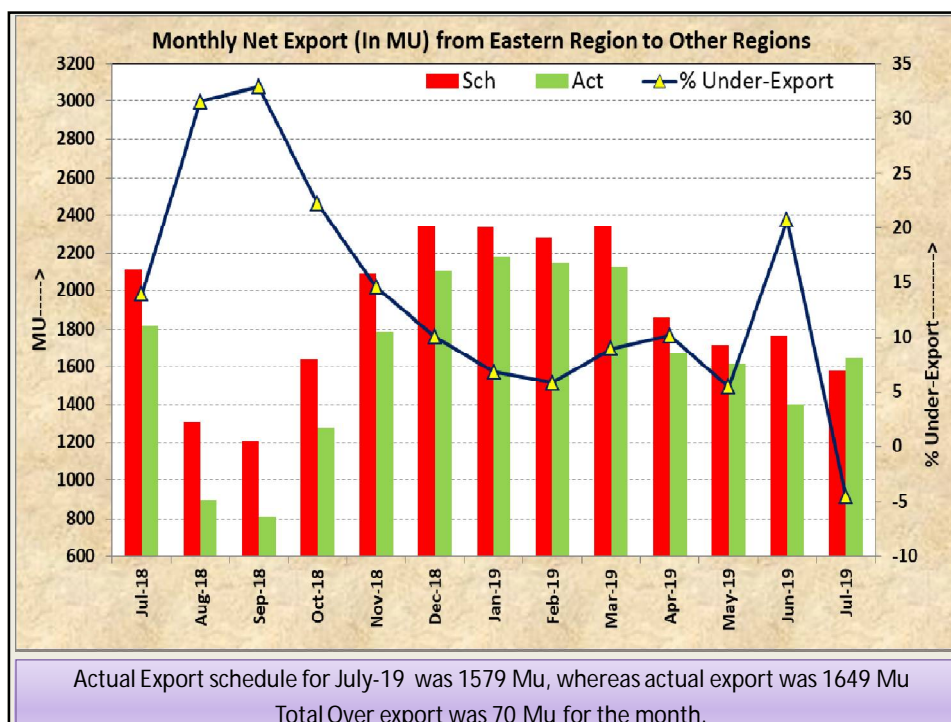


So Far Highest Demand					
Constitute	Demand (in MW)	Date	Time	Dmd met (MW) on 21 st July'19 (max dmd met day)	
				MW	Time
Bihar	5524	25-Jun-19	21:03	5246	22:01
DVC	3322	24-Jun-19	20:01	2950	20:53
Jharkhand	1348	21-May-19	20:45	1307	20:48
Odisha	5558	23-Aug-18	20:21	4210	19:16
W. Bengal	9362	28-May-19	14:27	9043	0:02
Sikkim	117	28-Oct-16	19:22	66	9:36
ER	23476	20-May-19	22:45	23401	23:25
So Far Highest Energy Consumption					
Constitute	Energy consumption (in MUs)	Date	Energy met on 21 st July'19 (max dmd met day)		
Bihar	111.3	25-Jun-19	109.8		
DVC	75.8	12-Jul-18	65.9		
Jharkhand	27.8	19-May-19	26.2		
Odisha	123.5	02-Oct-18	90.6		
West Bengal	199.9	28-May-19	185.8		
Sikkim	2.1	07-Dec-17	1.3		
ER	506.0	25-Jun-19	495		

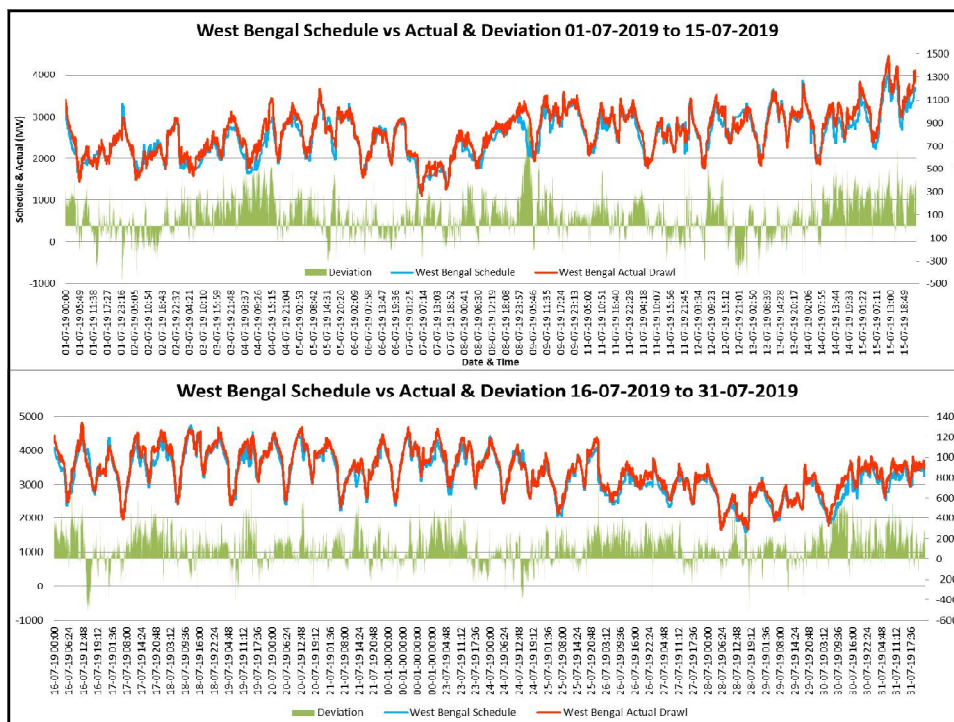
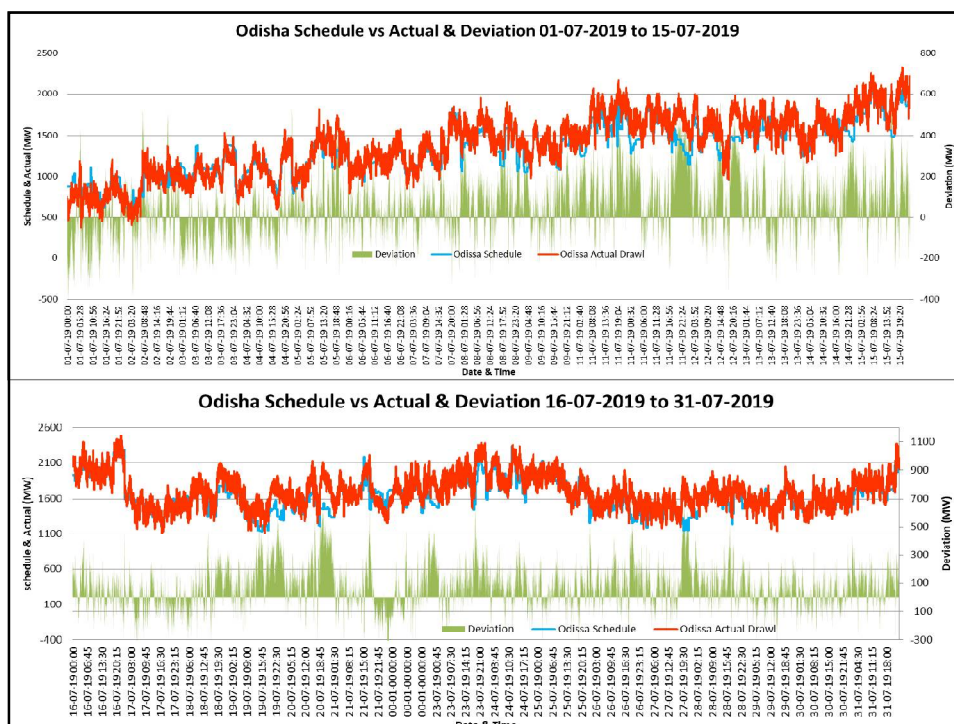
3D VIEW OF ER DEMAND PATTERN
(APR-19 to JULY-19)

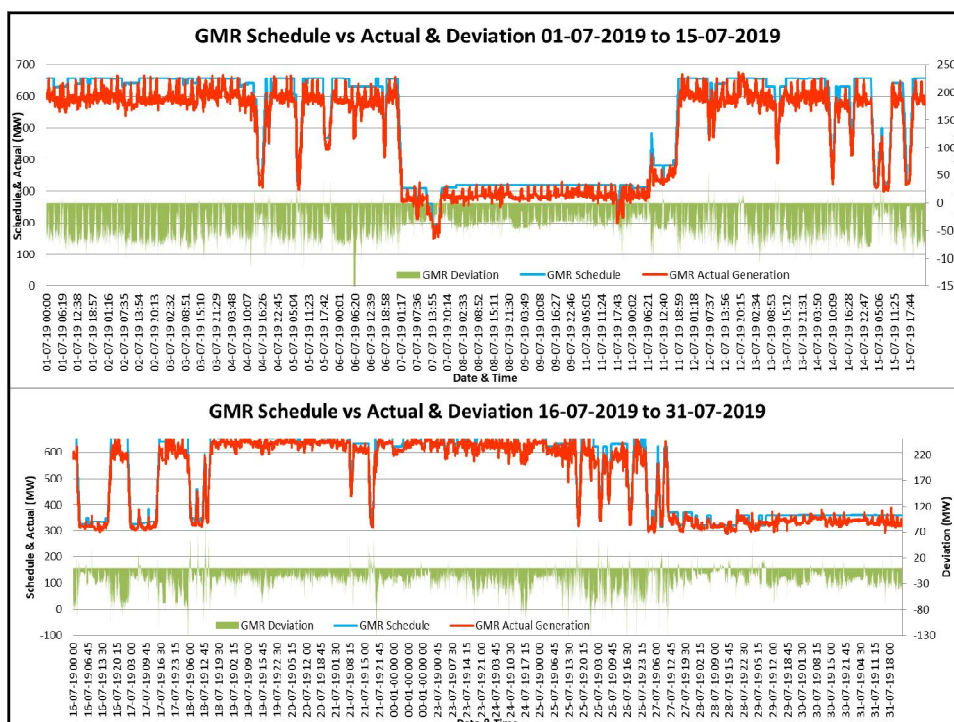
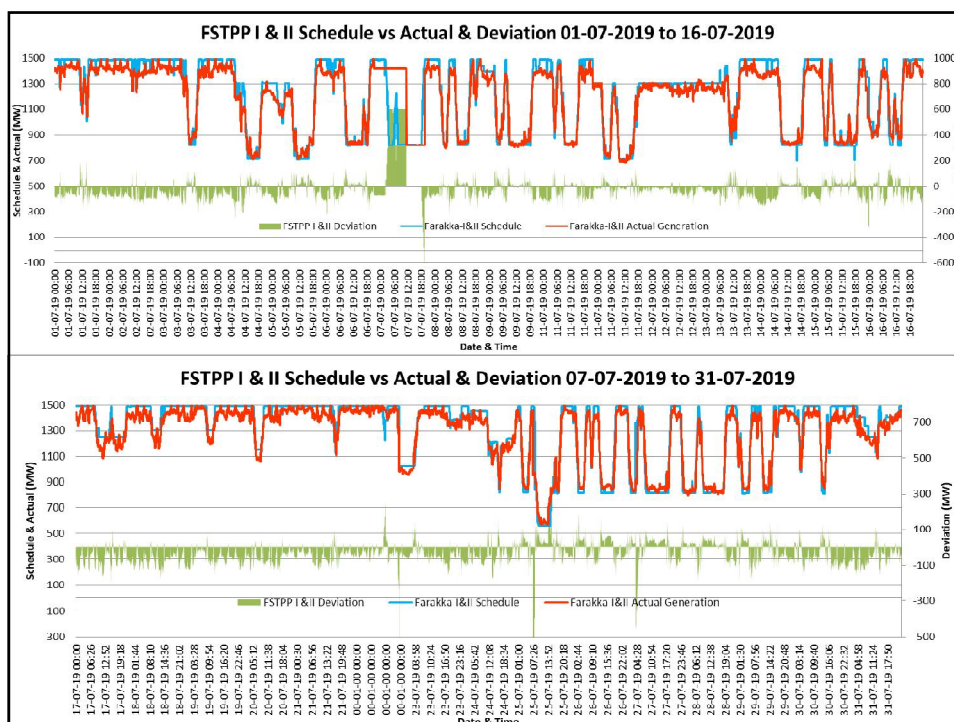


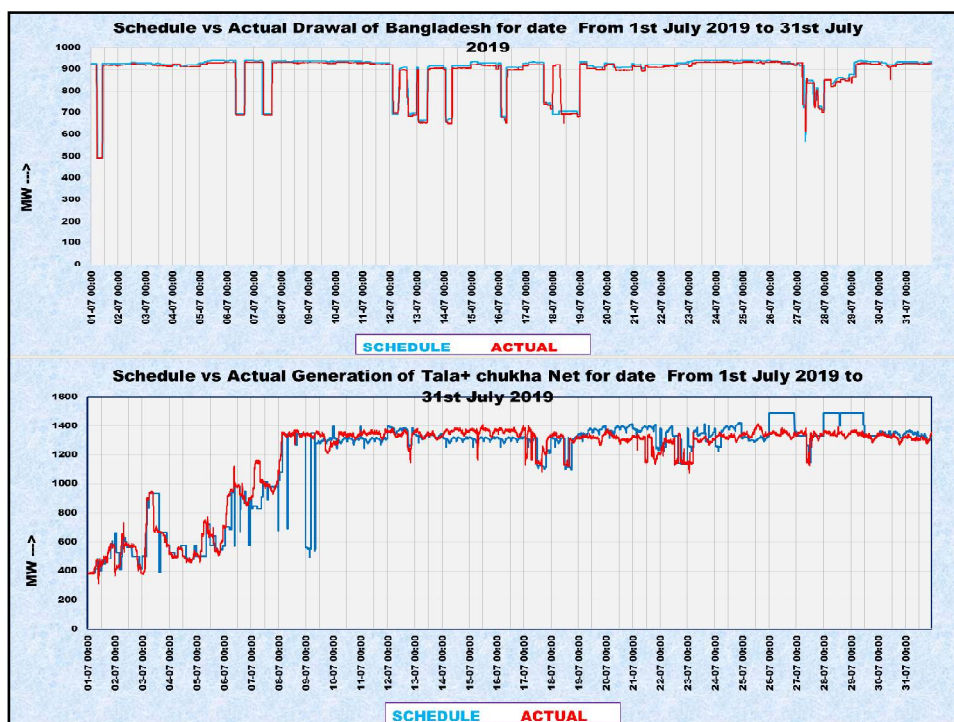
Over Drawl / Under Injection by ER
Entities
Non-compliance of direction issued by
SLDC



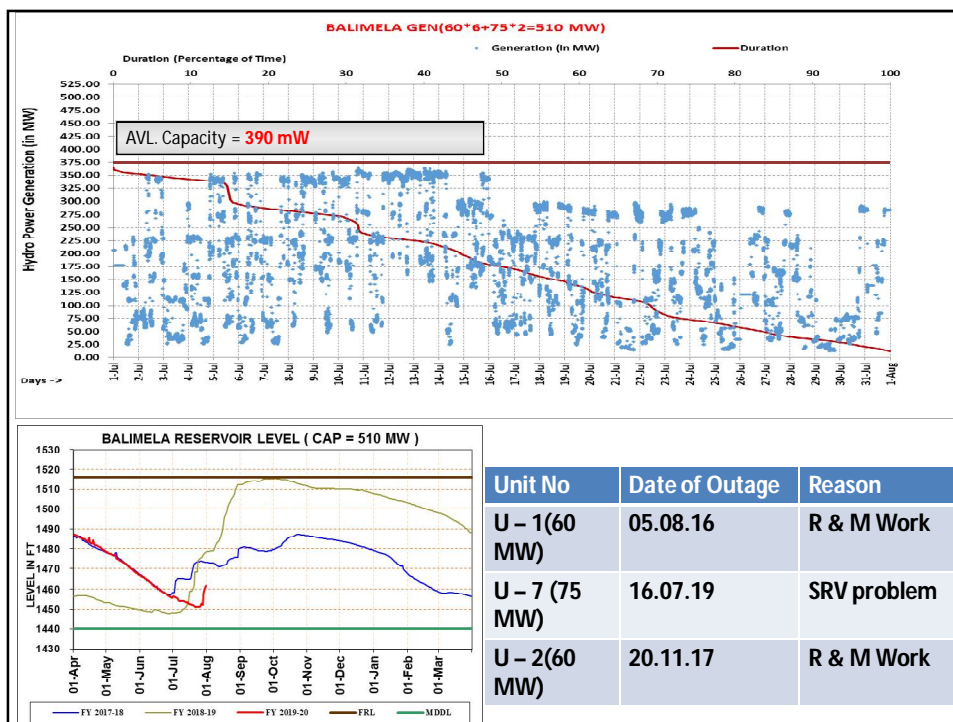
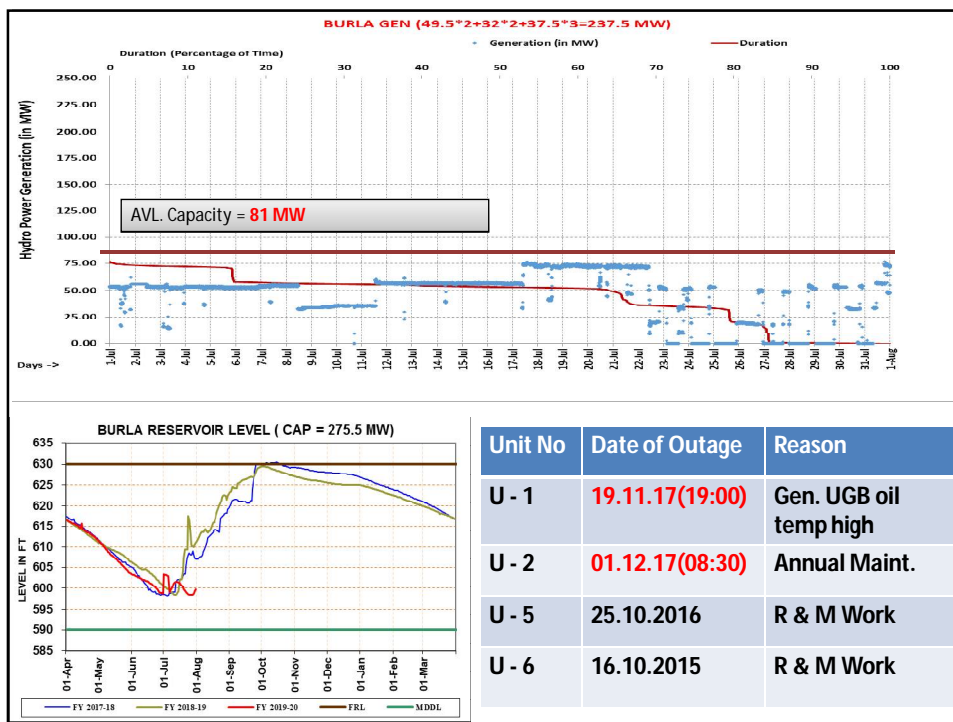
Schedule vs Actual Status - July 2019					
	Schedule (Mu)	Actual (Mu)	OD (Mu)	Daily Avg OD (Mu)	% Deviation
Bihar	2762	2758	-4	-0.1	-0.1
Jharkhand	502	505	3	0.1	0.7
DVC	-1220	-1224	-4	-0.1	-0.4
Odisha	1103	1169	67	2.2	6.0
West Bengal	2174	2257	82	2.7	3.8
Sikkim	38	37	0	0.0	-1.2
FSTPP I & II	941	908	-34	-1.1	-3.6
FSTPP III	0	0	0	0.0	0.0
KHSTPP I	382	422	40	1.3	10.4
KHSTPP II	871	826	-46	-1.5	-5.2
TSTPP I	543	541	-2	-0.1	-0.4
BARH II	787	781	-6	-0.2	-0.8
GMR	390	366	-24	-0.8	-6.2
MPL	288	288	0	0.0	0.1
APRNL	239	228	-10	-0.3	-4.3
JITPL	447	446	-1	0.0	-0.2

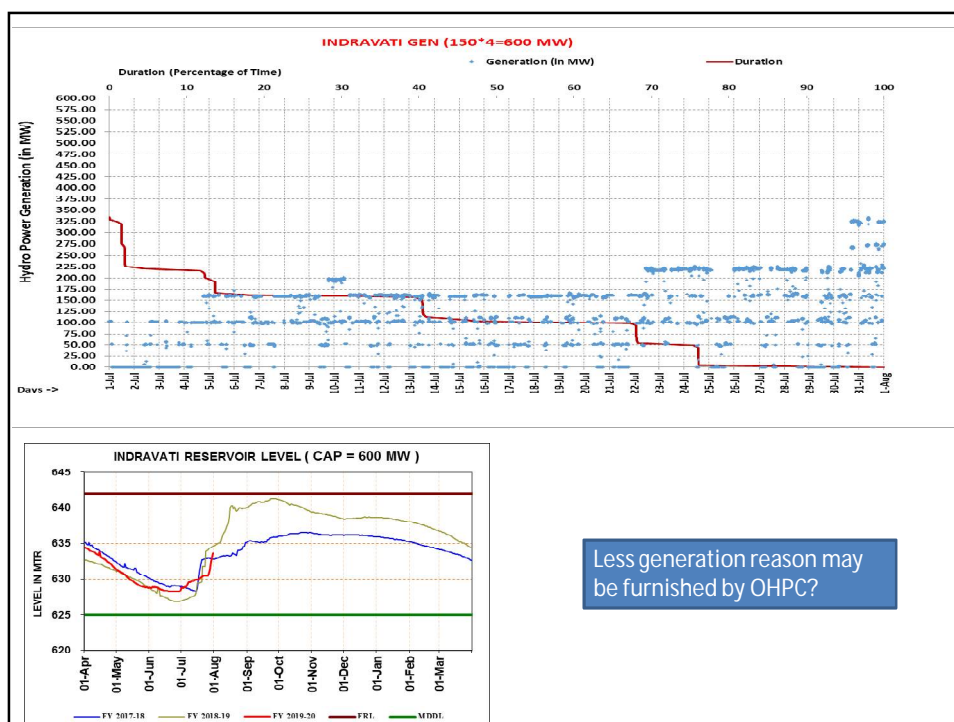
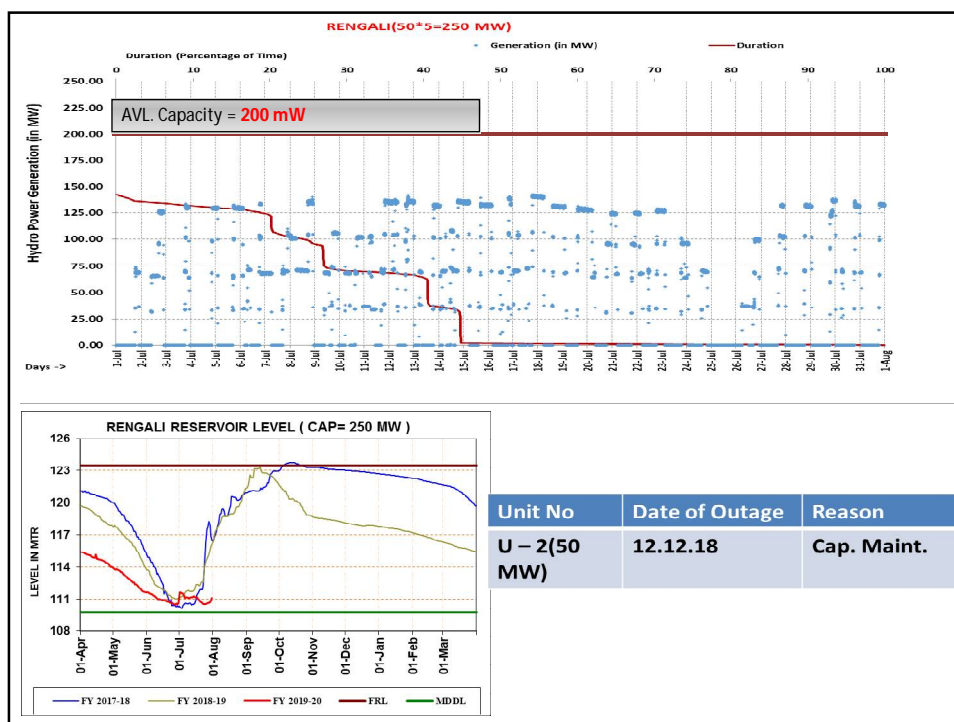


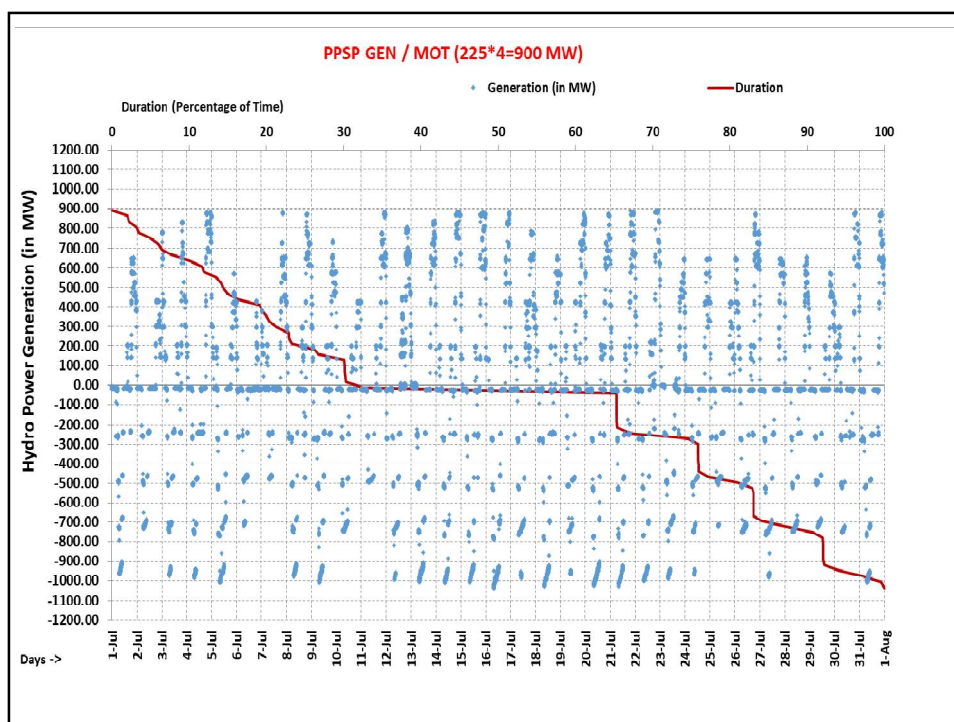
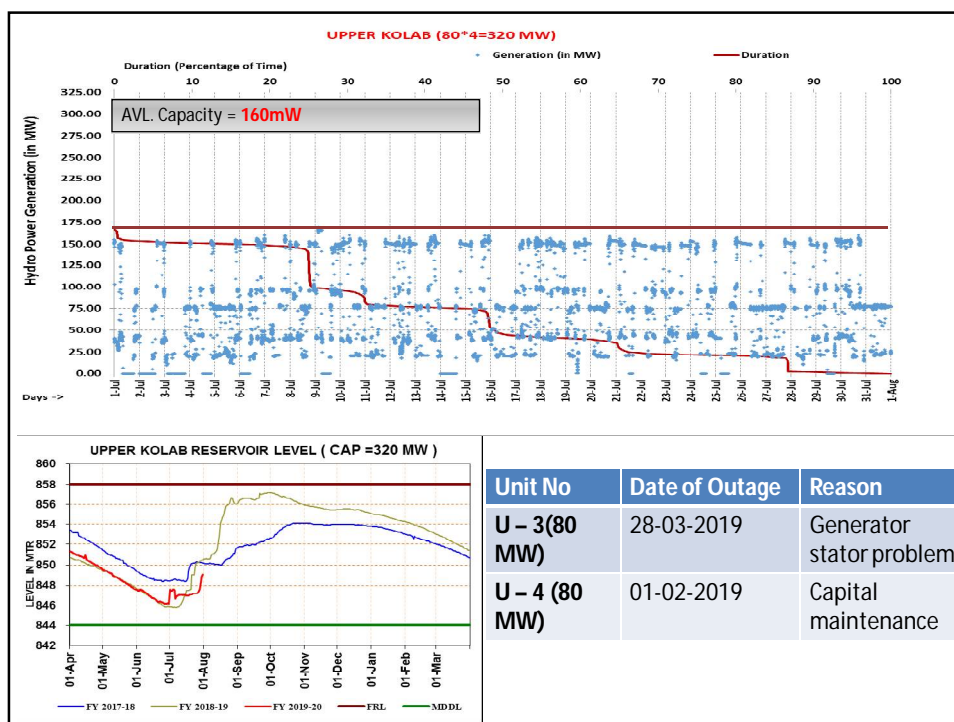




State Hydro Generators Performance







Long element long outages leading to transmission constrain

- 400KV tie bay(405) of (MAITHON RB-I AND DURGAPUR-I) at MAITHON out since 11-01-19 for upgradation of CT/ ISOLATORS /CONNECTORS from 2000 A TO 3150 A.
- 400KV FSTPP-KhSTPP-I out since 06-03-19 for taking up bay upgradation work at NTPC Farakka. Scope of work is under Powergrid ERTS-II. Line restored through tie bay on 31-07-2019.
- Tie bay of 400KV FSTPP-KhSTPP-I & 400KV FSTPP-BAHARAMPORE-I out of service since past 9 months due to defect in tie breaker. Scope of work is under NTPC, Farakka.
- 400KV main bay of Indravati(GR)-Indravati (PG) out of service since last 2 years for breaker problem at Indravati(PG). Line was charged through main bay of 125 MVASR B/R breaker on Bus – II. Breaker to be replaced by OPTCL. Timeline of restoration is uncertain – may be updated by OPTCL?
- 400 kV Patna – Kisanganj – I was out since 01/09/2018 & 400 kV 400 kV Patna – Kisanganj – II was out since 06/07/2019 and 400 kV Purnea – Biharsariff D/C were out since 10/08/2018 on Tower Collapse.
- 400 kV Rangpo – Kisanganj was out since 07-08-2019 due to bend in top and middle arm of Tower no 254.

Governor Response of ISGS and IPP Generating plants

Generating Power Plants	Response of the Power Plant as observed from ERLDC SCADA data/Power Plant Data	Course of Action decided during Meeting
Farakka NTPC	Stage 1 (3 X 200 MW): Old Siemens Make SSI system where finetuning of RGMO is not feasible.	Stage 1: Old system would be replaced with new BHEL make MAX DNA DCS system. during the AOH, as per latest LGBR. RGMO tuning would be completed after such upgradation.
	Stage 2 (2 X 500 MW): Performance is being monitored.	Stage 2 (2 X 500 MW): Further finetuning will be carried out if the performance is not adequate.
	Stage 3 (500 MW): Software has been upgraded for the better response of Governing system	Stage 3: Finetuning of parameters will be done by NTPC for better response.
Kahalgaon NTPC	Stage 1 (4 X 210 MW): These are Russian make old units having mechanical governor. The performance of Unit 4 is not good due to the control valve issue.	Stage 1 (4 X 210 MW): During the next AOH, issue of Unit 4 will be rectified for better response.
	Stage 2 (3 X 500 MW): The response is unsatisfactory even after tuning.	Stage 2 (3 X 500 MW): The matter of poor response has been taken with BHEL. Unit 6 and 7 will be tuned by mid of August 2019, for which no shutdown would be required.
Talcher NTPC	Stage 1 (2 X 500 MW): Old GE make Units and poor response is observed.	Stage 1 (2 X 500 MW): NTPC informed that the GE make units 1 & 2 are quite old and their performance had been unsatisfactory since beginning. However, the vibration problem of U-2 has been rectified by the OEM. It was further stated by NTPC that their corporate engineering has taken up the matter with GE and their response is awaited. There are plans to attend to the governor problems during the next overhauling in November 2019. ERLDC requested NTPC to update any development on this front.
	Stage 2 (4 X 500 MW): Unit 3 is providing an oscillatory response. Other units' performance was also not satisfactory	Stage 2 (4 X 500 MW): The oscillatory response observed for unit 3 will be rectified in the AOH. Unit 4, 5 and 6 response will be tuned by

		the end of Mid Sept 2019.
Barh NTPC	Unit 4 and 5: NTPC Barh units have Siemens make governor whose response was not satisfactory. Barh responded that they have taken the logic from NTPC Mouda whose performance is good and will implement the same. In addition, there are some limitation due to boiler and need modification.	Unit 4 and 5: NTPC Barh intimated that new logic (RGMO) will be implemented in Barh Units by end of Aug 2019, together with tuning of AGC software.. The modification in the boiler will be completed during the AOH of the Units as per LGBR schedule.
BRBCL	The response of the units is not satisfactory. Change in frequency is not being correctly detected. Correction in load reference (in response to frequency change) is being generated after 1 minute.	BRBCL intimated that they will implement the new logic for RGMO within 2 weeks and will share the response with high-quality data for analysis.
GMR Orissa	The units are Chinese make. Response is observed, however it is not adequate	GMR will fine-tune and improve the logic for detection of frequency event and Response will be analyzed during the next frequency event to find whether any improvement has taken place.
MPL	Good Response was observed in many cases and fine-tuning is being done as per the event response. U1 was generally operating in VWO mode.	MPL intimated that they have changed the settings for sliding pressure curve which has provided better response and the units are being operated in throttled valve condition rather than VWO to give the response as per IEGC.
APNRL	Based on data recorded at ERLDC, response of APNRL units has been observed to be delayed and inadequate. APNRL informed that they will send the data for these events where satisfactory response has been obtained as checked by them.	APNRL intimated that frequency influence detection and associated action were intentionally having a delay to check the RGMO logic. The delay has now been removed and better response can be observed from now onwards.
Teesta V	Generation response is slow during frequency response event.	Teesta V intimated that they will check the RGMO software and remove any delay in the governor control to provide an adequate response.
Teesta 3	The response of Teesta 3 Units is fast, adequate and sustaining.	Teesta 3 intimated that they have tuned their RGMO logic due to which they are

		now able to provide good response.
Dikchu	Dikchu intimated that they have not implemented RGMO, so units are run under FGMO.	Dikchu will take help from Teesta 3 to fine-tune their primary response.

In addition to the above, a few other issues were also deliberated during the meeting which are as follows:

1. Generators were advised to improve their RGMO logic and its fine-tuning to detect sudden frequency change beyond 0.03 Hz, maintaining the Frequency Response for at least 10 minutes thereafter, and subsequent withdrawal of response with a rate of 1% per minute.
2. It was strictly advised to all the generating plants not to operate their units in Valve Wide open (VWO) mode as this reduces the margin for primary frequency response from the generators.
3. From the DCS data received from many generating stations it is observed that the response variables are not updating as expected due to improper setting in the DCS system. It was decided that all generating plants would explore all possibilities for providing DCS data of better resolution and accuracy by changing the logic implemented for the update of data in their DCS system.

For all future frequency events, after receiving intimation from ERLDC, all generating plants will collect their DCS data, analyze their Units' response, calculate the % response and find out the reason for any inadequate response. The analysis will also be submitted to ERLDC.

ERPC :: KOLKATA

Minutes of Special Meeting on “Shutdown of 400 kV D/C Nabinagar-Sasaram Line” held on 02.08.2019 at ERPC, Kolkata

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

Member Secretary, ERPC chaired the meeting. He welcomed participants from Powergrid, BRBCL, NPGC, Eastern Central Railway, ERLDC & ERPC in the meeting. He explained that the issue was discussed in 158th OCC Meeting held on 27th June 2019 wherein, Powergrid informed that during line patrolling of 400kV D/C Nabinagar-Sasaram Line, the main leg-A and connected bracing between Leg-A & Leg-D was found deformed and bend inside, following the summer cyclone in the month of May 2019. Powergrid had requested for shutdown of 400kV D/C Nabinagar-Sasaram Line for ten days to replace the bend bracing by de-stringing of conductor and after that replacement of leg with support of derrick / hydra with proper guying arrangements. To avoid collapse of said tower, POWERGRID had provided stitching with additional tower member to safeguard the tower and kept under regular vigil.

OCC opined that no evacuation path would be available for Nabinagar generation plant during the shutdown period of 400kV D/C Nabinagar-Sasaram Line. OCC advised Powergrid to restore the line using ERS and complete the tower repairing work.

In 159th OCC Meeting held on 19th July 2019, Powergrid informed that restoration of the line using ERS would take more than 10 days as it requires destringing of 3.6 km line. The replacement of deformed / bulged leg & bracing would take 10 days. OCC decided to discuss the issue in separate meeting with the concerned utilities i.e. Eastern Railway, Bihar, BRBCL, Powergrid, ERLDC and ERPC.

In line with the OCC decision this meeting has been convened. The following deliberations were held in the meeting:

- BRBCL informed that 400kV NPGC-BRBCL line (about 10 km) was not yet completed by NPGC. Therefore, survival power to BRBCL plant will not be available during the shutdown of 400 kV D/C Nabinagar-Sasaram Line. Therefore, BRBCL requested Powergrid to carry out the tower repairing work by taking single circuit instead of double circuit shutdown.
- Powergrid informed that carrying out the tower repairing work by taking single circuit shutdown and using ERS is not possible. Powergrid assured to expedite and complete the repairing work within four days provided both line shutdown is granted.
- BRBCL added that since no alternative supply is available, the repairing work on the above line can only be started after complete shutdown of the turbine till stopping of the barring gear and the machines have to be started in cold start mode. Hence the BRBCL units will be under shutdown for one more week in addition to the shutdown period taken for the tower repairing work.
- Railways suggested that in order to have minimum interruption to Railways, the maintenance of BRBCL units may be planned during the shutdown of 400 kV D/C Nabinagar-Sasaram Line.

- ED, ERLDC suggested that if possible, 400 kV D/C Nabinagar-Sasaram Line may be connected to a nearby 400kV transmission line using ERS and jumpering arrangement for evacuation of BRBCL power during the shutdown of 400 kV D/C Nabinagar-Sasaram Line.
- During the discussion, it emerged that 400kV Daltanganj-Sasaram D/C line and 400kV NPGC-Patna D/C line are passing close to 400 kV D/C Nabinagar-Sasaram Line.
- Powergrid was advised to explore temporary connection of BRBCL power station with nearby 400kV transmission lines (i.e. 400kV Daltanganj-Sasaram D/C line or 400kV NPGC-Patna D/C line) using ERS during repair works of the defective tower of 400kV BRBCL-Sasaram D/C line. Powergrid agreed to explore the possibility for the same.
- Powergrid was advised to place the scheme in the upcoming 160th OCC Meeting scheduled to be held on 9th August 2019 at ERPC Kolkata. BRBCL and Railway were also advised to attend the 160th OCC Meeting.
- NPGC informed that 400kV NPGC-BRBCL line was planned only for drawing the start up power for NPGC station and for meeting system contingencies, if any. Contract for this line was awarded long time back and work also started but the line could not be completed due to serious ROW issues.
- It was opined that as a long term plan, the construction of 400kV NPGC-BRBCL line (10 km) is to be expedited for providing power to BRBCL under contingency. Possibility of construction of the line on cost plus basis through Powergrid may be explored for early construction of the line. It was decided to refer the issue to TCC for further guidance.
- BRBCL was also advised to plan for dedicated low voltage supply from state for meeting the emergency supply at the station.
- ERLDC suggested that to avoid situation like this in future, if there are two circuits planned for the evacuation of power from a generating station then separate single circuit towers should be planned instead of one double circuit tower.

Meeting ended with vote of thanks to the chair.

Generation Availability During Puja-2019

Expected Peak Hours Generation

Expected Peak Hours Generation													
System	Plants	Unit Considered	Gross MW				Net MW						
			Therm.	Hydro+RES	Import Captive	Total	Therm.	Hydro	Captive	Total			
BSPHCL	BTPS	1X110	0										
	MTPS	2X110	120										
TOTAL			120	80	0	200	103	80	0	183			
JUVNL	TTPS	2x210	380	100	60	540	321	100	60	481			
DVC	BTPS-A	1X500	450										
	BTPS-B	1x210	150										
	CTPS	2x250	500										
	DTPS	1X210	180										
	MTPS	4x210+2X250+2X500	1850										
	Durgapur STPS	2X500	950										
	Kodarma TPS	2X500	980										
	RTPS	2X600	600										
TOTAL			5660	80	0	5740	5151	80	0	5231			
ODISHA	IB TPS	2x210+1x660	950										
	TTPS	4x60+1x110	300										
TOTAL			1250	1450	900	3600	1138	1443	900	3480			
WBPDC	BTPS	2x60+1X215	280										
	STPS	2X250	450										
	KTPP	5x210	850										
	BkTPP	5x210	1000										
	Sag TPS	2X300+2X500	1400										
	DPPS	+1*110+1*300+1X250	480										
TOTAL			4460		105	4565	4014	0	105	4119			
WBSEDCL	(JAL.+RAMAM+TISTA)HPS+PPSP+TLDP		0	1000	0	1000	0	1000		1000			
CESC	TTPS	4x60	0										
	STPS	2x67.5	100										
	B.BUDGE TPS	3x250	730										
	HEL	2X300	600										
TOTAL			1430			1430	1302			1302			
NTPC	FSTPP	3x200+3x500	1900										
	KhSTPP	4x210+3X500	2100										
	TSTPP	2x500	1000										
	TSTPS Stg-II		150										
	Barh STPS	2X660	1260										
	MTPS Stg-II	2X195	350										
	BRBCL	3X250	700										
	NSTPS	1X660	600										
TOTAL			8060			8060	5351 *		5351	TOTAL	775		
NHPC	RHPS	3x20		60		60		60		60	RHPS	17	28.34%
	Teesta HEP	3x170		510		510		510		510	Teest HPS	122	23.98%
IPP	MPL (U#1&2)	2X525	1000										
	APNRL (U#1,2)	2X270	480								CHPC	80	31.85%
	GMR (2x350)	2X350	650								KHEP	30	50.00%
	JITPL (2X600)	1X600	580								THEP	276	38%
	Total IPP TH		2710			2710	2480	0		2480	MHEP	39	32.14%
	CHUZACHEN (2x55)			100		100		100		100	Total	425	
	JORETHANG (2x48)			90		90		90		90			
	TEESTA URJA St III (6x200)			830		830		830		830	Gr.Total	1024	
Tashinding (2x48.5)			90		90		90		90				
DICKCHU (2X48)			90		90		90		90				
Total IPP HY			1200			1200	0	1200		1200			
Import from BHUTAN	Chu. HPS,BIR. Receipt	4X190		250		250		250		250			
	KHPS	4X15		60		60		60		60			
	Tala HEP	6X170		850		850		723		723			
	Dagachu HPS	2X63		126		126		120		120			
	Mangdechhu HEP	2X180		180		180		180		180			
TOTAL				1466		1286		1153		1153			
GRAND TOTAL			24070	5766	1065	30901	19859	5625	1065	26550			

* for Eastern Region only .

West Bengal SHARE FROM ISGS		
	PEAK	% SHARE
FSTPS	597	34.21%
KhSTPP	57	3.10%
TSTPP	96	10.13%
BarhTPS	0	0.00%
MTPS-Stg-II	26	9.64%
BRBCL	0	0.00%
NSTPS	0	0.00%
TOTAL	775	
RHPS	17	28.34%
Teest HPS	122	23.98%
CHPC	80	31.85%
KHEP	30	50.00%
THEP	276	38%
MHEP	39	32.14%
Total	425	
Gr.Total	1024	

**EASTERN REGIONAL POWER COMMITTEE
PUJA LOAD FORECAST '2019**

DEMAND IN NET MW AND AT 50.0 HZ

PUJA DAYS		WEST BENGAL							
		WBSEDCL	CESC	TOTAL WEST BENGAL*	BSPHCL	JUVNL	DVC	ODISHA	REGION
SASTHI 04-Oct-19	MAX	7270	2180	9450	5535	1400	3000	5245	23770
	MIN	4929	1258	6252	3396	842	2446	4594	18325
FRIDAY	AVG	6107	1700	7808	4258	1075	2653	4902	20760
	MAX	6200	1750	7950	5235	1330	2960	4775	21800
SAPTAMI 05-Oct-19	MIN	3277	1021	4440	2957	942	2683	3982	15852
SATURDAY	AVG	4190	1248	5438	3700	1087	2849	4272	17404
	MAX	5620	1490	7085	5140	1305	2860	4602	21040
ASTAMI 06-Oct-19	MIN	3042	861	3958	2927	893	2526	3675	15060
SUNDAY	AVG	4054	1150	5204	3776	1052	2726	3963	16771
	MAX	5300	1420	6720	4740	1285	2820	4693	20215
NAVAMI 07-Oct-19	MIN	2931	868	3842	3009	961	2462	3767	15259
MONDAY	AVG	3853	1093	4945	3699	1098	2676	4310	16779
	MAX	5150	1370	6520	4255	1060	2530	4520	18475
DASHMI 08-Oct-19	MIN	3629	901	4721	2779	670	2268	3899	14629
TUESDAY	AVG	4187	1130	5316	3566	929	2419	4163	16437

*There would be around 2000 MW shortfall in West Bengal System w.r.t its availability during peak hours on Sasthi day(i.e 04.10.2019 Friday)
If there would be rain, there would be dropped of 1200 MW DEMAND in WEST Bengal System and Region as a whole around 2000 MW

EASTERN REGIONAL POWER COMMITTEE

LOAD MANAGEMENT OF WEST BENGAL DURING ALL THE PUJA DAYS 04.10.2019 TO 08.10.2019 (SASTI TO DASHMI)

(All figures are in net MW)

SYSTEM	04.10.2019 (SASTI) FRIDAY	05.10.2019 (SAPTAMI) SATURDAY	06.10.2019 (ASTAMI) SUNDAY	07.10.2019 (NAVAMI) MONDAY	08.10.2019 (DASHMI) TUESDAY
	PEAK	PEAK	PEAK	PEAK	PEAK
WBSEDCL GEN.	1000	1000	1000	1000	1000
WBPDL GEN.	4014	4014	4014	4014	4014
CESC GEN. (Inc. HEL)	1302	1302	1302	1302	1302
CENTRAL SECTOR SHARE	1024	1024	1024	1024	1024
Import from CPP	105	105	105	105	105
TOTAL AVAILABILITY	7445	7445	7445	7445	7445
DEMAND OF WEST BENGAL	9450	7950	7085	6720	6520
Sur.(+)/Def.(-)	-2005	-504	361	725	925
E.REGIONAL AVAILABILITY	26550	26550	26550	26550	26550
E.REGIONAL DEMAND	23770	21800	21040	20215	18475
Probable forced & partial outages @4%	1062	1062	1062	1062	1062
E.REGIONAL Sur.(+)/Def.(-)	1717	3687	4448	5273	7012

MOM regarding site visit on dated 29.07.2019 at Kishanganj site associated with tapping of 400KV Teesta-III – Kishanganj/400KV Rangpo-Kishanganj TL of M/s TPTL with LILO portion of POWERGRID 400KV D/C Binaguri-Kishanganj-Purnea TL (Ckt-III & IV).

Members Present

On behalf of POWERGRID

On behalf of M/s TPTL

Sh. Shibu Manandi, Binaguri

Mr. Ayappa, Siliguri

Sh S. Rajbanshi, Malda

Mr. Dheeraj Shrivastav, Siliguri

Sh Nitesh Kumar, Dalkhola

Upon Inspection, following are the observations:-

Point - 1: Direct jumpering from 400KV D/C Binaguri-Kishanganj-Purnea TL in power line crossing span with 400KV Teesta-III-Kishanganj/400KV Rangpo-Kishanganj TL (having suspension towers in crossing spans) seems impossible as the lines are crossing more or less perpendicularly with POWERGRID line on top and as such any jumpering arrangement shall result in clearance issue.

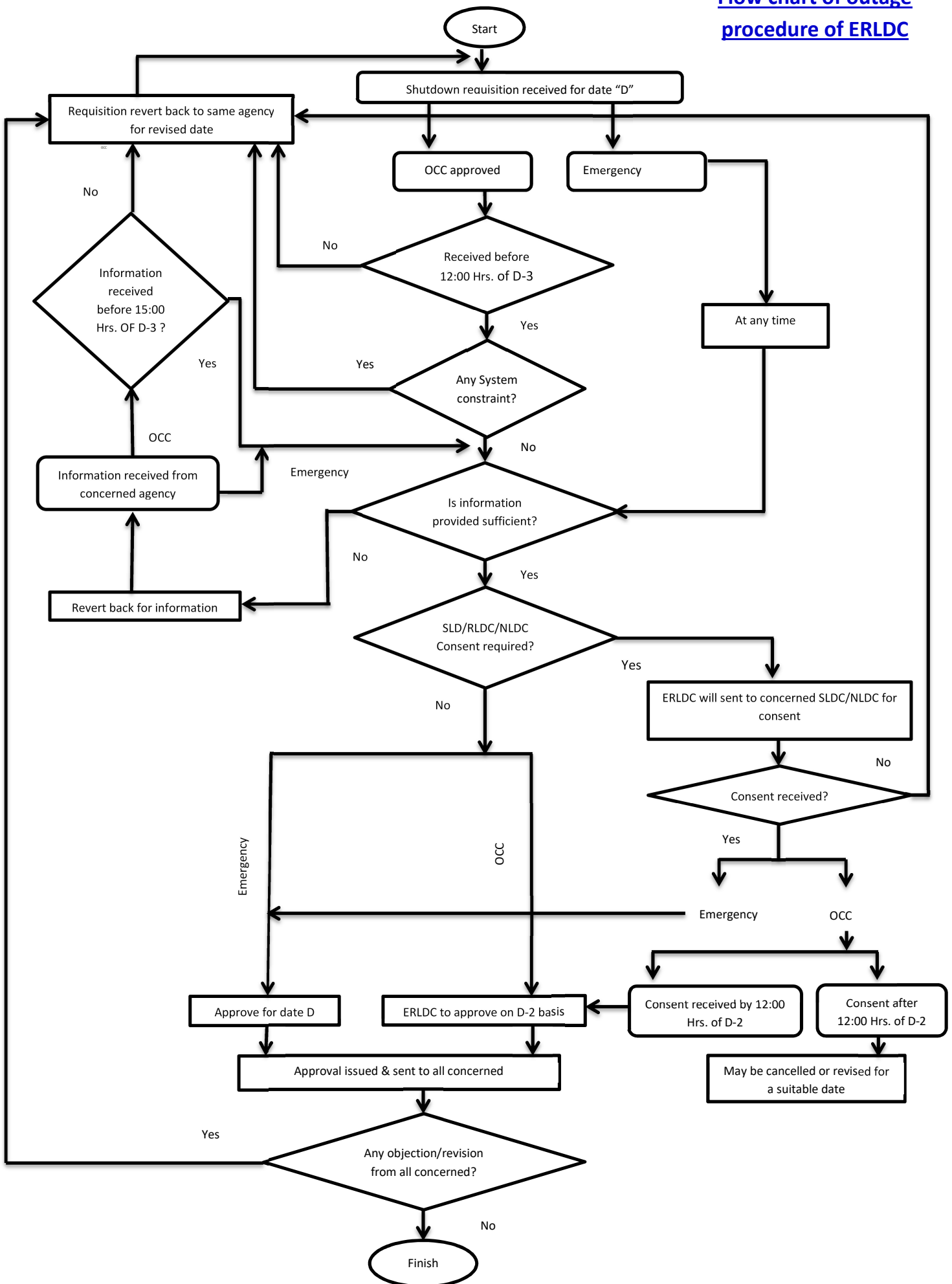
Point-2:- By passing of 400KV Teesta-III-Kishanganj TL through ERS towers also seems impossible due to water-logging in the entire area.

Point-3:- Option for permanent placement of new towers may be checked through surveyor in the power line crossing spans for future bypassing requirement if any. Since area is extreme row prone repeated re-arrangement may be difficult.

2m/ 29/7/19

29/7/19

Y. Ayappa.
29/7/19
(TPTL).



ERLDC Shutdown approval process flow and time line-reg.

With the ever increase in transmission elements, the Grid is getting more secure and reliable. Still, outage of one element may affect severely to adjacent control area depending on system condition that area. Hence, planning and co-ordination between different control areas is absolute necessary. It has been seen that, due to lack of mutual consent/communication between two control area/license, outage of transmission elements are getting delayed or denied due to which monetary loss occurred as well as condition of that particular element worsen. ERLDC wants to draw the attention on the following points which are seen in Eastern constituents/license.

1. There is a shortage of designated outage coordinators in ER constituents /license. Sometimes proper communication is not possible with them.
2. E-mails are not reaching to them in time which is sent from ERLDC (particularly in GRIDCO case). Most of the time mails are seen when ERLDC inform them verbally.
3. It also leads to delayed consent thereby delaying the shutdown.
4. There is no substitute for the absence of outage co-ordination. Sometimes SLDC control room person are coordinating shutdown which is not a good practice. Progress tracking of any outage will be lost once shift change occurred.
5. Planned outages are being sent on holidays also which is very difficult to process.
6. We have seen that, in absence of competent authority (SLDC Hawarh and SLDC Patna for example), OCC approved shutdowns are also get cancelled.

To tackle all the above following suggestions may be considered:

1. Every Transmission license, generators and SLDCs must have dedicated outage co-coordinators and the contact information of all such co-coordinators shall be shared with all.
2. In absence of the designated outage co-coordinator, suitable substitute should be provided and the same shall be intimated to all.
3. All the indenting agencies are requested to communicate with their counterpart outage co-coordinator for smooth and speedy consent if it require.
4. Getting consent timely is very important. All the agencies, whose consent is required for a particular outage, are requested to adhere the time line given by ERLDC fails to which the outage will be cancelled or delayed accordingly.
5. All the agencies are requested to submit holiday list in their control area or any other contingencies well in advance to all.
6. All the agencies must provide their official as well as personal E-mail of their outage coordinators to ERLDC and ensure that checking of the both email are being done simultaneously.

Generation Projection (Oct 2019 - Dec 2019)																	
				Generation declared Commercial from 1st Jan'19 to 30th June'19					Generation declared/expected to be declared Commercial from 1st July'19 to 30th Sep'19								
Sl. No.	Entities	Region	Projections based on 3 Years Data	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Sub Total	TOTAL	Comments From DICs /Others (if any)	Figure as per Comments/ PoC Data	Projected Generation before normalization w.r.t projected All India Peak Demand
			(MW)			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)	(MW)			(MW)
1	West Bengal	ER	5065											5065			5065
2	Odisha	ER	2637						OPGC Stage-II	4	660	432	432	3069	As per data given by GRIDCO	3266	3266
3	Bihar	ER	138											138			138
4	Jharkhand	ER	357											357			357
5	Sikkim	ER	0											0			0
6	Chujachan	ER	109											109			109
7	DVC	ER	3996											3996	As per data given by DVC	4859	4859
	Durgapur Steel	ER															
	Koderma TPP	ER															
	Bokaro TPS	ER															
	Raghunathpur	ER															
8	MPL	ER	942											942			942
9	Teesta V	ER	533											533			533
10	Kahalgaon	ER	2212											2212	As per data given by NTPC	2171	2171
11	Farakka	ER	1977											1977		1960	1960
12	Talcher	ER	945											945	Restricted to the generation(Installed Capacity-NAC)	942	942
13	Rangit	ER	67											67			67
14	Adhunik Power	ER	401											401			401
15	Barh	ER	1279											1279	As per data given by NTPC	1238	1238
16	Kamalanga TPP (GMR)	ER	637											637			637
17	JITPL	ER	760											760			760
18	Jorethang	ER	81											81			81
19	Bhutan	ER	793											793			793
20	Teesta-III	ER	915											915			915
21	Dikchu HEP	ER	105											105			105
22	Nabinagar BRBCL	ER	450	Nabinagar BRBCL	3	250	164	164						614			614
23	Tashiding HEP	ER	95											95			95
24	Kanti Bijlee Stg-2 (KBUNL)	ER													As per last quarter	300	300
	TOTAL		24495					164					432	25090			26348

Note:

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

DEMAND FORECAST USING PAST 3 YEARS DATA (Oct 2019 - Dec 2019)															
										1	2	3	4	Data given by DICs	Comments
	2016-17			2017-18			2018-19								
	Oct-16	Nov -16	Dec-16	Oct-17	Nov -17	Dec-17	Oct-18	Nov -18	Dec-18	2015-16 Av erage	2016- 17Av erage	2017-18 Av erage	Projected Demand for (Oct 2019 - Dec 2019) before normalization		
Bihar	3,702	3,759	3,534	4,515	3,917	4,038	5,084	4,425	4,151	3,665	4,157	4,553	5,013		
DVC	2,450	2,357	2,507	2,573	2,731	2,737	2,837	2,837	2,957	2,438	2,680	2,877	3,104	3070	As per data given by DVC
Jharkhand	1,172	1,168	1,194	1,206	1,245	1,200	1,247	1,289	1,291	1,178	1,217	1,276	1,321		
Odisha	3,920	3,788	3,837	4,370	4,108	4,151	5,219	4,516	4,042	3,848	4,210	4,592	4,961	4000	As per data given by GRIDCO
West Bengal	7,886	7,402	6,207	7,777	6,610	6,045	8,850	7,551	6,225	7,165	6,811	7,542	7,550		
Sikkim	92	92	91	90	96	94	93	101	106	92	93	100	103		

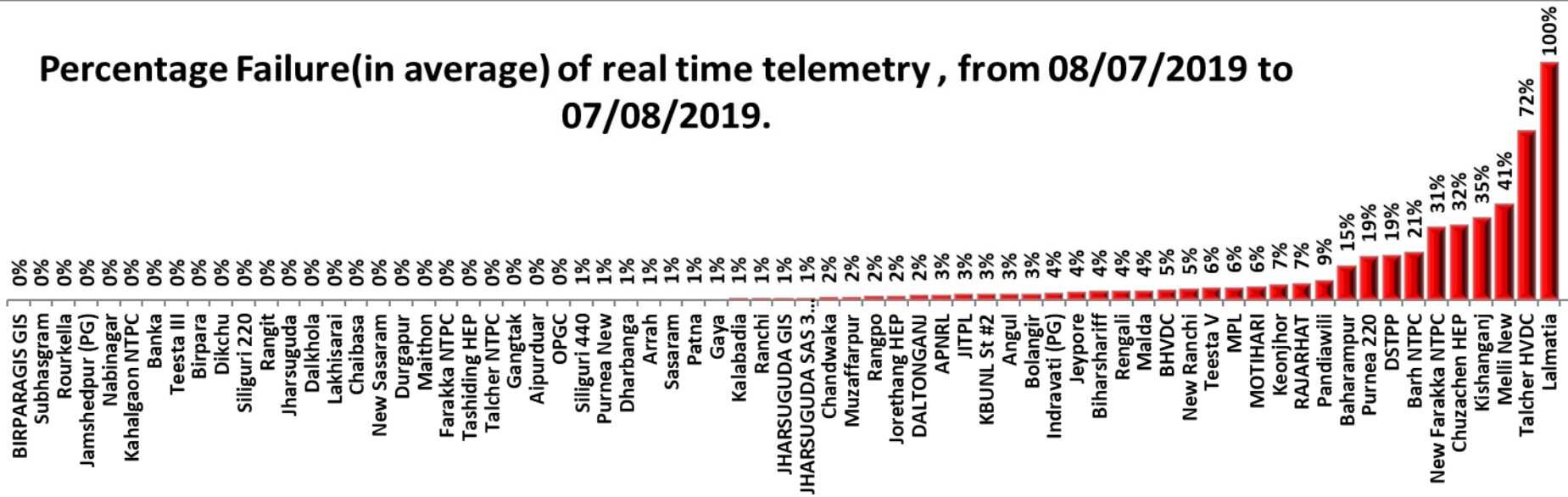
Notes

1. Projections are based on the past 3 years' monthly Peak Demand Met data available on the website of CEA
2. The above projections are being done for financial year 2019-2020 (Q3) i.e October 2019-December 2019
3. Projections are being done based on the forecast function available in MS Office Excel
4. CEA Reports can be accessed from the following links:
http://www.cea.nic.in/reports/monthly/powersupply/2018/psp_peak-10.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2018/psp_peak-11.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2018/psp_peak-12.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2017/psp_peak-10.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2017/psp_peak-11.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2017/psp_peak-12.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2016/psp_peak-10.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2016/psp_peak-11.pdf
http://www.cea.nic.in/reports/monthly/powersupply/2016/psp_peak-12.pdf

SCADA data availability:-Central Sector

Annexure-C12

Percentage Failure(in average) of real time telemetry , from 08/07/2019 to 07/08/2019.

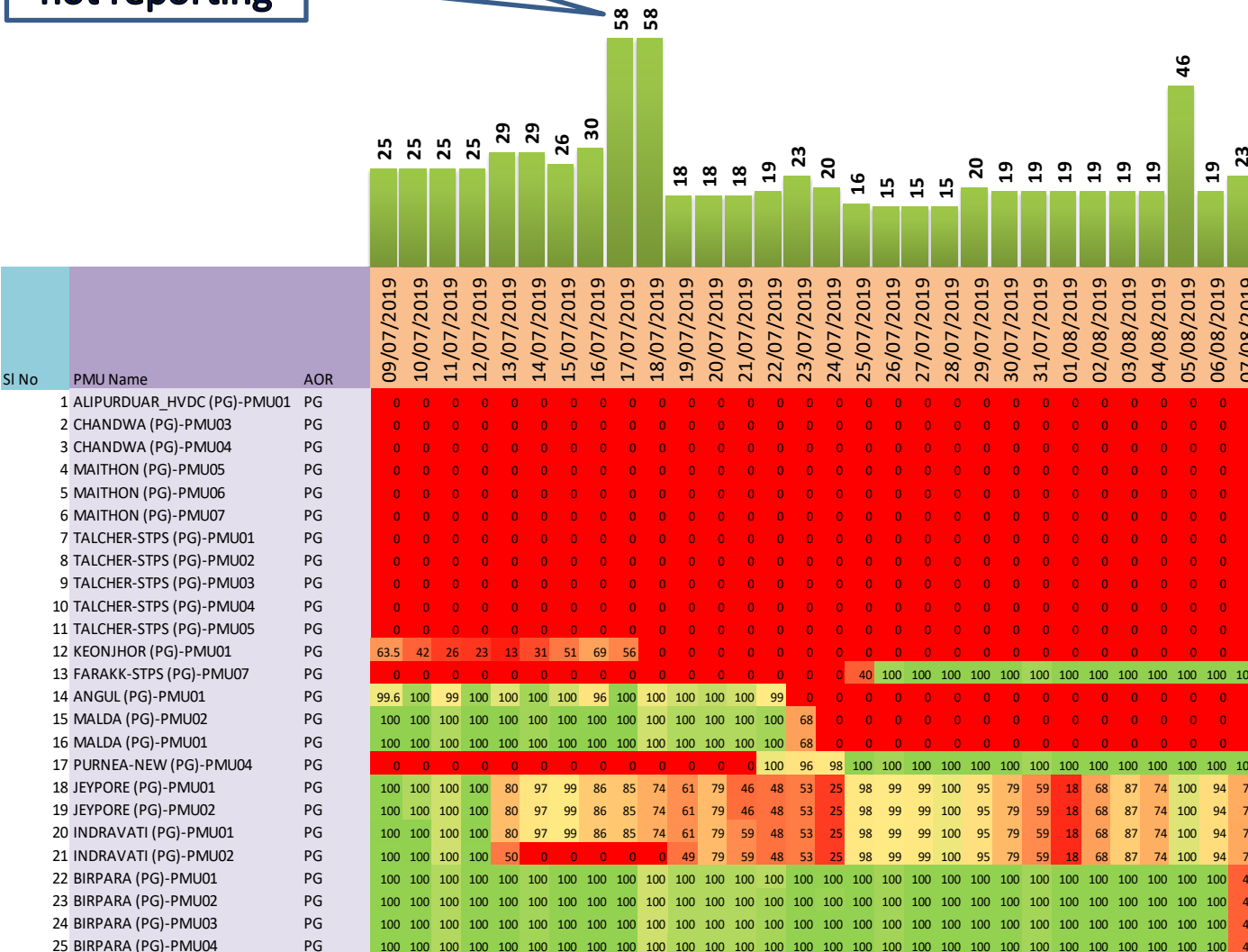


	7/Aug/19	6/Aug/19	5/Aug/19	4/Aug/19	3/Aug/19	2/Aug/19	1/Aug/19	31/Jul/19	30/Jul/19	29/Jul/19	28/Jul/19	27/Jul/19	26/Jul/19	25/Jul/19	24/Jul/19	23/Jul/19	22/Jul/19	21/Jul/19	20/Jul/19
Baharampur	64%	59%	77%	65%	65%	28%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Purnea 220	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	76%	100%	100%	100%	100%	100%
DSTPP	0%	3%	4%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	96%	100%	100%
Barh NTPC	100%	20%	46%	84%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42%	49%	0%	0%	0%	0%
New Farakka NTPC	0%	0%	0%	0%	0%	0%	0%	0%	78%	44%	100%	6%	0%	0%	40%	15%	0%	0%	0%
Chuzachen HEP	1%	1%	0%	0%	0%	47%	100%	100%	99%	100%	100%	100%	100%	100%	59%	1%	2%	1%	0%
Kishanganj	3%	64%	12%	2%	11%	1%	1%	3%	2%	54%	100%	10%	2%	19%	48%	100%	31%	2%	42%
Melli New	55%	94%	64%	83%	51%	54%	77%	74%	76%	62%	39%	44%	55%	67%	71%	100%	69%	71%	53%
Talcher HVDC	0%	0%	0%	0%	0%	0%	0%	0%	69%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Daily percentage non availability of data telemetry

No of PMU,
which are
intermittent/
not reporting

PMUs data availability:-Central Sector



Prolong data outage from(15):-

- 1) Alipurduar (1 No)
- 2) Chandwa (2 Nos)
- 3) Mathon(3 Nos)
- 4) Talcher STPS(5 Nos)
- 5) Keonjhor (1 nos)
- 6) Malda (2 Nos)
- 7) Angul(1 Nos)

Intermittent data from(8):

- 1) Indravati (2 Nos)
- 2) Jeypore(2 nos)
- 3) Birpara (4 Nos)

0%

Percentage availability

100%

PMUs data availability:-

Odisha

Total No of PMUs ,installed in Odisha - 29

Frequent failure in PDC - PDC communication and due to this , PMU data(Odisha sector) loss at ERLDC.

SI No	PMU Name	AOR	09/07/2019	10/07/2019	11/07/2019	12/07/2019	13/07/2019	14/07/2019	15/07/2019	16/07/2019	17/07/2019	18/07/2019	19/07/2019	20/07/2019	21/07/2019	22/07/2019	23/07/2019	24/07/2019	25/07/2019	26/07/2019	27/07/2019	28/07/2019	29/07/2019	30/07/2019	31/07/2019	01/08/2019	02/08/2019	03/08/2019	04/08/2019	05/08/2019	06/08/2019	07/08/2019
1	MENDHASAL (GR)-PMU01	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
2	MENDHASAL (GR)-PMU02	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
3	MERAMUNDALI (GR)-PMU01	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
4	MERAMUNDALI (GR)-PMU02	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
5	MERAMUNDALI (GR)-PMU03	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
6	MERAMUNDALI (GR)-PMU04	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
7	MERAMUNDALI (GR)-PMU05	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
8	MERAMUNDALI (GR)-PMU06	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
9	INDRAVATI (GR)-PMU01	GR	100	100	100	100	100	100	100	100	100	100	97	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
10	RENGALI (GR)-PMU01	GR	98	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
11	RENGALI (GR)-PMU02	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
12	UPPER-KOLAB (GR)-PMU01	GR	100	100	100	100	100	100	100	67	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
13	UPPER-KOLAB (GR)-PMU02	GR	100	100	100	100	100	100	100	50	46	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
14	BALIMELA (GR)-PMU01	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
15	BALIMELA (GR)-PMU02	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
16	BALIMELA (GR)-PMU03	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
17	BUDHIPADAR (GR)-PMU01	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
18	BUDHIPADAR (GR)-PMU02	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
19	BUDHIPADAR (GR)-PMU03	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
20	BUDHIPADAR (GR)-PMU04	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
21	BUDHIPADAR (GR)-PMU05	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
22	BUDHIPADAR (GR)-PMU06	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
23	BUDHIPADAR (GR)-PMU07	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
24	BUDHIPADAR (GR)-PMU08	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
25	BUDHIPADAR (GR)-PMU09	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
26	BUDHIPADAR (GR)-PMU10	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
27	TALCHER-TPS (GR)-PMU01	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
28	TALCHER-TPS (GR)-PMU02	GR	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100
29	TALCHER-TPS (GR)-PMU03	PG	100	100	100	100	100	100	100	100	100	100	100	99	46	61	100	100	100	100	77	0	0	0	0	96	100	100	100	100	100	100

0%

Percentage availability 100%

Eastern Region Telemetry Summery

- URTDSM data summery:-

- Central Sector:

- Prolonged outage of 15 Nos of PMUs.
 - Intermittent data from 8 Nos of PMUs.
 - Integration of PMUs are pending :
 - **Kahalgaon STPS (5 Nos), Sterlite (3 Nos)**, Patratu TPS (3 Nos), Tenughat TPS (2 Nos), JITPL (2 Nos).

- State Sector:

- Bakreswar (WB) – 4 Nos PMU
 - Mejia B (DV) – 2 Nos PMU
 - Koderma TPS(DV) – 1 Nos PMU

- **Frequent failure between SLDC and ERLDC PDC-PDC communication.**

Status of provisioning of Stand-by link ? – **POWERGRID may update.**

- SCADA data summery

- Highly intermittent SCADA data from :

- Baharampur
 - Kishanganj
 - New Melli
 - Barh STPS

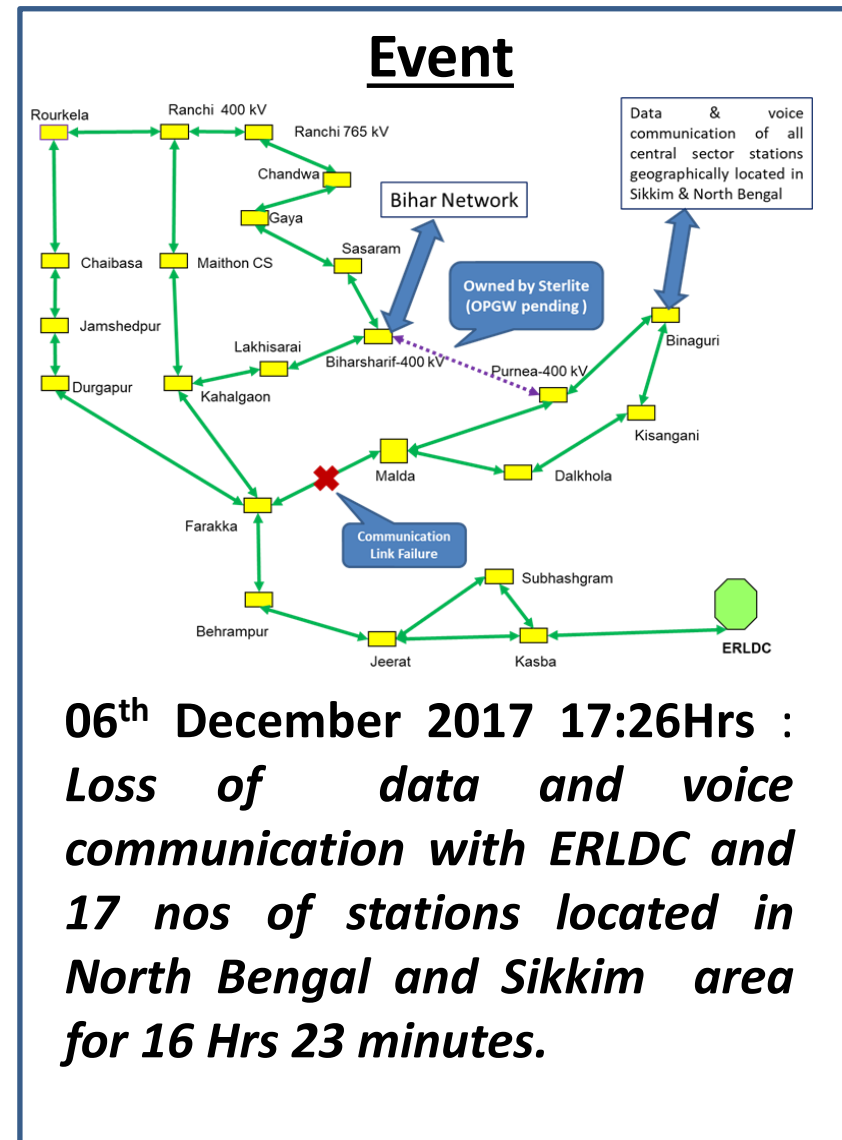
Failure of Real time telemetry from North Bengal and Sikkim to ERLDC

141st OCC: Event was reported by ERLDC.

142nd OCC: M/s East North Interconnection company Limited (ENICL) informed that OPGW is already available in the line but laying of approach cable inside the POWERGRID sub stations & termination at both end to communication Mux.

Matter was discussed in 143rd, 144th, 145th, 146th, 147th, 149th & 150th OCC

In 158th OCC meeting POWERGRID informed that alternate OPGW link through 400 kV Kishenganj-Darbhanga-Muzaffarpur lines would be implemented by July 2019.



POWERGRID may update the status.

Non availability of SCADA data above 220 kV Level

WBSETCL

- Following 220 kV station data not available:
 - TLDP 4 220kV : Communication link failure.
 - Dharampur 220kV : Communication link issue.
 - Egra 220 : Communication link issue.
 - Bantala 220kV : Communication link issue.
 - Alipurduar 220kV: Communication link yet to be established (February 2018).
 - Rishra 220kV

Non availability of SCADA data above 220 kV Level & 132kV

Station having tie lines

- **BIHAR**

- Barauni TPS 220kV

- **Odisha**

- Narsingpur 220kV.

- Nalco 220kV : Most of CB and Isolator data are not available

- Jindal Steel and Power Limited (JSPL) 400kV: Most of CB and Isolator data are not available

- **JHARKHAND**

- Hatia New 220.

- Jamtara 132kV

- Garwa 132kV

- Deoghar 132kV

- Kendposi 132 kV

PMUs data availability:-DVC

Intercontrol centre
PDC to PDC
communication
failure

Total No of PMUs
installed in DVC- 37

SI No	PMU Name	AOR	15-06-2019	16-06-2019	17-06-2019	18-06-2019	19-06-2019	20-06-2019	21-06-2019	22-06-2019	23-06-2019	24-06-2019	25-06-2019	26-06-2019	27-06-2019	28-06-2019	29-06-2019	30-06-2019	01-07-2019	02-07-2019	03-07-2019	04-07-2019	05-07-2019	06-07-2019	07-07-2019	08-07-2019	09-07-2019	10-07-2019	11-07-2019	12-07-2019	13-07-2019	14-07-2019
1	MEJIA-B (DV)-PMU01	DV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	MEJIA-B (DV)-PMU02	DV	100	100	100	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	RAGHUNATHPUR-TPS (DV)-PMU01	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
4	RAGHUNATHPUR-TPS (DV)-PMU02	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
5	RAGHUNATHPUR-TPS (DV)-PMU03	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
6	CHANDRAPURA-TPS (DV)-PMU01	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
7	CHANDRAPURA-TPS (DV)-PMU02	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
8	DURGAPUR-TPS (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
9	DURGAPUR-TPS (DV)-PMU02	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
10	KODRMA-TPS (DV)-PMU01	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
11	KODRMA-TPS (DV)-PMU02	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
12	KODRMA-TPS (DV)-PMU03	DV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	MEJIA-A (DV)-PMU01	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	MEJIA-A (DV)-PMU02	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
15	MEJIA-A (DV)-PMU03	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	MEJIA-A (DV)-PMU04	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
17	MEJIA-A (DV)-PMU05	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
18	PARULIA (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
19	PARULIA (DV)-PMU02	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
20	PARULIA (DV)-PMU03	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
21	PARULIA (DV)-PMU04	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
22	PARULIA (DV)-PMU05	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
23	BOKARO-A (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
24	KALYANESWARI (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
25	KALYANESWARI (DV)-PMU02	DV	50	50	50	48	50	50	50	50	50	50	50	50	50	50	50	50	50	99	100	100	100	100	100	100	100	100	100	100	100	100
26	KALYANESWARI (DV)-PMU03	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
27	KALYANESWARI (DV)-PMU04	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
28	MAITHON-RB (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
29	MAITHON-RB (DV)-PMU02	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
30	BOKARO-B (DV)-PMU01	DV	100	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
31	BOKARO-B (DV)-PMU02	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
32	CHANDRAPURA-B-TPS (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
33	CHANDRAPURA-B-TPS (DV)-PMU02	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
34	CHANDRAPURA-B-TPS (DV)-PMU03	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
35	WARIA (DV)-PMU01	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
36	WARIA (DV)-PMU02	DV	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100
37	WARIA (DV)-PMU03	GR	100	100	100	96	100	99	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100

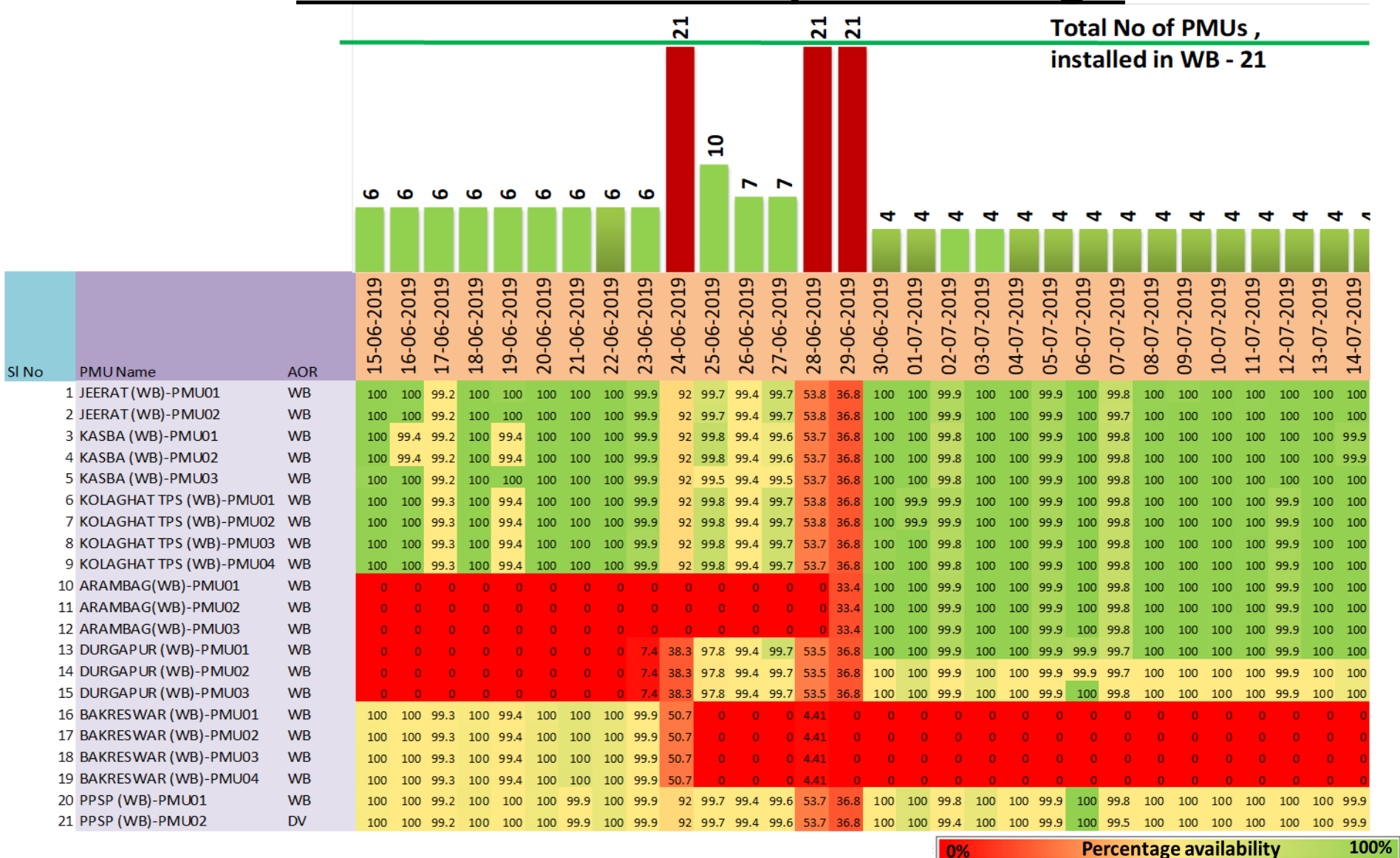
PMUs stopped reporting from -
— Mejia - B
— Koderma TPS

0%

Percentage availability

100%

PMUs data availability:-West Bengal



- Frequent PDC - PDC communication failure.
- PMUs stopped reporting from – Bakreswar (4 Nos)

ERPC :: KOLKATA

Minutes of Special Meeting on “Issue of Coordination during Outage and Restoration of Transmission Lines Owned by Private Licensees” held on 02.08.2019 at ERPC, Kolkata

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

Member Secretary, ERPC chaired the meeting. He welcomed participants from Powergrid, ERLDC & all the Private Transmission Licensees in ER. He explained that the issue was discussed in 158th OCC Meeting held on 27th June 2019, ERLDC informed that with the introduction of TBCB, multiple transmission utilities are constructing the transmission system. Other than Powergrid & Sterlite, no other transmission licensee has any dedicated operational control room for coordination with ERLDC during tripping/shutdown or any other switching operations. Due to non-availability of dedicated control center, ERLDC is facing difficulty to coordinate with multiple transmission licensees during tripping of lines in odd hours, which causes delay in restoration of transmission asset and collection of tripping related information.

In 159th OCC Meeting held on 19th July 2019, OCC decided to discuss the issue with all the transmission licensees in a separate meeting.

In line with the OCC decision this meeting has been convened. The following deliberations were held in the meeting:

- ERLDC explained the difficulties being faced to coordinate with multiple transmission licensees during tripping of lines and collection of information related to tripping and issuing code for taking the lines into service. In case line and end substations are owned by different licensees, representative of the line owner to be deployed at each of the substations to which transmission line terminates so that ERLDC could coordinate and collect the requisite information by contacting the substation. Similarly if one or more bays at a substation are owned by a licensee different from that of the substation, then the representative of the bay owner should be reachable through the same contact number as that of the main control room of the substation.
- It was informed that off line fault locator is not available at site for the private transmission licensee owning the transmission line. As a result, the transmission lines are being attempted for charging without properly ascertaining their healthiness after occurrence of a fault.
- KPTCL informed that they are making O&M agreement with DMTCL. As per the agreement, DMTCL would maintain the KPTCL bays at Darbhanga.
- TVPTL informed that they are also making O&M agreement with Powergrid for maintaining their bays at Kishanganj S/s.
- CPTC, Powerlinks and ATL informed that they have the O&M agreement with Powergrid.
- ENICL informed that they are having a control center at Bhopal for smooth coordination with end substation along with ERLDC

After detailed deliberation, the following decisions were taken:

- All the private transmission licensees (transmission line owner and bay owner) would have to make official O&M agreement with both end substations utility for smooth coordination with ERLDC. The operating procedure, obligation of DR & EL submission to ERLDC, mandatory maintenance of off-line fault locator and all the necessary coordination with ERLDC during line outages etc. should be clearly included in the agreement to avoid disputes.
- ERLDC will interact only with Substations for necessary coordination and collection of information.
- All the private transmission licensees should give two coordinator names along with their contact information to ERLDC for necessary coordination in case of emergency.
- All the private transmission licensees were advised to submit the status of execution of agreement to ERPC Secretariat by end of Aug 2019, before the next TCC/ ERPC meeting.
- It was decided to monitor the coordination issue in monthly OCC and PCC meetings. It was decided to report the issue to CERC for necessary penalty, if no improvement is observed in these meetings.

Meeting ended with vote of thanks to the chair.

Annexure-D.1

**Anticipated Power Supply Position for the month of
Sep-19**

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	BIHAR		
	i) NET MAX DEMAND	5537	2985
	ii) NET POWER AVAILABILITY- Own Source (including bilateral)	1350	342
	- Central Sector	3050	2511
	iii) SURPLUS(+)/DEFICIT(-)	-1137	-133
2	JHARKHAND		
	i) NET MAX DEMAND	1430	800
	ii) NET POWER AVAILABILITY- Own Source (including bilateral)	470	163
	- Central Sector	972	567
	iii) SURPLUS(+)/DEFICIT(-)	12	-70
3	DVC		
	i) NET MAX DEMAND (OWN)	2820	1785
	ii) NET POWER AVAILABILITY- Own Source	5299	2827
	- Central Sector	529	323
	Long term Bi-lateral (Export)	1467	1056
	iii) SURPLUS(+)/DEFICIT(-)	1540	309
4	ODISHA		
	i) NET MAX DEMAND	5035	2990
	ii) NET POWER AVAILABILITY- Own Source	4079	1957
	- Central Sector	1644	895
	iii) SURPLUS(+)/DEFICIT(-)	689	-138
5	WEST BENGAL		
5.1	WBSEDCL		
	i) NET MAX DEMAND (OWN)	7030	3896
	ii) CESC's DRAWAL	0	60
	iii) TOTAL WBSEDCL's DEMAND	7030	3956
	iv) NET POWER AVAILABILITY- Own Source	4305	1960
	- Import from DPL	465	0
	- Central Sector	2505	1648
	v) SURPLUS(+)/DEFICIT(-)	245	-348
	vi) EXPORT (TO B'DESH & SIKKIM)	-348	-486
5.2	DPL		
	i) NET MAX DEMAND	0	205
	ii) NET POWER AVAILABILITY	465	218
	iii) SURPLUS(+)/DEFICIT(-)	465	13
5.3	CESC		
	i) NET MAX DEMAND	2050	1080
	ii) NET POWER AVAILABILITY - OWN SOURCE	820	507
	FROM HEL	540	379
	Import Requirement	690	194
	iii) TOTAL AVAILABILITY	2050	1080
	iv) SURPLUS(+)/DEFICIT(-)	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
	i) NET MAX DEMAND	9080	5181
	ii) NET POWER AVAILABILITY- Own Source	5590	2685
	- Central Sector+Others	3735	2027
	iii) SURPLUS(+)/DEFICIT(-)	245	-469
7	SIKKIM		
	i) NET MAX DEMAND	95	44
	ii) NET POWER AVAILABILITY- Own Source	8	3
	- Central Sector+Others	179	112
	iii) SURPLUS(+)/DEFICIT(-)	92	71
8	EASTERN REGION		
	At 1.03 AS DIVERSITY FACTOR		
	i) NET MAX DEMAND	23299	13784
	Long term Bi-lateral by DVC	1467	1056
	EXPORT BY WBSEDCL	-348	-486
	ii) NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	26905	14411
	iii) PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	2487	57

ERLDC, KOLKATA											
TRANSMISSION ELEMENTS OUTAGE PROPOSED IN 160th OCC MEETING OF ERPC											
		FROM		TO							
SI	NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S.D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY	COMMENTS	INSULATOR
1	220 KV Bus -1 with Siliguri -1, ICT-1, Birpara-1 & Bus Section-I at Binaguri	01/09/19	9:00	01/09/19	17:00	ODB	ER-II	Commissioning of Bus #1 Bus bar protection for ICT#3 ERSS-XVII	After high hydro period		1
2	400KV BINAGURI-RANGPO-1 Main bay 410 at Binaguri	01/09/19	10:00	20/09/19	18:00	OCB	ER-II	TBEA Bay upgradation work under ERSS-XX	After high hydro period		1
3	400KV BINAGURI-RANGPO-2 Main bay 413 at Binaguri	01/09/19	10:00	20/09/19	18:00	OCB	ER-II	TBEA Bay upgradation work under ERSS-XX	After high hydro period		1
4	400KV Bus-1 at Binaguri	01/09/19	10:00	01/09/19	12:00	ODB	ER-II	isolating the bays from Bus-1 and to commence bay upgradation works under ERSS-XX	After high hydro period		1
5	400KV BINAGURI-RANGPO-1 line	01/09/19	12:00	01/09/19	15:00	ODB	ER-II	411 respectively) inter connector (Rigid Bus pipe) to isolate 410 bay and connecting the same on 411bay	After high hydro period		1
6	400KV BINAGURI-RANGPO-2 line	01/09/19	15:00	01/09/19	18:00	ODB	ER-II	414 respectively) inter connector (Rigid Bus pipe) to isolate 413 bay and connecting the same on 414bay	After high hydro period		1
7	400KV Futute bay of 500MVA ICT-3 (421) at Maithan	01/09/19	9:00	25/09/19	18:00	OCB	ER-II	Retrofitting of 400kv BHEL CB under ERSS-XX project work by M/s TBEA			
8	400KV Maithon-Right Bank - 2 at Maithan	01/09/19	8:00	10/09/19	18:00	OCB	ER-II	Upgradation of bay equipment and Re conducting work under ERSS-XVII project work	MPL		1
9	Main bay of 400KV Maithon-MPL Ckt#1,(Bay no 403) at MPL	01/09/19	8:00	07/09/19	18:00	OCB	ER-II	Upgradation of Bay equipmenets under ERSS-XVII Project work			
10	40252- Tie Bay of Keonjhar line & 315MVA ICT I	01/09/19	9:00	01/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
11	400 kV Jeypore-Indravati S/C Line	01/09/19	08:00:00	01/09/19	18:00:00	ODB	ER-II/Odisha /Jeypore	For PID defect insulator replacement work and for attending S/D nature defects	NLDC		
12	765KV Bus-I at Sundargarh	01/09/19	9:00	07/09/19	18:00	OCB	ER-II/Odisha/Sundergarh	HV & Impulse testing of 765KV GIS (Construction Head)	NLDC		
13	765 KV S/C Sasaram-Fatehpur	01/09/19	9:00	20/09/19	18:00	ODB	POWERGRID ER-I	Tower strengthening work	NLDC	PROPER DOCUMENTS OF TOWER STRENGTHNING WORK TO BE SUBMITTED	1
14	400 KV Nabinagar-Sasaram-D/C	01/09/19	9:00	20/09/19	18:00	OCB	POWERGRID ER-I	Replacement of tower no.170 having critical bent leg,			1
15	400KV Bus -I at Patna	01/09/19	9:30	03/09/19	17:30	ODB	POWERGRID ER-I	CB and sky bus connection under SS03 package of Patna Nabinagar Ckt 1	BIHAR		1
16	500MVA ICT 1 at Patna	01/09/19	9:30	20/09/19	17:30	OCB	POWERGRID ER-I	Construction of Firewall of ICT 2 and equipment uprating & jumper connection	BIHAR	AFTER CHATT PUJA, NOV'19	1
17	400 KV Patna Barh line 1	01/09/19	9:30	15/09/19	17:30	OCB	POWERGRID ER-I	Under SS03 package for commissioning of 80 MVAR Bus reactor as switchable line reactor			
18	A/R 400 kV Biharsarif - Banka - 2	01/09/19	8:00	30/09/19	17:00	ODB	POWERGRID ER-I	for OPGW erection work			
19	A/R 400 kV Biharsarif - Koderma - 2	01/09/19	8:00	30/09/19	17:00	ODB	POWERGRID ER-I	for OPGW erection work	DVC		
20	400 KV ICT - I AT GAYA	01/09/19	9:00	01/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR	NEED TO DICUSS, BASEB ON REAL TIME CONSENT	1
21	132KV NTPC (Kahalgao)-Lalmatia S/C T/L	01/09/19	9:00	01/09/19	16:00	ODB	BSPTCL	Line Maintainance work	Lalmataia will avail power from alternate sources		1
22	132KV Kahalgao-Lalmatia S/C T/L	01/09/19	9:00	01/09/19	16:00	ODB	BSPTCL	Line Maintainance work	Lalmataia will avail power from alternate sources		1
23	220kv DMTCL(D)-Laukahi Trans. Line 01	01/09/19	10:00	05/09/19	17:00	ODB	BSPTCL	Maintenance work on daily basis	No Load Restriction		
24	220 KV Bus -2 with Siliguri -2, ICT-2, Birpara-2 & Bus Section-II at Binaguri	02/09/19	9:00	02/09/19	17:00	ODB	ER-II	Commissioning of Bus #2 Bus bar protection for ICT#3 ERSS-XVII	After high hydro period		1
25	400kv Maithan-Kahalgao-1 Line	02/09/19	9:00	05/09/19	18:00	ODB	ER-II	Upgradation of bay equipment under ERSS-XVII project work.			1
26	400KV Maithon-Kahalgao 1 & 2	02/09/19	8:00	03/09/19	18:00	OCB	ER-II	TL Crossing during Re-conductoring work of Maithon - Right Bank Line			

27	220KV WBSETCL Subhasgram Line#1 (Bay No.207) at Powergrid,Subhasgram	02/09/2019	9:00	02/09/2019	17:00	ODB	ER-II	For rectification of Abnormal sound Coming from Line Isolator	Subhasgram Line#1 will be under Shutdown on daily basis.		
28	400KV KHARAGPUR-CHANDITALA-I	02/09/19	7:00	02/09/19	15:00	ODB	WB	MAINTENANCE WORK			
29	Arambag-BKTPP 400 KV Line	02/09/19	7:00	04/09/19	15:00	ODB	WB	MAINTENANCE WORK			
30	40352- Main Bay of 315MVA ICT I	02/09/19	9:00	02/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works	GRIDCO		
31	500 MVA ICT-2	02/09/19	10:00	02/09/19	18:00	ODB	ER-II/Odisha/ Pandiabili GIS	For replacement of PRD micro-switch.	GRIDCO		
32	400 /220 kV ICT-II at Gaya ss	02/09/19	9:00	04/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kV under Nabinagr -2 Package	BIHAR	NEED TO DICUSS, BASEB ON REAL TIME CONSENT	1
33	63 MVAR RANGPO LINE REACTOR AT KISHANGANJ	02/09/19	9:00	02/09/19	18:00	ODB	POWERGRID ER-I	AMP and NGR breaker mechanism replacement			
34	400 KV KISHANGANJ-RANGPO LINE	02/09/19	9:00	02/09/19	18:00	ODB	POWERGRID ER-I	Testing of Line Protection and Auto Reclose	After high hydro period		1
35	400KV Farakka Gokarna Ckt-I	02/09/19	8:00	03/09/19	17:00	OCB	POWERGRID ER-I	Termination of 400KV New Purnea- Farraka and 400 KvVNew Purnea- Gokarna Line from Purnea End	SPECIAL MEETING DICISSION		1
36	400KV Farakka Gokarna Ckt-II	02/09/19	8:00	03/09/19	17:00	OCB	POWERGRID ER-I	Termination of 400KV New Purnea- Farraka and 400 KvVNew Purnea- Gokarna Line from Purnea End	SPECIAL MEETING DICISSION		1
37	220KV NPRN- PRN CKT-I	02/09/19	9:30	14/09/19	18:00	OCB	POWERGRID ER-I	FOR RE-CONDUCTORING WORK OF LINE (EXISTING COND. TO BE REPLACED WITH HTLS).	After high hydro period	After high hydro period	1
38	400kv MALDA-NEW PURNEA-I	02/09/19	9:30	02/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OF Y-PHASE CVT DUE TO SECONDARY VOLTAGE DRIFT.	REAL TIME CONDITION		
39	315 MVA ICT-1 AT RANCHI	02/09/19	9:30	06/09/19	17:00	OCB	POWERGRID ER-I	Replacement of 01 No 220 KV (Y-Ph) & 2 Nos 33 KV (R & Y Ph) Bushings	JSEB	PROVIDED TENUGHAT REMAIN IN SERVICE	1
40	220kv main bay of sipara 1 at Patna	02/09/19	9:30	04/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updraton works under SS03 package			
41	400 Kv Patna Ballia -II	02/09/19	10:00	02/09/19	17:30	ODB	POWERGRID ER-I	Testing of auto recose scheme at Patna	NLDC		
42	400KV Motihari-Gorakhpur-I	02/09/19	9:00	02/09/19	17:00	ODB	POWERGRID NR-3	AMP of Line Bay equipments at PGCIL Gorakhpur S/s	NLDC		1
43	400 KV ICT - I AT GAYA	02/09/19	9:00	02/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY			
44	400KV Rangpo-Teesta-V Ckt-2	03/09/19	8:00	03/09/19	14:00	ODB	ER-II	For Installation of Insulation Tape in Loc LILO 7 to 8	TEESTA-V		1
45	400 KV Binaguri-Tala Line-4	03/09/19	9:00	04/09/19	17:00	ODB	ER-II	Erection of Bus duct	NLDC		1
46	400KV TBC at Malda	03/09/19	8:00	02/10/19	17:00	OCB	ER-II	ERSS-XVII-B Constructional work	WB	AFTER HIGH HYDRO	1
47	400/220 KV 315 MVA ICT-3 at Malda (associated Bays 403 and 205)	03/09/19	8:00	31/10/19	17:00	OCB	ER-II	ERSS-XVII-B Constructional work			
48	400 KV BUS-I of NTPC Farakka	03/09/19	9:00	03/09/19	18:00	ODB	ER-II	For connecting BUS isolator of bay no-22 to BUS-I (After	As bay-34 (Tie bay of		
49	220KV WBSETCL Subhasgram Line#2 (Bay	03/09/2019	9:00	03/09/2019	17:00	ODB	ER-II	For rectification of Abnormal sound Coming from Line	220KV WBSETCL		
50	400KV KHARAGPUR-CHANDITALA-II	03/09/19	7:00	03/09/19	15:00	ODB	WB	MAINTENANCE WORK			
51	400 KV 406 Main Bay of 315 MVA ICT-II	03/09/19	9:00	03/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
52	400kv Jeypore-Gazuwaka-I Line	03/09/19	08:00:00	04/09/19	18:00:00	ODB	ER-II/Odisha /Jeypore	Replacement of porcelain insulator with polymer insulator and for attending S/D nature defects	NLDC		

53	50MVAR JEYPURE LINE REACTOR at Balangir	03/09/19	9:00	03/09/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 50MVAR Jeypore L/R and 403R 52 CB			
54	Main bay-703 of 765/400KV ICT-1 at Sundergarh	03/09/19	9:00	03/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	for replacement of CB closing damper	NLDC		
55	400KV Sundergarh-Raigarh Ckt #1	03/09/19	8:00	15/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	For PID Testing of Porcelain Insulator. Only Auto reclose	NLDC		
56	400KV Sundergarh-Raigarh Ckt #3	03/09/19	8:00	15/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	For PID Testing of Porcelain Insulator. Only Auto reclose	NLDC		
57	400kV Angul-Bolangir Line	03/09/19	9:00	03/09/19	18:00	ODB	ER-II/Odisha/Angul SS	Commissioning of LILO Isolator	NLDC		
58	220 kv bus coupler 206 bay with 220 kv main bus-II	03/09/19	10:00:00	03/09/19	18:00:00	ODB	ER-II/Odisha/ Pandiabili GIS	AMP of 206 bay.			
59	400KV BUS BAR 1 AT CHAIBASA	03/09/19	9:30	04/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK OF 400 KV BUS BAR 1			
60	220KV MUZAFFARPUR - DHALKEBAR (NEPAL) -1	03/09/19	9:00	04/09/19	17:30	ODB	POWERGRID ER-I	NTAMC INTEGRATION OF NEPAL -1 BAY	NLDC	Apply in 10 days advance	1
61	220KV BUS-II AT NEW PURNEA	03/09/19	9:30	03/09/19	18:00	ODB	POWERGRID ER-I	220KV BUS-II, AMP & BUS ISOLATOR WORK OF PRN CKT-I			
62	220KV BUS Coupler Bay (204-S2) AT NEW PURNEA	03/09/19	9:30	03/09/19	18:00	OCB	POWERGRID ER-I	Isolators (205-89B) at Bus-2 Side will be replaced			
63	400KV Biharsariff -Ballia-I	03/09/19	10:00	03/09/19	18:00	ODB	POWERGRID NR-3	For replacement of neutral busning or 50MVAR BHEL make Line Reactor	NLDC		
64	400KV Motihari-Gorakhpur-II	03/09/19	9:00	03/09/19	17:00	ODB	POWERGRID NR-3	AMP of Line Bay equipments at PGCIL Gorakhpur S/s	NLDC		1
65	220 Kv Muzaffarpur (PG)-Hajipur ckt-1	03/09/19	10:00	03/09/19	16:00	ODB	BSPTCL	Tree cutting	No Load Restriction		
66	400KV Bus-1 at Binaguri	04/09/19	9:00	05/09/19	17:00	ODB	ER-II	Connection between SF6 to Air (GIS) Bushing and 400KV Bus#1 and to check bus stability ERSS-XVII	After high hydro period		1
67	220KV Siliguri Dalkhola Ckt-1(Bay-202)	04/09/19	9:00	05/09/19	17:00	ODB	ER-II	For retrofitting of Numerical Distance(M-I) relay, refurbishment of Numerical A/R relay.	After high hydro period		
68	40kV D/C Binaguri - Bongaigaon (Twin) Line (POWERGRID)	04/09/19	6:00	07/09/19	18:00	ODB	ER-II	Stringing work of overhead crossing (in between loc no 273-274) for under construction 400 KV D/C Jigmeling-Alipurduar TL .	NLDC	After high hydro period	1
69	220 kV Bus-I at Malda	04/09/19	8:00	04/09/19	17:00	ODB	ER-II	ERSS-XX Constructional work(Re-connection of Bus isolator Jumper)	WB		
70	400KV Malda-New Purnea-I	04/09/19	8:00	14/09/19	17:00	ODB	ER-II	Replacement of old porcealin insulators by Polymer Insulator due to defects noticed in PID.	After high hydro period		1
71	400KV Maithon-Durgapur 1&2	04/09/19	8:00	05/09/19	18:00	OCB	ER-II	1.TL Crossing during Re-conductoring work of Maithon - Right Bank Line. 2. Reconnection of Jumper of 405 Tie Bay (RB#1-DGP#1) under ERSS-XVII			
72	315 MVA ICT#1 at Subhasgram S/s	04/09/2019	9:00	04/09/2019	17:00	ODB	ER-II	Retrofitting of Numerical REF Relay and AMP of 315 MVA ICT#1.	WB		
73	400kV Andol-Jamshedpur-I	04/09/19	9:00	05/09/19	17:00	ODB	ER-II	Rectification of damaged Porcelain insulators noticed in DALMA Forest			
74	400KV KHARAGPUR-KOLAGHAT-I	04/09/19	7:00	04/09/19	15:00	ODB	WB	MAINTENANCE WORK			
75	400 KV Jeerat BKTTP Tr. Line	04/09/19	7:00	04/09/19	15:00	ODB	WB	MAINTENANCE WORK			
76	400 kV 407 main Bay of Baripada-Duburi line	04/09/19	9:00	05/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP & Gasket replacement			
77	315 MVA ICT#1 at Rourkela	04/09/19	9:00	04/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	RETROFITTING OF EXISTING OLD ICT PROTECTION RELAYS WITH NEW NUMERICAL RELAYS	GRIDCO		

78	Main bay-706 of 765/400KV ICT-2 at Sundergarh	04/09/19	9:00	04/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	for replacement of CB closing damper	NLDC		
79	400kV Angul-Meramundi-1 Line	04/09/19	9:00	04/09/19	18:00	ODB	ER-II/Odisha/Angul SS	Commissioning of LILo Isolator and tower top Line maintenance works	GRIDCO		1
80	Replacement of DGA Violated CTs with new GE make CTs.	04/09/19	6:00	04/09/19	18:00	OCB	ER-II/Odisha/HVDC Talcher	Outage of Bus Sectionliser Bay (10CO4-T11) on continuous basis for replacement of DGA violated CTs with new GE make CTs. There shall be no interruption or any limitation			
81	400 KV Mendhasal-Pandiabili Ckt-2	04/09/19	9:00:00	04/09/19	18:00:00	ODB	ER-II/Odisha/ Pandiabili GIS	Servicing of line isolator at Mendhasal.	GRIDCO		
82	400KV TIE BAY OF MUZZAFARPUR ckt 1&2 at Biharshariff	04/09/19	10:00	04/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
83	220KV BUS-I AT NEW PURNEA	04/09/19	9:30	04/09/19	18:00	ODB	POWERGRID ER-I	220KV BUS-I, AMP & BUS ISOLATOR WORK OF PRN CKT-I.			
84	400KV Biarsarif - Koderma-I	04/09/19	8:00	05/09/19	18:00	ODB	POWERGRID, ER-1	FOR REPLACEMENT OF INSULATORS DAMMAGED BY MISCREANTS	DVC		
85	400KV Bus 2 at Patna	04/09/19	9:30	06/09/19	17:30	ODB	POWERGRID ER-I	Stringing of Sky bus under SS03 package of Patna Nabinagar Ckt 1	BIHAR	BSEB CONSENT REQUIRED	1
86	800kv BNC-AGRA POLE-I	04/09/19	10:00	04/09/19	14:00	ODB	POWERGRID ER-I	for fixing of broken jump conductor and tightening of jumpers N&B s.	NLDC	After high hydro	1
87	315MVA ICT-1 at Biharshariff	04/09/19	10:00	04/09/19	18:00	ODB	POWERGRID ER-I	AND REF RELAY	BIHAR		
88	220 Kv Muzaffarpur (PG)-Hajipur ckt-2	04/09/19	10:00	04/09/19	16:00	ODB	BSPTCL	Tree cutting	No Load Restriction		
89	132KV Rangpo-Rangit line	05/09/19	8:00	05/09/19	14:00	ODB	ER-II	For installation of Insulation Tape in Loc LILo 6 - 7	SIKKIM		
90	220 kV Bus-II at Malda	05/09/19	8:00	05/09/19	17:00	ODB	ER-II	ERSS-XX Constructional work(Reconnection of Bus isolator Jumper)	WB		
91	Tie Bay of 400kV Maithan RB-II-Kahalgaon-1 line (408) at Maithan	05/09/19	9:00	25/09/19	18:00	OCB	ER-II	Upgradation of bay equipment under ERSS-XVII project work.			
92	315 MVA ICT#2 at Subhasgram S/s	05/09/2019	9:00	05/09/2019	17:00	ODB	ER-II	Retrofitting of Numerical REF Relay	WB		
93	400KV KHARAGPUR-KOLAGHAT-II	05/09/19	7:00	05/09/19	15:00	ODB	WB	MAINTENANCE WORK			
94	220kv KLC,Bantala-Subhasgram(PG)	05/09/19	7:00	05/09/19	15:00	ODB	WB	MAINTENANCE WORK			
95	Jeerat: 400/220 KV 315 MVA Trafo 1	05/09/19	7:00	05/09/19	15:00	ODB	WB	MAINTENANCE WORK			
96	Arambag-New Chanditala 400 KV Line	05/09/19	7:00	05/09/19	15:00	ODB	WB	MAINTENANCE WORK			
97	400 kV Bus-I at Baripada	05/09/19	9:00	05/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Replacement of Y phase CVT	GRIDCO		
98	400kV Jeypore-Gazuwaka-II Line	05/09/19	08:00:00	06/09/19	18:00:00	ODB	ER-II/Odisha /Jeypore	Replacement of porcelain insulator with polymer insulator and for attending S/D nature defects	NLDC		
99	50MVAR ANGUL LINE REACTOR at Balangir	05/09/19	9:00	05/09/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 401R 52 CB			
100	Main Bay-710 of 765KV Angul Ckt-3 at Sundergarh	05/09/19	9:00	05/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	for replacement of CB closing damper	NLDC		
101	400 KV Rengali-Talcher # 1 Line	05/09/19	8:00	05/09/19	17:00	ODB	ER-II/Odisha/Rengali	For Replacement of Insulator & testing of Auto Reclose Relay			
102	400kV Angul-Talcher Line	05/09/19	9:00	05/09/19	18:00	ODB	ER-II/Odisha/Angul SS	Commissioning of LILo Isolator & Line maintenance and testing of M1 and M2 Relay work	GRIDCO		1
103	220KV CB of 204 Bay (Future line bay)	05/09/19	9:00	05/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Rectification of CB found faulty timing & DCRM graphs. Shutdown shall be taken if not availed in Aug'19.			
104	400KV Keonjhar-Baripada Line	05/09/19	7:00	06/09/19	18:00	ODB	ER-II/Odisha	For OPGW replacement work			
105	400 kv Bus-I at Mendhasal sub-station.	05/09/19	9:00:00	05/09/19	18:00:00	ODB	ER-II/Odisha/ Pandiabili GIS	Servicing of bus isolator at Mendhasal.	GRIDCO		1
106	400KV MAIN BAY OF PURNEA - 2 at Biharshariff	05/09/19	10:00	05/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			

107	400KV BUS BAR 2 AT CHAIBASA	05/09/19	9:30	06/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK OF 400KV BUS BAR 2			
108	400 KV SASARAM - DALTONGANJ - I	05/09/19	9:30	05/09/19	17:30	ODB	POWERGRID ER-I	CSD Commissioning			
109	400 KV 125 MVAR BR-I at Gaya S/S	05/09/19	9:00	07/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kV under Nabinagr -2 Package	BIHAR		1
110	220KV MUZAFFARPUR - DHALKEBAR (NEPAL) - 2	05/09/19	9:30	06/09/19	17:30	ODB	POWERGRID ER-I	NTAMC INTEGRATION OF NEPAL -2 BAY	NLDC		
111	400KV SILIGURI - NEW PURNEA-I	05/09/19	9:30	05/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OLD DISTANCE RELAY(EPAC) WITH NEW MICOMP44 RELAY.	After high hydro period		
112	400KV SILIGURI - NEW PURNEA-II	05/09/19	14:00	05/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OLD DISTANCE RELAY(EPAC) WITH NEW MICOMP44 RELAY.	After high hydro period		
113	400KV KAHALGAON - BANKA II	05/09/19	9:00	15/09/19	18:00	ODB	POWERGRID ER-I	for OPGW stringing WORK.			
114	400 KV Pusauli Biharsharif Line-1	05/09/19	9:00	10/09/19	18:00	ODB	POWERGRID ER-I	Replacement of insulators at Road/Rail/River/Power Line Crossings and Relay Retrofitting			
115	400 KV Pusauli Allahabd Line	05/09/19	9:00	10/09/19	18:00	ODB	POWERGRID ER-I	Replacement of insulators at Road/Rail/River/Power Line Crossings and Relay Retrofitting	NLDC		
116	400/220kv 500MVA ICT-I AT SASARAM	05/09/19	9:00	08/09/19	18:00	OCB	POWERGRID ER-I	Shifting of transformer for Transformer Retrofitting Work	BIHAR	POST CHATT PUJA 2ND NOV	1
117	220KV SASARAM-SAHUPURI	05/09/19	9:00	08/09/19	18:00	OCB	POWERGRID ER-I	To facilitate the S/D of ICT-I for shifting of transformer for Transformer Retrofitting Work	NLDC		
118	400 KV Patna Barh 1	05/09/19	9:30	09/09/19	17:30	OCB	POWERGRID ER-I	Commissioning of 80 MVAR Switchable line reactor in Patna Barh line 1 at Patna SS under SS03 package			
119	315MVA ICT-3 at Biharshariff	05/09/19	10:00	05/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
120	315 MVA ICT-1 at JAMSHEDPUR	05/09/19	9:00	05/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY			
121	220kv Pusauli (PG)-Pusauli (BSPTCL)	05/09/19	9:00	05/09/19	11:00	ODB	BSPTCL	Jumper connection of LILO line at Pushauli GSS	2. ARA (PG) will avail power from 2. ARA (PG) will be completely off during the Shutdown		
122	220kv Pusauli (PG)-Ara (PG)	05/09/19	9:00	05/09/19	11:00	ODB	BSPTCL	Jumper connection of LILO line at Pushauli GSS	1. Nalanda will avail		
123	132kv Nalanda-Barhi T/L	05/09/19	10:00	05/09/19	13:00	ODB	BSPTCL	For testing of CT CVT & Relays	Surajpura (Nepal) will be completely off during the Shutdown		
124	132 kv Ramnagar -Valmikinagar	05/09/19	9:00	05/10/19	17:00	OCB	BSPTCL	Reconductoring work			
125	220KV New Melli-JLHEP Line-1	06/09/19	11:00	06/09/19	13:00	ODB	ER-II	SF6 Gas Filling in Bay 205 G5 Compartment (Y-Phase)			
126	400KV Bus-2 At Binaguri	06/09/19	9:00	07/09/19	17:00	ODB	ER-II	Connection between SF6 to Air (GIS) Bushing and 400KV Bus#2 and to check bus stability ERSS-XVII	After high hydro period		1
127	160MVA ICT-II at Birpara	06/09/19	8:00	06/09/19	17:00	ODB	ER-II	132KV side Bushing Jumper Replacement	WB		
128	132KV Main Bus at Malda	06/09/19	8:00	06/09/19	17:00	ODB	ER-II	ERSS-XX Constructional work(Re-connection of Bus isolator Jumper)	WB		
129	400KV RBTPS-Ranchi 1&2	06/09/19	8:00	07/09/19	18:00	OCB	ER-II	TL Crossing during Re-conductoring work of Maithon - Right Bank Line	DVC		1
130	400 KV Main Bus -I at Subhasgram SS	06/09/2019	9:00	06/09/2019	17:00	ODB	ER-II	AMP of 400 KV Main Bus -I at Subhasgram SS	400 KV Main Bus-I will be under Shutdown on daily basis.		
131	400kv Andal-Jamshedpur-II	06/09/19	9:00	07/09/19	17:00	ODB	ER-II	Rectification of damaged Porcelain insulators noticed in DALMA Forest			
132	KGP: 400/220 KV 315MVA-TRANSFORMER-I	06/09/19	7:00	07/09/19	15:00	ODB	WB	MAINTENANCE WORK			
133	400 KV Jeerat New Chanditala Tr. Line	06/09/19	7:00	06/09/19	15:00	ODB	WB	MAINTENANCE WORK			
134	ARAMBAG:400 KV 50 MVAR Bus Reactor	06/09/19	7:00	07/09/19	15:00	ODB	WB	MAINTENANCE WORK			

135	400 kV 411 Tie Bay of Baripada-Pandiabili & Baripada-TISCO line	06/09/19	9:00	07/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Gasket replacement			
136	315 MVA ICT#2 at Rourkela	06/09/19	9:00	06/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	RETROFITTING OF EXISTING OLD ICT PROTECTION RELAYS WITH NEW NUMERICAL RELAYS	GRIDCO		
137	765KV Sundargarh-Angul Ckt #4 with LR at Sundergarh	06/09/19	9:00	06/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	To take B ph Reactor in to service and keep out of service SPARE Reactor+BPI Erection at T point + TL maint. Work	NLDC		
138	220 KV Transfer Bus Coupler Bay (Bay No-203)	06/09/19	8:00	06/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
139	400kV Angul-Meramunduli-2 Line	06/09/19	9:00	06/09/19	18:00	ODB	ER-II/Odisha/Angul SS	Commissioning of LILO Isolator and tower top Line maintenance works	GRIDCO		1
140	220KV CB of bus coupler bay (207 bay)	06/09/19	9:00	06/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Rectification of CB found faulty timing & DCRM graphs.Shutdown shall be taken if not availed in Aug'19.			
141	400 kv Bus-II at Mendhsal sub-station.	06/09/19	9:00:00	06/09/19	18:00:00	ODB	ER-II/Odisha/ Pandiabili GIS	Servicing of bus isolator at Mendhasal.	GRIDCO		
142	400kV Chaibasa -Rourkela 2	06/09/19	9:30	06/09/19	17:30	ODB	POWERGRID ER-I	Damage Jamper replacement work, Loc no 297			
143	400KV MAIN BAY OF SILIGURI -2 AT NEW PURNEA	06/09/19	9:30	06/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OF GASKET OF POLE COLOUMN OF R-PH TO ATTEND THE SF6 LEAKAGE.			
144	400kv Main bay of 765/400kv ICT-2 (BAY NO. - 407) at New Ranchi	06/09/19	9:00	06/09/19	17:00	ODB	POWERGRID ER-I	AMP			
145	400KV Biharsariff - Koderma -II	06/09/19	8:00	07/09/19	18:00	ODB	POWERGRID, ER-1	FOR REPLACEMENT OF INSULATORS DAMMAGED BY MISCREANTS	DVC		
146	220kV Bus Coupler at Sasaram	06/09/19	9:00	06/09/19	18:00	ODB	POWERGRID ER-I	AMP work	BIHAR		
147	220kv main bay of sipara 2 at Patna	06/09/19	9:30	08/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updation works under SS03 package			
148	800kv BNC-AGRA POLE-II	06/09/19	10:00	06/09/19	14:00	ODB	POWERGRID ER-I	for fixing of broken jump conductor and tightening of jumpers N&B s.	NLDC		1
149	315MVA ICT-2 at Biharhariff	06/09/19	10:00	06/09/19	18:00	OCB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY & 04 nos. Bushing replacement work	BIHAR		
150	315 MVA ICT-2 at JAMSHEDPUR	06/09/19	9:00	06/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	JSEB		
151	315 MVA ICT-I at RANCHI	06/09/19	9:00	06/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	JSEB		
152	400 KV Main Bus -II at Subhasgram SS	07/09/2019	9:00	07/09/2019	17:00	ODB	ER-II	AMP of 400 KV Main Bus -II at Subhasgram SS	WB		
153	Jeerat: 400/220 KV 315 MVA Trafo 2	07/09/19	7:00	07/09/19	15:00	ODB	WB	MAINTENANCE WORK			
154	220 kV Bus-II at Baripada	07/09/19	9:00	07/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Replacement of R phase CVT			
155	ICT-I (3x 105 MVA) at Jeypore	07/09/19	10:00:00	07/09/19	12:00:00	ODB	ER-II/Odisha /Jeypore	For changing ICT-I combination form Unit-I,III, IV to Unit-I, II & IV for charging Unit-II	GRIDCO		
156	765KV Sundargarh-Angul Ckt #3 with LR at Sundergarh	07/09/19	9:00	07/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	BPI Erection at T point + TL Maint work	NLDC		

157	3X500MVA ICT-1	07/09/19	9:00	07/09/19	13:00	ODB	ER-II/Odisha/Angul SS	Taking ICT-1 Y phase into service after oil leaking gasket replacement	NLDC		
158	220KV CB of 208 bay (OPTCL Ckt-I)	07/09/19	9:00	07/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Rectification of CB found faulty timing & DCRM graphs. Shutdown shall be taken if not availed in Aug'19.			
159	401 KV Mendhasal-Pandiabili Ckt-1	07/09/19	9:00:00	07/09/19	18:00:00	ODB	ER-II/Odisha/ Pandiabili GIS	Servicing of line isolator at Mendhasal.	GRIDCO		
160	220kv NPRN-PRN-1	07/09/19	9:30	07/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OF R-PHASE CVT DUE TO SECONDARY VOLTAGE DRIFT.	After high hydro period		1
161	400KV North Bus-2 at Sasaram	07/09/19	9:00	07/09/19	18:00	ODB	POWERGRID ER-I	AMP work	NLDC		
162	400kv Ballia -IV Main bay at Patna	07/09/19	9:30	09/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
163	315 MVA ICT-3 at JAMSHEDPUR	07/09/19	9:00	07/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	JSEB		
164	315 MVA ICT-II at RANCHI	07/09/19	9:00	07/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	JSEB		
165	220KV Siliguri- Kishanganj-1	08/09/19	8:00	08/09/19	17:00	ODB	ER-II	Replacement of arcing horn	After high hydro period		1
166	400KV Tie bay of GT-1-Maithon-1 (Bay No. 404) at MPL	08/09/19	8:00	15/09/19	18:00	OCB	ER-II	Upgradation of Bay equipmenets under ERSS-XVII Project work			
167	400 kV 408 Tie Bay of Baripada-Duburi & Baripada-Jamshedpur line	08/09/19	9:00	09/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Gasket replacement			
168	315MVA ICT # II at Jeypore	08/09/19	09:00:00	08/09/19	18:00:00	ODB	ER-II/Odisha /Jeypore	AMP of ICT # II, 208 Bay CT and testing of Back up Impedance relay	GRIDCO		
169	765KV Bus-II at Sundargarh	08/09/19	9:00	15/09/19	18:00	OCB	ER-II/Odisha/Sundergarh	HV & Impulse testing of 765KV GIS (Construction Head)	NLDC		
170	220 KV Bus Coupler Bay (Bay No-204)	08/09/19	8:00	08/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
171	220KV CB of 206 bay (OPTCL Ckt-II)	08/09/19	9:00	08/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Rectification of CB found faulty timing & DCRM graphs. Shutdown shall be taken if not availed in Aug'19.			
172	400 KV SASARAM - DALTONGANJ - II	08/09/19	9:30	08/09/19	17:30	ODB	POWERGRID ER-I	CSD Commissioning			
173	132Kv Main Bus at LAKHISARAI	08/09/19	9:30	08/09/19	17:30	ODB	POWERGRID ER-I	AMP works of Bus Isolators .Entire power in 132 KV LKR & Jamui lines will be zero.	BIHAR		
174	400KV ICT 2 at Patna & Patna Nabinagar Ckt -II	08/09/19	10:00	08/09/19	14:00	ODB	POWERGRID ER-I	Checking of Tie LBB			
175	200 MVA ICT - I AT LAKHISARAI	08/09/19	10:00	08/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
176	220KV Siliguri- Kishanganj-2	09/09/19	8:00	09/09/19	17:00	ODB	ER-II	Replacement of arcing horn	After high hydro period		1
177	220KV Siliguri Binaguri Ckt-1 (Bay-204)	09/09/19	9:00	09/09/19	17:00	ODB	ER-II	Retrofitting of numerical A/R relay	After high hydro period		1
178	220KV Maithon(PG)-Dhanbad 1 & 2	09/09/19	8:00	10/09/19	18:00	OCB	ER-II	TL Crossing during Re-conductoring work of Maithon - Right Bank Line	DVC	PATRATU ASSSITANCE OF 25-30MW REQUIRED BY DVC	1
179	400KV Main Bay of Bus Reactor-2(Bay 409) at NTPC Farakka	09/09/19	10:00	09/09/19	12:00	ODB	ER-II	Oil Sampling of Bay CT.			
180	220 KV Main Bus-I at Subhasgram SS	09/09/2019	9:00	09/09/2019	17:00	ODB	ER-II	AMP of 220 KV Main Bus-I at Subhasgram SS	WB		1

181	220kV Alipurduar-Salakati-I	09/09/19	9:00	10/09/19	17:00	ODB	ER-II	Rectification of broken Earth-wire in section 425-427 which got broken due to thunderstorms & lightening resulting in tripping dated 17.07.2019.	NLDC		
182	400 kV Farakka-Behrampur line II (main bay)	09/09/19	9:00	09/09/19	17:00	ODB	FARAKKA	CB & Relay Test			
183	KGP: 400/220 KV 315MVA-TRANSFORMER-II	09/09/19	7:00	09/09/19	15:00	ODB	WB	MAINTENANCE WORK			
184	400 KV Main Bus-1	09/09/19	7:00	09/09/19	15:00	ODB	WB	MAINTENANCE WORK			
185	220 kV Bus -II at Jeypore & 220 kV Bus Coupler CB(202 52)	09/09/19	08:00:00	11/09/19	18:00:00	OCB	ER-II/Odisha /Jeypore	For 30 Years old Isolator Retrofitting Works of Bus-II side Isolators of Jeypore I, Jeypore-2 & ICT-I & Bus Coupler Bay	WB		
186	400KV GIS Main Bay-436 & Tie Bay-437 of ICT-3 at Sundergarh	09/09/19	9:00	09/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	For 765kv ICT construction works.			
187	3X500MVA ICT-2	09/09/19	9:00	09/09/19	13:00	ODB	ER-II/Odisha/Angul SS	Taking ICT-2 Y phase out of service for oil leaking gasket replacement	NLDC		
188	220KV side CB of ICT-II Bay (bay-205)	09/09/19	9:00	09/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Rectification of CB found faulty timing & DCRM graphs. Shutdown shall be taken if not availed in Aug'19.			
189	400KV TIE BAY OF BALIA 2 & SSRM- 2 at Biharshariff	09/09/19	10:00	09/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
190	400KV CHANDWA-GAYA-I	09/09/19	9:00	09/09/19	12:00	ODB	POWERGRID ER-I	FOR BAY CONSTRUCTION WORK OF 400 KV CHANDAWA - NORTH KARNAPURA LINE AT CHANDAWA	NLDC		1
191	400KV CHANDWA-GAYA-II	09/09/19	14:00	09/09/19	17:00	ODB	POWERGRID ER-I	FOR BAY CONSTRUCTION WORK OF 400 KV CHANDAWA - NORTH KARNAPURA LINE AT CHANDAWA	NLDC		1
192	400 KV 125 MVAR BR-II at Gaya S/S	09/09/19	9:00	11/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kv under Nabinagr -2 Package			
193	400 KV BUS-1 AT MUZAFFARPUR	09/09/19	9:00	10/08/19	17:30	ODB	POWERGRID ER-I	STRINGING OF JACK BUS FOR EXTENSION WORK (NEPAL BAY)	NLDC		1
194	400KV MAIN BAY OF 400kv MUZ-2 AT NEW PURNEA	09/09/19	9:30	11/09/19	18:00	OCB	POWERGRID ER-I	MIDLIFE OVERHAULING OF ALSTOM MAKE CB.			
195	400 KV MAIN BUS-2 AT RANCHI	09/09/19	9:30	09/09/19	17:00	ODB	POWERGRID ER-I	Fixing of Stool in Yph Bus-II CVT, During the S/D, all Lines and equipments will remain Charged through Bus-I except 400 kv RNC-NRNC- 1 & 2 line.			
196	400KV RANCHI-NEW RANCHI-I	09/09/19	9:30	09/09/19	17:00	ODB	POWERGRID ER-I	DUE TO NON AVAILBILTY OF ITS TIE BAY AT RANCHI LINE WILL BE OUT OF SERVICE DURING THE S/D OF 400KV BUS-II AT RANCHI			
197	400KV RANCHI-NEW RANCHI-II	09/09/19	9:30	09/09/19	17:00	ODB	POWERGRID ER-I	DUE TO NON AVAILBILTY OF ITS TIE BAY AT RANCHI LINE WILL BE OUT OF SERVICE DURING THE S/D OF 400KV BUS-II AT RANCHI			
198	220KV ICT-2 Bay at Sasaram	09/09/19	9:00	09/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
199	400/220kv 315MVA ICT-II AT SASARAM	09/09/19	8:00	14/10/19	18:00	OCB	POWERGRID ER-I	For Transformer Retrofitting Work	BIHAR		1
200	400kv main bay of Ballia -3 at Patna	09/09/19	10:00	09/09/19	11:00	ODB	POWERGRID ER-I	CB dew point measurement			
201	400kv Tie bay of Barh 3 and ballia 3 at Patna	09/09/19	13:00	09/09/19	14:00	ODB	POWERGRID ER-I	CB dew point measurement			
202	400kv Main bay Barh-3 at Patna	09/09/19	16:00	09/09/19	17:00	ODB	POWERGRID ER-I	CB dew point measurement			
203	220kv main bay of Fatuha line at Patna	09/09/19	9:30	12/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
204	200 MVA ICT - II AT LAKHISARAI	09/09/19	10:00	09/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
205	132 kv Rajgir-Barhi S/C T/L	09/09/19	11:00	09/09/19	15:00	ODB	BSP TCL	Line Maintanance work	Line charged on NO Load		

206	132 kv Nalanda-Barhi S/C T/L	09/09/19	11:00	09/09/19	15:00	ODB	BSPTCL	Line Maintenance work	Line charged on NO Load		
207	220 Kv DMTCL-Ujjaypur T/L	09/09/19	9:00	09/09/19	17:00	ODB	BSPTCL	Tree cutting	No Load Restriction		
208	400KV Bus-2 at Binaguri	10/09/19	10:00	10/09/19	12:00	ODB	ER-II	Jumper connection between BUS-1 to 412 & 413 bays after completion of bay upgradation works on 412 & 415 main bays under ERSS-XX	After high hydro period		1
209	400KV BINAGURI-Bongaigaon-1 line	10/09/19	12:00	10/09/19	15:00	ODB	ER-II	Removal of jumper on 423bay isolator and connecting the same on main and tie bay (412 & 411 respectively) inter connector (Rigid Bus pipe) after completion of bay	After high hydro period		1
210	400KV BINAGURI-Bongaigaon-2 line	10/09/19	15:00	10/09/19	18:00	ODB	ER-II	Removal of jumper on 423bay isolator and connecting the same on main and tie bay (415 & 414 respectively) inter connector (Rigid Bus pipe) after completion of bay	After high hydro period		1
211	400KV Bidhan Nagar-II Main bay at Durgapur(404 bay)	10/09/19	9:30	10/09/19	17:30	ODB	ER-II	Isolator & AMP works			
212	400 KV Farakka- Kahalgaon-III line	10/09/19	9:00	12/09/19	18:00	OCB	ER-II	For Jumper coonnection, relay setting change & Bay stability between Bay- 34 & 35 after upgradation of bay- 34 under ERSS-XV projects.			
213	220 KV Main Bus-II at Subhasgram SS	10/09/2019	9:00	10/09/2019	17:00	ODB	ER-II	AMP of 220 KV Main Bus-II at Subhasgram SS	WB		
214	400kV Alipurduar-Bongaigaon-I	10/09/19	9:00	11/09/19	17:00	ODB	ER-II	LINE AMP	After high hydro period		1
215	400 KV Main Bus-2 , 400 KV Transfer Bus and 315 MVA ICT-4	10/09/19	7:00	11/09/19	15:00	ODB	WB	MAINTENANCE WORK			
216	400 kV 410 main Bay of Baripada-Pandiabili line	10/09/19	9:00	11/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Gasket replacement			
217	125 MVAR BUS REACTOR-I	10/09/19	9:00	10/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	COMMISSIONING OF CSD IN ITS TIE BAY CB (42352 CB)			
218	400KV Balangir-Angul Line	10/09/19	8:00	12/09/19	18:00	ODB	ER-II/Odisha/Balangir	Replacement of defective insulator by Polymer long Rod Insulator	NLDC		
219	765kV Sundergarh-darlipalli Ckt 1	10/09/19	9:00	10/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	Quad to twin modification of jumper works and BPI erection works	NLDC	SUBJECT TO CONSENT FROM DALRLIPALLI	1
220	400KV Sundergarh-Rourkela Ckt #1	10/09/19	8:00	10/09/19	18:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works			
221	Jeypore- Rengali Tie Bay (402)	10/09/19	8:00	10/09/19	17:00	ODB	ER-II/Odisha /Indravati	AMP works of Jeypore- Rengali Tie Bay (402)			
222	220 KV OPTCL # 2 Main Bay (Bay No-207)	10/09/19	8:00	10/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
223	765kV Bus Reactor 2	10/09/19	9:00	10/09/19	18:00	ODB	ER-II/Odisha/Angul SS	AMP Work	NLDC		
224	400KV MAIN BAY OF SASARAM ckt 2 at Biharshariff	10/09/19	10:00	10/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
225	220KV BUS BAR 1 AT CHAIBASA	10/09/19	9:30	10/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK OF 220KV BUS BAR 1			
226	400KV CHANDWA-NEW RANCHI-I	10/09/19	9:00	10/09/19	12:00	ODB	POWERGRID ER-I	FOR BAY CONSTRUCTION WORK OF 400 KV CHANDAWA - NORTH KARNAPURA LINE AT CHANDAWA	NLDC		1
227	400KV CHANDWA-NEW RANCHI-II	10/09/19	14:00	10/09/19	17:00	ODB	POWERGRID ER-I	FOR BAY CONSTRUCTION WORK OF 400 KV CHANDAWA - NORTH KARNAPURA LINE AT CHANDAWA	NLDC		1
228	405 Bay(ICT-2 Main Bay) at Daltanganj	10/09/19	9:30	10/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
229	765 kV New Ranchi Dharamjaygarh CKT- I	10/09/19	9:00	10/09/19	18:00	ODB	POWERGRID ER-I	For 1 no. Insulator changing work, tightning of keeper, CC ring, Jumper etc	NLDC		
230	400kv Tie bay of NRNC-RNC-1 & B/R-I (Bay 405) at New Ranchi	10/09/19	9:00	10/09/19	17:00	ODB	POWERGRID ER-I	AMP			
231	400KV Spare Bay (421 Bay) at Sasaram	10/09/19	9:00	10/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
232	400 KV Pusauli -Biharsharif Line-2	10/09/19	9:00	15/09/19	19:00	ODB	POWERGRID ER-I	Replacement of insulators at Road/Rail/River/Power Line Crossings and Relay Retrofitting			

233	400 KV Pusaali-Varanasi Line	10/09/19	9:00	15/09/19	19:00	ODB	POWERGRID ER-I	Replacement of insulators at Road/Rail/River/Power Line Crossings and Relay Retrofitting	NLDC		
234	400kv Main bay Ballia 4 at Patna	10/09/19	10:00	10/09/19	11:00	ODB	POWERGRID ER-I	CB dew point measurement			
235	400kv Tie bay of Barh 4 and Ballia 4 at Patna	10/09/19	13:00	10/09/19	14:00	ODB	POWERGRID ER-I	CB dew point measurement			
236	400kv Main bay Barh 4 at Patna	10/09/19	16:00	10/09/19	17:00	ODB	POWERGRID ER-I	CB dew point measurement			
237	132 Kv Purnea(PG)-Kishanganj T/L	10/09/19	8:00	31/09/2019	17:00	OCB	BSPTCL	For pile foundation , erection & stringing work on continous basis.	No Load Restriction		
238	400KV D/C Binaguri - Bongaigaon Ckt. 1 & 2	11/09/19	12:00	11/09/19	16:00	ODB	PGCIL	Stringing activity of 400KV D/C Quad Alipurduar - Siliguri Transmission Line	After high hydro period		1
239	132 KV Siliguri-Melli Line	11/09/19	10:00	11/09/19	17:00	ODB	ER-II	Commissioning of TWFL (Travelling wave fault locator)	SIKKIM		
240	400kV D/C Alipurduar - Binaguri (QUAD) Line (STERLITE)	11/09/19	6:00	14/09/19	18:00	ODB	ER-II	Stringing work of overhead crossing (in between loc no 292-293) for under construction 400 KV D/C Jigmeling-Alipurduar TL .	After high hydro period		1
241	400 Bus-I & Bus-III Sectionalize CB (BS-I) at Durgapur	11/09/19	9:30	11/09/19	17:30	ODB	ER-II	AMP works & CB Aus. Contact works			
242	400KV Maithon-Right Bank -1 at Maithan	11/09/19	8:00	25/09/19	18:00	OCB	ER-II				
243	220KV Maithon-Dumka 1 & 2	11/09/19	8:00	12/09/19	18:00	OCB	ER-II	TL Crossing during Re-conductoring work of Maithon - Right Bank Line	JSEB		1
244	50 MVAR Line Reactor at Subhasgram S/s	11/09/2019	9:00	11/09/2019	17:00	ODB	ER-II	VT Selection work and REF Relay Retrofitting work	50 MVAR Line Reactor will be under Shutdown.		
245	220kv Alipurduar-Salakati-II	11/09/19	9:00	12/09/19	17:00	ODB	ER-II	Rectification of broken Earth-wire in section 425-427 which got broken due to thunderstorms & lightening resulting in tripping dated 17.07.2019.	NLDC		
246	KGP: 400/220 KV 315MVA-TRANSFORMER-II	11/09/19	7:00	11/09/19	15:00	ODB	WB	MAINTENANCE WORK			
247	220kv BidhanNagar-Waria(DVC)#1	11/09/19	7:00	11/09/19	15:00	ODB	WB	MAINTENANCE WORK			
248	400 KV Jeerat BKTPP Tr. Line	11/09/19	7:00	11/09/19	15:00	ODB	WB	MAINTENANCE WORK			
249	220 KV BUS I at Rourkela	11/09/19	9:00	11/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	FOR DISMANTLING OF JUMPERS OF SPARE FEEDERS	GRIDCO		
250	765kv Sundergarh-darlipalli Ckt 2	11/09/19	9:00	11/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	Quad to twin modification of jumper works and BPI erection works	NLDC		1
251	400KV Sundergarh-Rourkela Ckt #2	11/09/19	8:00	11/09/19	18:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works			
252	220 KV OPTCL # 1 Main Bay (Bay No-208)	11/09/19	8:00	11/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
253	Replacement of DGA Violated CTs with new GE make CTs.	11/09/19	6:00	11/09/19	18:00	OCB	ER-II/Odisha/HVDC Talcher	Outage of Bus Sectionliser Bay (10CO4-T21) on continuous basis for replacement of DGA violated CTs with new GE make CTs. There shall be no interruption or limitation of			
254	400KV TIE BAY OF ICT3 & BR 2 at Biharshariff	11/09/19	10:00	11/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
255	220KV BUS BAR 2 AT CHAIBASA	11/09/19	9:30	11/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK OF 220KV BUS BAR 2			
256	400KV B/R-I AT CHANDWA	11/09/19	9:00	11/09/19	12:00	ODB	POWERGRID ER-I	FOR BAY CONSTRUCTION WORK OF 400 KV CHANDAWA - NORTH KARNAPURA LINE AT CHANDAWA	NLDC		1
257	400KV B/R-II AT CHANDWA	11/09/19	14:00	11/09/19	17:00	ODB	POWERGRID ER-I	FOR BAY CONSTRUCTION WORK OF 400 KV CHANDAWA - NORTH KARNAPURA LINE AT CHANDAWA	NLDC		1

258	80 MVAR Line Reactor for Patna Ckt I AT KISHANGANJ	11/09/19	9:00	11/09/19	18:00	ODB	POWERGRID ER-I	AMP			
259	400KV RANCHI-MAITHON(PG)-S/C	11/09/19	9:00	11/09/19	17:00	ODB	POWERGRID ER-I	FOR STRENGTHENING OF TOWER PICK AT LOCATION NO. 509, 510 & 511 DAMAGED DURING LOCALIZED CYCLONE			1
260	400KV RANCHI-RAGHUNATHPUR-I	11/09/19	9:00	11/09/19	17:00	ODB	POWERGRID ER-I	FOR STRENGTHENING OF TOWER PICK AT LOCATION NO. 509, 510 & 511 DAMAGED DURING LOCALIZED CYCLONE	DVC		1
261	200 MVA ICT - I AT BANKA	11/09/19	10:00	11/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
262	132 KV Rangpo-Rangit Line	12/09/19	9:00	12/09/19	17:00	ODB	ER-II	Damage conductor Rectification work & sag correction at locatio 23-24	SIKKIM		
263	220 KV WBSEB- Bus section-1 at Binaguri	12/09/19	8:00	12/09/19	17:00	ODB	ER-II	Impeementation of Back up protection- CC SIR compliane	WB		
264	220KV Siliguri Binaguri Ckt-2 (Bay-203)	12/09/19	9:00	12/09/19	17:00	ODB	ER-II	Retrofitting of numerical A/R relay	After high hydro period		
265	220 KV Birpara-New Siliguri Ckt-I	12/09/19	8:00	12/09/19	17:30	ODB	ER-II	TLM releated work: Balance VD tightening , A/H tightening , CC Ring Refixing , Repairing of Conductor with repair sleeve etc .			
266	220KV CESC CKT#2 (Bay No.203) at Powergrid,Subhasgram	12/09/2019	9:00	12/09/2019	17:00	ODB	ER-II	AMP work	There will be no Power Interruption Only 203 Bay is under		
267	400kv Alipurduar-Bongaigaon-II	12/09/19	9:00	12/09/19	17:00	ODB	ER-II	LINE AMP	NLDC		
268	KGP: 400/220 KV 315MVA-TRANSFORMER-III	12/09/19	7:00	13/09/19	15:00	ODB	WB	MAINTENANCE WORK			
269	220kv BidhanNagar-Waria(DVC)#2	12/09/19	7:00	12/09/19	15:00	ODB	WB	MAINTENANCE WORK			
270	400 KV Jeerat Sagardighi Tr. Line	12/09/19	7:00	12/09/19	15:00	ODB	WB	MAINTENANCE WORK			
271	Arambag-KTPP 400 KV Line	12/09/19	7:00	13/09/19	15:00	ODB	WB	MAINTENANCE WORK			
272	220 KV BUS II at Rourkela	12/09/19	9:00	12/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	FOR DISMANTLING OF JUMPERS OF SPARE FEEDERS	GRIDCO		
273	220 kv Bus -I at Jeypore & 220 kv Bus Coupler CB(202 52)	12/09/19	08:00:00	14/09/19	18:00:00	OCB	ER-II/Odisha /Jeypore	For 30 Years old Isolator Retrofitting Works of Bus-I side Isolators of Jeynagar I, Jeynagar-2 & ICT-I & Bus Coupler Bay	NLDC		
274	765kv B/R -I at Sundargarh	12/09/19	9:00	12/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	BPI ercetion works at T-point	NLDC		
275	400KV Sundergarh-Raigarh Ckt #2	12/09/19	8:00	12/09/19	18:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works			
276	400 KV Rengali-Keonjhar Line	12/09/19	8:00	13/09/19	17:00	ODB	ER-II/Odisha/Rengali	For Retrofitting of Main # 2 Relay			
277	220KV TRANSFER BUS AT CHAIBASA	12/09/19	9:30	12/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK OF 220KV TRANSFER BUS			
278	406 Bay(ICT-2 Tie Bay) at Daltanganj	12/09/19	9:30	12/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
279	400 KV BUS-I at Gaya S/S	12/09/19	9:00	14/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kv under Nabinagr -2 Package	BIHAR		
280	400/220 KV 315 MVA ICT-2 AT MUZAFFARPUR	12/09/19	9:30	14/09/19	17:30	OCB	POWERGRID ER-I	OLTC OVERHAULING	BIHAR	SUBJECT TO KANTI GENERATION	1

281	400KV TIE BAY OF 400KV MUZ-2 & Kishanganj-1 AT NEW PURNEA	12/09/19	9:30	14/09/19	18:00	OCB	POWERGRID ER-I	MIDLIFE OVERHAULING OF ALSTOM MAKE CB.			
282	400kv Main bay of NRNC-RNC-3 (BAY NO -412) at New Ranchi	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	AMP			
283	400KV RANCHI-MAITHON(PG)-S/C	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR REPAIR WORK OF DAMAGED E/W AND EARTHWIRE PEAK DAMAGED DURING LOCALIZED CYCLONE			1
284	400KV RANCHI-RAGHUNATHPUR-I	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	REPAIR WORK OF DAMAGED E/W			1
285	400KV RANCHI-NEW RANCH-1	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR REPAIR WORK OF DAMAGED E/W AND EARTHWIRE PEAK DAMAGED DURING LOCALIZED CYCLONE			1
286	400KV RANCHI-NEW RANCH-2	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR REPAIR WORK OF DAMAGED E/W AND EARTHWIRE PEAK DAMAGED DURING LOCALIZED CYCLONE			1
287	400KV RANCHI-NEW RANCH-3	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR REPAIR WORK OF DAMAGED E/W AND EARTHWIRE PEAK DAMAGED DURING LOCALIZED CYCLONE			1
288	400KV RANCHI-NEW RANCH-4	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR REPAIR WORK OF DAMAGED E/W AND EARTHWIRE PEAK DAMAGED DURING LOCALIZED CYCLONE			1
289	400 KV MAIN BUS-1 AT RANCHI	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	STABILITY TEST FOR BUS BAR PROTECTION OF 429 BAY (TIE BAY OF RNC-RNC-2 AS COMMISSIONING TEST)			1
290	400 KV RANCHI-RANCHI-2	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR REPAIR WORK OF DAMAGED E/W AND EARTHWIRE PEAK DAMAGED DURING LOCALIZED CYCLONE			1
291	RANCHI-SIPAT-D/C	12/09/19	9:00	12/09/19	17:00	ODB	POWERGRID ER-I	FOR RECTIFICATION OF SAG BETWEEN LOC NO 5/0 AND	NLDC		1
292	400KV Tie bay of Daltonganj-1 and 500MVA ICT-1 at Sasaram	12/09/19	9:00	12/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
293	400/220KV ICT 2 at Patna	12/09/19	10:00	12/09/19	14:00	ODB	POWERGRID ER-I	Commissioning of CSD of Tie bay of ICT	BIHAR		
294	200 MVA ICT - II AT BANKA	12/09/19	10:00	12/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
295	132 KV Rangpo-Rangit Line	13/09/19	9:00	13/09/19	17:00	ODB	ER-II	Damage conductor Rectification work & sag correction at locatio 24-25	SIKKIM		
296	220 KV WBSEB- Bus section-2 at Binaguri	13/09/19	8:00	13/09/19	17:00	ODB	ER-II	Impeementation of Back up protection- CC SIR compliane	WB		
297	400 Bus-II & Bus-IV Sectionalize CB (BS-II) at Durgapur	13/09/19	9:30	13/09/19	17:30	ODB	ER-II	AMP works & CB Aus. Contact works			
298	500 MVA ICT -1 at Maithan	13/09/19	8:00	13/09/19	18:00	ODB	ER-II	1. AMP work 2. On load testing of CSD & Replacement of MOG under ERSS-IX project work.	DVC	DVC-350 & JSEB-100 MW RESTRICTION; AFTER 15TH	1
299	132KV S/C Maithan Hydel - Jamtara	13/09/19	8:00	14/09/19	18:00	OCB	ER-II	TL Crossing during Re-conductoring work of Maithon - Right Bank Line			
300	220KV NEWTOWN LINE (Bay No.205) at Powergrid,Subhasgram	13/09/2019	9:00	13/09/2019	17:00	ODB	ER-II	AMP work	LINE will be under Shutdown on daily basis.		
301	400kv, 50MVAR Bus Reactor	13/09/19	7:00	13/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
302	400kv Durgapur: 400kv, 50MVAR Bus Reactor	13/09/19	7:00	13/09/19	15:00	ODB	WB	MAINTENANCE WORK			
303	Jeerat: 400/220 KV 315 MVA Trafo 1	13/09/19	7:00	13/09/19	15:00	ODB	WB	MAINTENANCE WORK			
304	400KV Balangir-Jeypore Line with L/R at Jeypore	13/09/19	8:00	14/09/19	18:00	ODB	ER-II/Odisha/Balangir	Replacement of defective insulator by Polymer long Rod Insulator and AMP of L/R at Jeypore			
305	765kv B/R -II at Sundargarh	13/09/19	9:00	13/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	BPI erection works at T-point	NLDC		
306	400KV Sundergarh-Raigarh Ckt # 4	13/09/19	8:00	13/09/19	18:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works	NLDC		
307	315MVA ICT-II	13/09/19	9:00	13/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Retro fitting of Back up Impedance relay. Shutdown shall be taken if not availed in Aug'19.	NLDC		
308	400KV Bus-II AT BANKA	13/09/19	9:00	14/09/19	17:30	ODB	POWERGRID ER-I	ERECTION OF TOWER FOR BUS EXTENSION UNDER SS-01, ERSS-XX	BIHAR		
309	407 Bay(SSRM LINE 1 Main Bay) at Daltanganj	13/09/19	9:30	13/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			

310	400 kV JSR -Chaibasa 2	13/09/19	9:30	13/09/19	17:30	ODB	POWERGRID ER-I	Main 1 Distance relay (SEL 321)replacement work to be carried out.			
311	400 KV BUS - 1 AT KISHANGANJ	13/09/19	9:00	13/09/19	18:00	ODB	POWERGRID ER-I	Configuration and checking of LBB Protection	After high hydro period		1
312	400KV TIE BAY OF 400 KV SIPAT-1 & FUTURE (420 BAY) AT RANCHI	13/09/19	9:30	13/09/19	17:00	ODB	POWERGRID ER-I	AMP			
313	220KV side bay of 400/220kv ICT-1 at Sasaram	13/09/19	9:00	13/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
314	220kv bay Bus coupler at Patna	13/09/19	9:30	15/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package	BIHAR		
315	220kv side Main bay of 400/220kv ICT 1 at Patna	13/09/19	9:30	15/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
316	220 kv BSF-TTPS S/C T/L	13/09/19	9:00	13/09/19	16:00	ODB	BSPTCL	Line Maintainance work	Ranchi & TTPS will be required		
317	400KV D/C (Twin Moose) Baharampur(India)-Bheramara (Bangladesh) CKT-I & CKT-II	14/09/2019	9:00	15/09/2019	17:00	ODB	ER-II	Stringing of upcoming Bnagladesh -II line crossising at LOC. NO. AP 68 & AP 69 with Bangaldesh Line 1 (LOC NO 151 & LOC NO 152)	NLDC		1
318	220KV KLC Bantala Line (Bay No.206) at Powergrid,Subhasgram	14/09/2019	9:00	14/09/2019	17:00	ODB	ER-II	AMP work	WB		
319	400kV Durgapur-New Chanditala S/C	14/09/19	7:00	14/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
320	400kV Durgapur-New Chanditala S/C	14/09/19	7:00	14/09/19	15:00	ODB	WB	MAINTENANCE WORK			
321	400 KV Jeerat New Chanditala Tr. Line	14/09/19	7:00	14/09/19	15:00	ODB	WB	MAINTENANCE WORK			
322	315 MVA ICT-1	14/09/19	7:00	15/09/19	15:00	ODB	WB	MAINTENANCE WORK			
323	80 MVAR Bus Reactor at Duburi SS	14/09/19	9:00	14/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
324	765kV Raipur-I at Sundargarh	14/09/19	9:00	14/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	BPI erection works at T-point	NLDC		
325	765KV Sundergarh-Angul Ckt #1	14/09/19	8:00	14/07/19	18:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works			
326	220 KV ICT # 1 Main Bay (Bay No-201)	14/09/19	8:00	14/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
327	315MVA ICT-I	14/09/19	9:00	14/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Retro fitting of Back up Impedance relay. Shutdown shall be taken if not availed in Aug'19.			
328	220 KV MAIN BUS-2 AT RANCHI	14/09/19	9:30	14/09/19	17:00	ODB	POWERGRID ER-I	AMP			
329	220KV BAY OF Dehri AT SASARAM	14/09/19	9:00	14/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
330	400KV Bus -I at Patna	14/09/19	9:30	16/09/19	17:30	ODB	POWERGRID ER-I	Dismantling and erection of Bus isolator of Dia of Patna Nabinagar D/C	BIHAR		1
331	765kv SASARAM-FATEHPUR-S/C	14/09/19	17:00	14/09/19	18:00	ODB	POWERGRID NR-3	For AMP & Tightening Work of Line Reactor and Line Side Equipments at 765kv fatehpur S/S.	NLDC		1
332	500 MVA ICT - I AT PATNA	14/09/19	10:00	14/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
333	400KV Malda-Purnea-II	15/09/19	8:00	25/09/19	17:00	ODB	ER-II	Replacement of old porcealin insulators by Polymer insulator due to defects noticed in PID.	After high hydro period		
334	220KV Bus-I at Malthan	15/09/19	9:00	16/09/19	18:00	ODB	ER-II	Erection of 220kV Bus-1 isolator of ICT-3 bays under ERSS-XX project work	DVC		1
335	220 kV Bus-1 at Baripada	15/09/19	9:00	15/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Isolator Alignment works	GRIDCO		
336	765kV Raipur-II at Sundargarh	15/09/19	9:00	15/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	BPI erection works at T-point	NLDC		

337	765KV Sundergarh-Angul Ckt #2	15/09/19	8:00	16/07/19	18:00	ODB	ER-II/ODISHA/SUNDERGARH	TL Maintenance works	NLDC		
338	408 Bay(1CT-1 Tie Bay) at Daltanganj	15/09/19	9:30	15/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
339	500 MVA ICT - II AT PATNA	15/09/19	10:00	15/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
340	Biharsharif-Barhi (via Rajgir) 132kV line	15/09/19	10:00	15/09/19	17:00	ODB	BSPTCL	Reconductoring of Rajgir-Barhi section	power from BSF(SG) 2.S/D element is		
341	132KV Rangpo-Gangtok line-2	16/09/19	9:00	16/09/19	18:00	ODB	ER-II	Line A/R implementation & conductor repairing in b/w loc 104 & 105	SIKKIM		
342	132 KV Siliguri-NBU (Bay-101)	16/09/19	10:00	16/09/19	17:00	ODB	ER-II	Bay AMP work	WB		
343	220 KV Bus Sectionalize CB (205 bay) at Durgapur	16/09/19	9:30	16/09/19	17:30	ODB	ER-II	AMP works			
344	400KV Maithon - Mejia-1 Line	16/09/19	8:00	17/09/19	18:00	ODB	ER-II	1. Rectification of Line Defects Observed by CC . 2. 1st line CT oil sampling as per Powergrid norms.	DVC		1
345	414 Tie Bay of 500 MVA ICT#5 and 400 KV Subhasgram Haldia Line-2	16/09/2019	9:00	16/09/2019	17:00	OCB	ER-II	Pole Inspection of 414 Breaker	WB		
346	400kV Durgapur-PPSP ckt.-2	16/09/19	7:00	16/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
347	400KV FKK-Kahalgaon Line-3	16/09/19	9:00	17/09/19	17:00	ODB	FARAKKA	CB & Relay Test			
348	400kV Durgapur-PPSP ckt.-2	16/09/19	7:00	16/09/19	15:00	ODB	WB	MAINTENANCE WORK			
349	132 kV Baripada-Bhograi Line 103 Bay	16/09/19	9:00	16/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
350	63MVar Bus Reactor at Jeypore	16/09/19	09:00:00	16/09/19	12:00:00	ODB	ER-II/Odisha /Jeypore	Installation & Commissioning of CSD (during SD period switch OFF & switch ON code is required for 03 times each for fine tuning of CSD)			
351	765KV Bus-I at Sundargarh	16/09/19	9:00	23/09/19	18:00	OCB	ER-II/Odisha/Sundergarh	Erection of SFB to Air bushing of 765KV GIS bus sectionalizer, jumpering , HV & impulse testing for commissioning of 765KV GIS under construction head	NLDC		
352	400kV Bus2 sectionalizer GIS Bay 425 at Sundargarh	16/09/19	9:00	16/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
353	Uihep-BR Tie Bay (411)	16/09/19	8:00	16/09/19	17:00	ODB	ER-II/Odisha /Indravati	AMP works of Uihep- BR Tie Bay (411).The power flow will be Interrupt in Indravati-Uihep Line Due to temporary shutdown of Uihep Main bay(412) at Indravati.			
354	400 KV BUS-II at Gaya S/S	16/09/19	9:00	17/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kV under Nabinagr -2 Package	BIHAR		
355	Main Bay of 400kV APNRL 1(424 Bay) at JAMSHEDPUR	16/09/19	9:30	16/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK			
356	220KV NPRN- PRN CKT-II	16/09/19	9:30	30/09/19	18:00	OCB	POWERGRID ER-I	FOR RE-CONDUCTORING WORK OF LINE (EXISTING COND. TO BE REPLACED WITH HTLS).	After high hydro period		1
357	MAIN BAY OF 400kV 125MVAR B/R-1 (415) AT NEW PURNEA	16/09/19	9:30	18/09/19	18:00	OCB	POWERGRID ER-I	MIDLIFE OVERHAULING OF ALSTOM MAKE CB.			
358	400KV Main Bay of Allahabad AT SASARAM	16/09/19	9:00	16/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
359	400kv Main bay Of 400/220kv ICT 1 at Patna	16/09/19	9:30	28/09/19	17:30	OCB	POWERGRID ER-I	Equipment uprating under SS03 package for Patna Nabinagar Bay			
360	400kv Main bay Of 400/220kv ICT 1 at Patna	16/09/19	9:30	19/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updraton works under SS03 package			
361	400kv Tie bay Ballia 2 & Barh 2 at Patna	16/09/19	9:30	18/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updraton works under SS03 package			
362	500 MVA ICT - III AT PATNA	16/09/19	10:00	16/09/19	18:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
363	132KV Rangpo-Gangtok line-1	17/09/19	9:00	17/09/19	18:00	ODB	ER-II	Line A/R implementation	SIKKIM		
364	125MVAR BR- I at Alipurduar	17/09/19	7:00	19/09/19	18:00	OCB	ER-II	Oil leakage (from PRD & Main tank joint) and Air Cell rectification			
365	400KV Malda-New Purnea - I	17/09/19	8:00	17/09/19	17:00	ODB	ER-II	S/D required for rectification of OPGW Peak Bend	After high hydro period		

366	400KV Bidhan Nagar-I & 315 MVA ICT-I Tie Bay(408 Bay) at Durgapur	17/09/19	9:30	17/09/19	17:30	ODB	ER-II	CT Replace & AMP			
367	220KV Bus-II at Maithan	17/09/19	9:00	18/09/19	18:00	ODB	ER-II	Erection of 220KV Bus-2 isolator of ICT-3 bays under ERSS-XX project work	DVC		
368	400KV Main bay of 400KV Maithon-MPL Ckt-2,(Bay no 406) at MPL	17/09/19	8:00	23/09/19	18:00	OCB	ER-II	Upgradation of Bay equipmenets under ERSS-XVII Project work			
369	400 KV Farakka- Berhampur-I	17/09/19	9:00	18/09/19	18:00	ODB	ER-II	bay-33 after upgradation of bay-34 under ERSS-XV projects & to carry out punch point works in TL.			
370	405 Tie Bay of 315 MVA ICT#2 and 400 KV Subhasgram Jeerat Line	17/09/2019	9:00	17/09/2019	17:00	ODB	ER-II	Retrofitting of A/R Relay in 405 Bay	Power Interruption Only 405 Bay is under		
371	400kv Durgapur-PPSP ckt.-1	17/09/19	7:00	17/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
372	400kv Durgapur-PPSP ckt.-1	17/09/19	7:00	17/09/19	15:00	ODB	WB	MAINTENANCE WORK			
373	201 bay 220KV Baripada-Balasure Line -1	17/09/19	9:00	17/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
374	400kv ROURKELA-SUNDERGARH#1	17/09/19	8:00	17/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	COUNTER WEIGHTS (CW) FIXING, INSULATION TAPE APPLICATION AND TO RECTIFY DEFECTS OBSERVED DURING CAMERA PATROUILLING			
375	400kv Jeypore-Gazuwaka-I Line	17/09/19	08:00:00	19/09/19	16:00:00	ODB	ER-II/Odisha /Jeypore	For doing PID test(Auto Reclose Switch to be put into Non Auto mode at Jeypore & Gazuwaka end)	NLDC		
376	400KV Bus-2 sectionalizer GIS Bay 425 at Sundargarh	17/09/19	9:00	17/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
377	220 KV ICT # 2 Main Bay (Bay No-202)	17/09/19	8:00	20/09/19	17:00	OCB	ER-II/Odisha/Rengali	CB Pole Overhauling & MOM Box Retrofitting			
378	409 Bay (ICT-1 Main Bay) at Daltanganj	17/09/19	9:30	17/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
379	400KV Tie Bay of Allahabad AND FUTURE AT SASARAM	17/09/19	9:00	17/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
380	400KV Bus 2 at Patna	17/09/19	9:30	19/09/19	17:30	ODB	POWERGRID ER-I	Dismantling and erection of Bus isolator of Dia of Patna Nabinagar D/C	BIHAR		1
381	132KV Rangpo-Chuzachen line -1	18/09/19	9:00	18/09/19	18:00	ODB	ER-II	Line A/R implementation	CHUZACHEN		
382	220 KV Birpara-New Siliguri Ckt-II	18/09/19	8:00	18/09/19	17:30	ODB	ER-II	tightening , CC Ring Refixing , Repairing of Conductor with repair sleeve etc .			
383	220KV Dalkhola(PG)-Dalkhola(WB) II	18/09/19	9:00	18/09/19	12:00	ODB	ER-II	For Newly replaced Y-Ph CT DGA Test (Replacement Date-30.03.2019)	WB		1
384	400KV BUS-I at Malda	18/09/19	8:00	18/09/19	17:00	ODB	ER-II	ERSS-XX Constructional work(Disconnection of TBC Bus isolator Jumper)	WB	AFTER HIGH HYDRO	1
385	400KV Farakka-II Main Bay (413 Bay) at Durgapur	18/09/19	9:30	18/09/19	17:30	ODB	ER-II	CT Replace			
386	400KV Maithon - Mejia-2 Line	18/09/19	8:00	19/09/19	18:00	ODB	ER-II	Rectification of line Defects Observed by CC	DVC		
387	401 Main Bay of Subhasgram Sagardighi Line at Subhasgram SS	18/09/2019	9:00	18/09/2019	17:00	ODB	ER-II	Retrofitting of A/R Relay in 401 Bay	Power Interruption Only 401 Bay is under		
388	10152- 132KV Jaleswar Line Main bay	18/09/19	9:00	18/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
389	400kv ROURKELA-SUNDERGARH#2	18/09/19	8:00	18/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	COUNTER WEIGHTS (CW) FIXING, INSULATION TAPE APPLICATION AND TO RECTIFY DEFECTS OBSERVED DURING CAMERA PATROUILLING			
390	400KV GIS Main Bay 433 of OPGC-1 at Sundargarh	18/09/19	9:00	18/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
391	400KV Sundergarh-Raigarh Ckt #2	18/09/19	8:00	30/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	For PID Testing of Porcelain Insulator. Only Auto reclose	NLDC		
392	400KV Sundergarh-Raigarh Ckt #4	18/09/19	8:00	30/09/19	18:00	ODB	ER-II/Odisha/Sundergarh	For PID Testing of Porcelain Insulator. Only Auto reclose	NLDC		
393	Bus bar-1at Indravati	18/09/19	8:00	18/09/19	17:00	ODB	ER-II/Odisha /Indravati	AMP works of Bus-1	GRIDCO		
394	400 KV Rengali - Indravati Line	18/09/19	8:00	18/09/19	17:00	ODB	ER-II/Odisha/Rengali	For Replacement of Insulator	NLDC		
395	Replacement of DGA Violated CTs with new GE make CTs.	18/09/19	6:00	18/09/19	18:00	OCB	ER-II/Odisha/HVDC Talcher	Outage of AC Filter 2 main bay (1000SC-11) on continuous basis for replacement of DGA violated CTs			
396	400 KV GAYA-NABINAGAR -1 line	18/09/19	9:00	20/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kv under Nabinagr -2 Package			
397	Tie Bay of 400kv APNRL 1(425 Bay) at JAMSHEDPUR	18/09/19	9:30	18/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK			
398	400kv Main bay of 765/400kv ICT-1 at New Ranchi at New Ranchi	18/09/19	9:00	18/09/19	17:00	ODB	POWERGRID ER-I	AMP			
399	400kv Koderma - Bokaro-I	18/09/19	8:00	19/09/19	18:00	ODB	POWERGRID, ER-1	FOR REPLACEMENT OF INSULATORS DAMMAGED BY MISCREANTS	DVC		1

400	160 MVA ICT - I AT PURNEA	18/09/19	9:00	18/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
401	400/220KV 315 MVA ICT -3 at Rangpo	19/09/19	8:00	25/09/19	17:00	OCB	ER-II	For rectification of SF6 gas leakage repair work,			
402	400KV BUS-II at Malda	19/09/19	8:00	19/09/19	17:00	ODB	ER-II	ERSS-XX Constructional work(Disconnection of TBC Bus Isolator Jumper)	WB		1
403	400KV Farakka-II & Maithon-I Tie Bay(414 Bay) at Durgapur	19/09/19	9:30	19/09/19	17:30	ODB	ER-II	CT Replace			
404	404 Main Bay of Subhasgram Rajarhat Line at Subhasgram SS	19/09/2019	9:00	19/09/2019	17:00	ODB	ER-II	Retrofitting of A/R Relay in 404 Bay	Power Interruption Only 404 Bay is under		
405	KGP: 400KV TRANSFER BUS COUPLER BAY	19/09/19	7:00	19/09/19	15:00	ODB	WB	MAINTENANCE WORK			
406	Jeerat: 400/220 KV 315 MVA Trafo 3	19/09/19	7:00	19/09/19	15:00	ODB	WB	MAINTENANCE WORK			
407	315 MVA ICT-2	19/09/19	7:00	19/09/19	15:00	ODB	WB	MAINTENANCE WORK			
408	40452- 400KV Kharagpur Line Main Bay	19/09/19	9:00	19/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
409	400KV ROURKELA-SUNDERGARH#3	19/09/19	8:00	19/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	COUNTER WEIGHTS (CW) FIXING, INSULATION TAPE APPLICATION AND TO RECTIFY DEFECTS OBSERVED DURING SAME DAY TESTING			
410	125MVAR BUS REACTOR-2	19/09/19	9:00	19/09/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 125 MVAR BUS Reactor-2			
411	400kv GIS tie bay no. 434 of ICT4 & OPGC 1 at Sundargarh	19/09/19	9:00	19/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
412	400 KV Talcher # 2 Main Bay (Bay No-403)	19/09/19	8:00	19/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
413	410 Bay(SSRM LINE 2 Main Bay) at Daltanganj	19/09/19	9:30	19/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
414	220KV MUZAFFARPUR-KANTI-1	19/09/19	9:30	19/09/19	17:30	ODB	POWERGRID ER-I	CHECKING OF AUTO RECLOSE SCHEME	BIHAR		
415	400KV L/R OF MUZ-2 AT NEW PURNEA(SWITCHABLE)	19/09/19	9:30	21/09/19	18:00	OCB	POWERGRID ER-I	MIDLIFE OVERHAULING OF ALSTOM MAKE CB.			
416	400 KV RANCHI-SIPAT-1 LINE AND 80 MVAR LINE REACTOR	19/09/19	9:30	19/09/19	17:00	ODB	POWERGRID ER-I	1) To attend on leakage in line reactor of 400 KV RANCHI-SIPAT-1 (80 MVAR).	NLDC		
417	220 Kv Patna Sipara 3	19/09/19	9:30	19/09/19	17:30	ODB	POWERGRID ER-I	AMP	BIHAR		
418	160 MVA ICT - II AT PURNEA	19/09/19	9:00	19/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
419	220kv DMTCL(D)-Laukahi Trans. Line 02	19/09/19	10:00	22/09/19	17:00	ODB	BSPTCL	Maintenance work on daily basis	No Load Restriction		
420	400KV Bus-1 at Binaguri	20/09/19	10:00	20/09/19	12:00	ODB	ER-II	completion of bay upgradation works on 410 & 413 main bays under ERSS-XX	After high hydro period		1
421	400KV BINAGURI-RANGPO-1 line	20/09/19	12:00	20/09/19	15:00	ODB	ER-II	same on main and tie bay (410 & 411 respectively) inter connector (Rigid Bus pipe) after completion of bay	After high hydro period		1
422	400KV BINAGURI-RANGPO-2 line	20/09/19	15:00	20/09/19	18:00	ODB	ER-II	same on main and tie bay (413 & 414 respectively) inter connector (Rigid Bus pipe) after completion of bay	After high hydro period		1
423	132KV Bus coupler (Bay-104)	20/09/19	10:00	20/09/19	17:00	ODB	ER-II	Bay AMP work	WB		
424	220KV Siliguri-Dalkhola I & II	20/09/19	8:00	19/09/19	17:00	OCB	ER-II	For removal of jumper at 220kv SILIGURI-DALKHOLA line after completion of stringing & tower erection work of 400 MVA Sagur Road substation	After high hydro period		1
425	400 KV BERHAMPORE-SAGARDIGHI I	20/09/2019	8:00	20/09/2019	17:00	ODB	ER-II	For Stringing works in MULTI CKT(MCT73-76) & Dead End Tower	WB		
426	400 KV Subhasgram Rajarhat Line	20/09/2019	9:00	20/09/2019	17:00	ODB	ER-II	A/R Retrofitting & Testing	Rajarhat Line will be under Shutdown on		
427	400kv Durgapur-PGCIL ckt.-2	20/09/19	7:00	20/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
428	KGP: 400KV BUS COUPLER BAY & 400 KV MAIN BUS -I	20/09/19	7:00	20/09/19	15:00	ODB	WB	MAINTENANCE WORK			
429	400kv Durgapur-PGCIL ckt.-2	20/09/19	7:00	20/09/19	15:00	ODB	WB	MAINTENANCE WORK			
430	400 KV Jeerat Rajarhat Tr. Line	20/09/19	7:00	20/09/19	15:00	ODB	WB	MAINTENANCE WORK			
431	Arambag-New PPSP 400 KV Line-1	20/09/19	7:00	20/09/19	15:00	ODB	WB	MAINTENANCE WORK			
432	40952- 400KV Jamshedpur line Main Bay	20/09/19	9:00	20/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
433	400kv ROURKELA-SUNDERGARH#4	20/09/19	8:00	20/09/19	18:00	ODB	ER-II/ODISHA/ROURKELA	COUNTER WEIGHTS (CW) FIXING, INSULATION TAPE APPLICATION AND TO RECTIFY DEFECTS OBSERVED DURING SAME DAY TESTING			

434	400kV Jeypore-Gazuwaka-II Line	20/09/19	08:00:00	22/09/19	16:00:00	ODB	ER-II/Odisha /Jeypore	For doing PID test(Auto Reclose Switch to be put into Non Auto mode at Jeypore & Gazuwaka end)	NLDC		
435	125MVAR BUS REACTOR-2 Main Bay(406 Bay)	20/09/19	9:00	20/09/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 406 52CB & 406 CT			
436	400kV GIS Main Bay 435 of ICT-4 at Sundargarh	20/09/19	9:00	20/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
437	400KV Keonjhar-Rengali Line	20/09/19	7:00	20/09/19	18:00	ODB	ER-II/Odisha/Keonjhar	Replacement of Porcelain insulator by Polymer insulators in NH crossing and attending SD nature defects. Shutdown shall be taken if not available in April 19.			
438	411 Bay(Bus Reactor Tie Bay) at Daltanganj	20/09/19	9:30	20/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
439	220KV MUZAFFARPUR-KANTI-2	20/09/19	9:30	20/09/19	17:30	ODB	POWERGRID ER-I	CHECKING OF AUTO RECLOSE SCHEME	BIHAR		
440	765 kV New Ranchi Dharamjaygarh CKT- II	20/09/19	9:30	20/09/19	17:30	ODB	POWERGRID ER-I	For 20 no. insulator changing work at Loc 440 and 07 no insulator at loc 268, tightening of keeper, CC ring, Jumper and insulator at locs 378 etc.	NLDC		
441	MSR-I bay H21 at New Ranchi	20/09/19	9:00	20/09/19	17:00	ODB	POWERGRID ER-I	AMP			
442	400 KV RANCHI-SIPAT-2 LINE AND 80 MVAR LINE REACTOR	20/09/19	9:30	20/09/19	17:00	ODB	POWERGRID ER-I	Replacement of defective CAPTHOR in FSC of the same line			
443	400kV Koderma - Bokaro-II	20/09/19	8:00	21/09/19	18:00	ODB	POWERGRID, ER-1	FOR REPLACEMENT OF INSULATORS DAMMAGED BY MISCREANTS	DVC		1
444	400kv Main Bay of Ballia 1 at Patna	20/09/19	9:30	22/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updraton works under SS03 package			
445	160 MVA ICT - III AT PURNEA	20/09/19	9:00	20/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
446	132 KV Siliguri-Melli Line	21/09/19	9:00	21/09/19	17:00	ODB	ER-II	Damaged Conductor bottom Ph & balance Insulator Replacement work at location 86-87	SIKKIM		1
447	400KV BINAGURI-Bongaigaon-1 Main bay 412 at Binaguri	21/09/19	10:00	10/09/19	18:00	OCB	ER-II	TBEA Bay upgradation work under ERSS-XX	After high hydro period		1
448	400KV BINAGURI-Bongaigaon-1 Main bay 415 at Binaguri	21/09/19	10:00	10/09/19	18:00	OCB	ER-II	TBEA Bay upgradation work under ERSS-XX	After high hydro period		1
449	400KV Bus-2 at Binaguri	21/09/19	10:00	21/08/18	12:00	ODB	ER-II	isolating the bays from Bus-2 and to commence bay upgradation works under ERSS-XX	After high hydro period		1
450	400KV BINAGURI-Bongaigaon-1 line	21/09/19	12:00	21/09/19	15:00	ODB	ER-II	411 respectively) inter connector (Rigid Bus pipe) to isolate 412 bay and connecting the same on 411bay	After high hydro period		1
451	220KV MAIN BUS-I at Dalkhola	21/09/19	8:00	21/09/19	18:00	ODB	ER-II	For Jumper and Dropper rectification work	WB		1
452	400 KV BERHAMPORE-SAGARDIGHI II	21/09/2019	8:00	21/09/2019	17:00	ODB	ER-II	For Stringing works in MULTI CKT(MCT73-76) & Dead End Tower	WB		
453	400 KV Jeerat Sagardighi Line	21/09/2019	9:00	21/09/2019	17:00	ODB	ER-II	400KV relay testing in 400 KV Jeerat Sagardighi Line and live line defects attending and defective isulator replacement	Sagardighi Line will be under Shutdown on		
454	400kV Durgapur-PGCIL ckt.-1	21/09/19	7:00	21/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
455	KGP: 400KV BUS COUPLER BAY & 400 KV MAIN BUS -II	21/09/19	7:00	21/09/19	15:00	ODB	WB	MAINTENANCE WORK			
456	400kV Durgapur-PGCIL ckt.-1	21/09/19	7:00	21/09/19	15:00	ODB	WB	MAINTENANCE WORK			
457	Jeerat: 400/220 KV 315 MVA Trafo 2	21/09/19	7:00	21/09/19	15:00	ODB	WB	MAINTENANCE WORK			
458	Arambag-New PPSP 400 KV Line-2	21/09/19	7:00	21/09/19	15:00	ODB	WB	MAINTENANCE WORK			
459	402-main bay of 400KV Duburi-Pandiabilli Line at Duburi SS	21/09/19	9:00	21/09/19	13:30	ODB	ER-II/Odisha/BARIPADA S/S	Compressor Overhauling			
460	40102-Tie bay of 400KV Duburi-Pandiabilli & Future line at Duburi SS	21/09/19	13:30	21/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Compressor Overhauling			
461	125MVAR BUS REACTOR-2 Tie Bay(40506 Bay)	21/09/19	9:00	21/09/19	18:00	ODB	ER-II/Odisha/Balangir	AMP for 40506 52CB & 40506 CT			
462	400kV GIS Main Bay 430 of RAIGARH-3 at Sundargarh	21/09/19	9:00	21/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
463	400 KV 315 MVA ICT # 1	21/09/19	8:00	22/09/19	17:00	ODB	ER-II/Odisha/Rengali	for retrofitting of O/C, EF & REF Relay			
464	412 Bay (Bus Reactor Main Bay) at Daltanganj	21/09/19	9:30	21/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
465	500 MVA ICT - I AT NEW PURNEA	21/09/19	9:00	21/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY			
466	400 KV Subhasgram Sagardighi Line.	22/09/2019	9:00	24/09/2019	17:00	ODB	ER-II	VT Selection work, 400KV relay retrofitting & testing and live line defects attending and defective isulator replacement in line	WB		1
467	400KV BARIPADA-KHARAGPUR	22/09/19	7:00	22/09/19	15:00	ODB	WB	MAINTENANCE WORK			

468	403-main bay of 400KV Duburi-Baripada Line at Duburi SS	22/09/19	9:00	22/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	Compressor Overhauling			
469	400KV GIS tie bay no. 431 of RAIGARH-3 & ROURKELA-3 at Sundargarh	22/09/19	9:00	22/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
470	201 Bay (ATR-1 HV side Bay) at Daltanganj	22/09/19	9:30	22/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
471	400KV Bus -I at Patna	22/09/19	9:30	23/09/19	17:30	ODB	POWERGRID ER-I	Jumper connection of Bus isolator and Bus stability	BIHAR		
472	500 MVA ICT - II AT NEW PURNEA	22/09/19	9:00	22/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	BIHAR		
473	315 MVA, 400/220/33kV, ICT-1	23/09/19	7:00	23/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
474	400KV CHAIBASA-KHARAGPUR-I	23/09/19	7:00	23/09/19	15:00	ODB	WB	MAINTENANCE WORK			
475	BidhanNagar: 315 MVA, 400/220/33kV, ICT-1	23/09/19	7:00	23/09/19	15:00	ODB	WB	MAINTENANCE WORK			
476	Jeerat: 400/220 KV 315 MVA Trafo 3	23/09/19	7:00	23/09/19	15:00	ODB	WB	MAINTENANCE WORK			
477	Jeypore-Gazuwaka-II FSC Bay	23/09/19	08:00:00	23/09/19	18:00:00	ODB	ER-II/Odisha /Jeypore	AMP of Jeypore-Gazuwaka-II FSC	NLDC		
478	Bus bar-2 Indravati	23/09/19	8:00	23/09/19	17:00	ODB	ER-II/Odisha /Indravati	AMP works of Bus-2	GR		
479	400KV TIE BAY OF ICT2 & BR 3 at Biharshariff	23/09/19	10:00	23/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
480	202 Bay (ATR-2 HV side Bay) at Daltanganj	23/09/19	9:30	23/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
481	400 KV GAYA-NABINAGAR -2 line	23/09/19	9:00	25/09/19	18:00	ODB	POWERGRID ER-I	for Uprating of CT work for 400 kV under Nabinagr -2 Package			
482	400KV TIE BAY OF 400KV MLD-2 & 125MVAR B/R-1 AT NEW PURNEA	23/09/19	9:30	25/09/19	18:00	OCB	POWERGRID ER-I	MIDLIFE OVERHAULING OF ALSTOM MAKE CB.			
483	MSR-II bay H22 at New Ranchi	23/09/19	9:00	23/09/19	17:00	ODB	POWERGRID ER-I	AMP			
484	400KV RANCHI-NEW RANCH-2	23/09/19	9:00	23/09/19	17:00	ODB	POWERGRID ER-I	INSTRUCTION,AS THERE IS NO TIE BAY, SO LINE WILL BE			
485	400KV Main Bay of Varanasi North AT SASARAM	23/09/19	9:00	23/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
486	400kv Main bay of 400/220kv ICT 2 at Patna	23/09/19	9:30	25/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
487	400/220/33kV ICT - I at Alipurduar	24/09/19	7:00	25/09/19	18:00	ODB	ER-II	AMP work (400kv, 220kv, 33KV bay & ICT-I)			
488	400KV Maithon - Jamshedpur Line	24/09/19	8:00	25/09/19	18:00	ODB	ER-II	1. Insulator Replacement at Loc. No. 36,83,146 and 147 2. Replacement of Main and Line bay CT.			
489	400KV Tie bay of ST-1-Maithon-2 (Bay No. 407) at MPL	24/09/19	8:00	30/09/19	18:00	OCB	ER-II	Upgradation of Bay equipmenets under ERSS-XVII Project work			
490	(3X105)MVA, 400/220/33kV, ICT-2	24/09/19	7:00	24/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
491	400KV CHAIBASA-KHARAGPUR-II	24/09/19	7:00	24/09/19	15:00	ODB	WB	MAINTENANCE WORK			
492	BidhanNagar: (3X105)MVA, 400/220/33kV, ICT-2	24/09/19	7:00	24/09/19	15:00	ODB	WB	MAINTENANCE WORK			
493	20552- Transfer Bus Coupler Bay	24/09/19	9:00	24/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
494	63MVAr Bus Reactor & 125 MVAr Bus Reactor	24/09/19	9:00:00	24/09/19	13:00:00	ODB	ER-II/Odisha /Jeypore	For carrying out the provision of work 1 & 2 (switch off code for 125MVAr BR & 63MVAr BR may required for			
495	80 MVAR BUS REACTOR at Balangir	24/09/19	9:00	24/09/19	18:00	ODB	ER-II/Odisha/Balangir	Replacement of damaged control cable.			
496	765KV Bus-II at Sundargarh	24/09/19	9:00	30/09/19	18:00	OCB	ER-II/Odisha/Sundergarh	Erection of 3rd to 4th bus of 765KV GIS bus sectionalizer, jumpering , HV & impulse testing for	NLDC		
497	400KV GIS Main Bay 432 of ROURKELA-3 at Sundargarh	24/09/19	9:00	24/09/19	17:00	ODB	ER-II/Odisha/Sundergarh	AMP works			
498	400 KV Talcher # 1 Main Bay (Bay No-404)	24/09/19	8:00	24/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
499	400KV MAIN BAY OF BANKA ckt 1 at Biharshariff	24/09/19	10:00	24/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
500	203 Bay (ICT-1 IV side bay) at Daltanganj	24/09/19	9:30	24/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
501	Main Bay of 400KV APNRL 2(423 Bay) at JAMSHEDPUR	24/09/19	9:30	24/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK			

502	220 KV MAIN BUS-1 AT RANCHI	24/09/19	9:30	24/09/19	17:00	ODB	POWERGRID ER-I	AMP	JSEB		
503	400KV Tie Bay of Varanasi AND FUTURE AT SASARAM	24/09/19	9:00	24/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
504	400KV Bus 2 at Patna	24/09/19	9:30	25/09/19	17:30	ODB	POWERGRID ER-I	Jumper connection of Bus Isolator and Bus stability	BIHAR		1
505	500 MVA ICT - I AT KISHANGANJ	24/09/19	9:00	24/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	After high hydro period		
506	400 KV Rajarhat Jeerat Line	25/09/2019	9:00	27/09/2019	17:00	ODB	ER-II	A/R relay retrofitting & testing	Jeerat Line will be under Shutdown on		
507	400KV TBC Bay	25/09/19	7:00	25/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
508	BidhanNagar: 400KV TBC Bay	25/09/19	7:00	25/09/19	15:00	ODB	WB	MAINTENANCE WORK			
509	400 KV Jeerat Sagardighi Tr. Line	25/09/19	7:00	25/09/19	15:00	ODB	WB	MAINTENANCE WORK			
510	21052- 160MVA ICT II Main Bay	25/09/19	9:00	25/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
511	765kV Sundargarh-Dharamjaygarh Ckt#3 at Sundargarh	25/09/19	9:00	25/09/19	14:00	ODB	ER-II/Odisha/Sundergarh	BPI erection works at T-point + TL Maintenance work			
512	Replacement of DGA Violated CTs with new GE make CTs.	25/09/19	6:00	25/09/19	18:00	OCB	ER-II/Odisha/HVDC Talcher	Outage of AC Filter 3 main Bay (10005A-11) on continuous basis for replacement of DGA violated CTs with new GE make CTs. There shall be no interruption of power.			
513	400 /220 kV ICT-II at Gaya ss	25/09/19	9:00	28/09/19	18:00	OCB	POWERGRID ER-I	for Uprating of CT work for 400 kV under Nabinagr -2 Package	BIHAR	BSEB CONSENT REQUIRED	1
514	400 kV New Ranchi-Ranchi CKT-3.	25/09/19	9:00	25/09/19	18:00	ODB	POWERGRID ER-I	For Rectification work of Conductor at Loc 054-055 OF 400 kV Ranchi-New Ranchi CKT-3 & 4.			1
515	400 kV New Ranchi-Ranchi CKT-4.	25/09/19	9:00	25/09/19	18:00	ODB	POWERGRID ER-I	For Rectification work of Conductor at Loc 054-055 OF 400 kV Ranchi-New Ranchi CKT-3 & 4.			1
516	400 Ranchi-Maithan(pg)-s/c	25/09/19	9:00	25/09/19	18:00	ODB	POWERGRID ER-I	For Rectification work of Conductor at Loc 054-055 OF 400 kV Ranchi-New Ranchi CKT-3 & 4.			1
517	400 kv Ranchi-Raghunathpur CKT-I	25/09/19	9:00	25/09/19	18:00	ODB	POWERGRID ER-I	For Rectification work of Conductor at Loc 054-055 OF 400 kV Ranchi-New Ranchi CKT-3 & 4.			1
518	400 KV RANCHI- MAITHON-RB-1	25/09/19	9:00	25/09/19	17:00	ODB	POWERGRID ER-I	FLASHED PILOT INSULATOR STRING REPLACED AT LOCATION 516			1
519	400KV Tie Bay of Nabinagar & Spare Bay AT SASARAM	25/09/19	9:00	25/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
520	500 MVA ICT - II AT KISHANGANJ	25/09/19	9:00	25/09/19	17:00	ODB	POWERGRID ER-I	FOR RETROFITTING OF DIFFERENTIAL, OVER CURRENT AND REF RELAY	After high hydro period		
521	220kv DMTCL(D) -Motipur ckt 01	25/09/19	9:00	25/09/19	14:00	ODB	BSPTCL	For relay& protection test in PLCC panel.	No Load Restriction		
522	220kv DMTCL(D) -Motipur ckt 02	25/09/19	14:30	25/09/19	18:30	ODB	BSPTCL	For relay& protection test in PLCC panel.	No Load Restriction		
523	400KV Rangpo-Teesta-V Ckt-2	26/09/19	8:00	30/09/19	17:00	OCB	ER-II	For rectification of SF6 gas leakage repair work,	TEESTA-V		
524	2800KV HVDC Biswanath Chariali - Aliprduar Line 1&2 (Aliprduar - Biswanath Chariali)	26/09/19	6:00	28/09/16	18:00	ODB	ER-II	Stringing work of overhead crossing (in between loc no 8-9 of Aliprduar BNC Section) for under construction 400 KV	After high hydro period		1
525	400/220 KV ICT-5 at Malda	26/09/19	8:00	26/09/19	17:00	ODB	ER-II	Recttification of 89M2 isolator(Y PH).	WB		1
526	400KV Maithon-Right Bank -2 at Maithan	26/09/19	8:00	10/10/19	18:00	OCB	ER-II				
527	400KV Mejia - Jamshedpur Line	26/09/19	8:00	26/09/19	18:00	ODB	ER-II	Insulator replacement at Loc. No. 127,169 and 178	DVC		
528	Bus Coupler along with Main Bus-1 & Durgapur-New Chanditala ckt.	26/09/19	7:00	26/09/19	15:00	ODB	WB	Pre-puja maintenance work.			
529	BidhanNagar: Bus Coupler along with Main Bus-1 & Durgapur-New Chanditala ckt.	26/09/19	7:00	26/09/19	15:00	ODB	WB	MAINTENANCE WORK			
530	Jeerat: 400/220 KV 315 MVA Trafo 4	26/09/19	7:00	26/09/19	15:00	ODB	WB	MAINTENANCE WORK			
531	10252- 160MVA ICT I Bay	26/09/19	9:00	26/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
532	765kV Sundargarh-Dharamjaygarh Ckt#4 at Sundargarh	26/09/19	9:00	26/09/19	14:00	ODB	ER-II/Odisha/Sundergarh	BPI erection works at T-point + TL Maintenance work	NLDC		
533	400 KV, 315 MVA ICT # 2	26/09/19	8:00	27/09/19	17:00	ODB	ER-II/Odisha/Rengali	for retrofitting of O/C, EF & REF Relay			
534	205 Bay(ICT-2 IV side Bay) at Daltanganj	26/09/19	9:30	26/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
535	765kV Gaya-Balia line	26/09/19	9:00	27/09/19	18:00	ODB	POWERGRID ER-I	replacement of insulators damaged by miscreant	NLDC		

536	Tie Bay of 400kV APNRL 2(422 Bay) at JAMSHEDPUR	26/09/19	9:30	26/09/19	17:30	ODB	POWERGRID ER-I	AMP WORK			
537	400KV MAIN BAY OF 400KV KISHANGANJ-1 AT NEW PURNEA	26/09/19	9:30	28/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OF GASKET OF R-PHASE PIR TO ATTEND THE SF6 LEAKAGE.			
538	400 KV RANCHI- MAITHON-RB-2	26/09/19	9:00	26/09/19	17:00	ODB	POWERGRID ER-I	FLASHED PILOT INSULATOR STRING REPLACED AT LOCATION 495			
539	400KV Tie Bay of Nabinagar-2 & Daltonganj-2 AT SASARAM	26/09/19	9:00	26/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
540	400kv Main Bay Barh-2 at Patna	26/09/19	9:30	28/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
541	400kv bay Tie of Ballia 1 & Barh 2 at Patna	26/09/19	9:30	27/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
542	400 KV Jeerat Rajarhat Tr. Line	27/09/19	7:00	27/09/19	15:00	ODB	WB	MAINTENANCE WORK			
543	10452- 160MVA ICT II Bay	27/09/19	9:00	27/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
544	765KV GIS BUS-I along with AIS section of Darmajaygar-I & II Main Bays	27/09/19	9:00	28/09/19	17:00	OCB	ER-II/Odisha/Sundergarh	for 765KV GIS and 765KV ICT-3&4 commissioning work under construction head	NLDC		
545	400 KV Talcher # 1 Main Bay (Bay No-404)	27/09/19	8:00	27/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
546	400KV New Purnea-1 L/R at Biharshariff	27/09/19	10:00	27/09/19	18:00	ODB	POWERGRID ER-I	AMP WORK			
547	211 Bay(Bus Coupler Bay) at Daltanganj	27/09/19	9:30	27/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
548	765/400 kV ICT-I at Gaya S/S	27/09/19	9:00	27/09/19	18:00	ODB	POWERGRID ER-I	For installation of Backup Impedance Relay	NLDC		
549	400KV Main Bay of Daltonganj-2 AT SASARAM	27/09/19	9:00	27/09/19	18:00	ODB	POWERGRID ER-I	AMP work			
550	208 Bay (220 KV Side of 315 MVA ICT#1) at Subhasgram SS	28/09/2019	9:00	28/09/2019	17:00	ODB	ER-II	AMP Work	Power Interruption Only 208 Bay is under		
551	10752- Transfer Bus coupler Bay	28/09/19	9:00	28/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
552	101 Bay (ATR-2 IV side Bay) at Daltanganj	28/09/19	9:30	28/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
553	765/400 kV ICT-II at Gaya S/S	28/09/19	9:00	28/09/19	18:00	ODB	POWERGRID ER-I	For installation of Backup Impedance Relay	NLDC		
554	403 ICT#1 Main Bay at Subhasgram SS	29/09/2019	9:00	29/09/2019	17:00	ODB	ER-II	AMP work	Power Interruption.Only 403		
555	10952- 132KV Baripada Line Main bay	29/09/19	9:00	29/09/19	17:30	ODB	ER-II/Odisha/BARIPADA S/S	AMP works			
556	765KV GIS BUS-II along with AIS section of Darlipalli -I & II Main Bays	29/09/19	9:00	30/09/19	17:00	OCB	ER-II/Odisha/Sundergarh	for 765KV GIS and 765KV ICT-3&4 commissioning work under construction head	NLDC		
557	400 KV Talcher # 1 Tie Bay (Bay No-407)	29/09/19	8:00	29/09/19	17:00	ODB	ER-II/Odisha/Rengali	MOM Box Retrofitting			
558	102 Bay (ATR-1 IV side Bay) at Daltanganj	29/09/19	9:30	29/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
559	765/400 kV ICT-III at Gaya S/S	29/09/19	9:00	29/09/19	18:00	ODB	POWERGRID ER-I	For installation of Backup Impedance Relay	NLDC		
560	400kv main bay of Balia Line-2 at Patna	29/09/19	9:30	30/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
561	400kv Main bay Barh 1 at Patna	29/09/19	9:30	30/09/19	17:30	OCB	POWERGRID ER-I	CB Overhauling & BCU updration works under SS03 package			
562	Jeerat: 400/220 KV 315 MVA Trafo 4	30/09/19	7:00	30/09/19	15:00	ODB	WB	MAINTENANCE WORK			
563	103 Bay (Chatarpur Line-1) at Daltanganj	30/09/19	9:30	30/09/19	17:30	ODB	POWERGRID ER-I	Bay AMP			
564	400/220 kV ICT-I at Gaya S/S	30/09/19	9:00	30/09/19	18:00	ODB	POWERGRID ER-I	For installation of Backup Impedance Relay			
565	400KV MAIN BAY OF 400KV SILIGURI CKT-2 AT NEW PURNEA	30/09/19	9:30	30/09/19	18:00	ODB	POWERGRID ER-I	FOR REPLACEMENT OF GASKET OF POLE COLOUMN OF Y-PH TO ATTEND THE SF6 LEAKAGE.			
566	400KV KAHALGAON-MAITHON-I	30/09/19	9:30	30/09/19	17:30	ODB	POWERGRID ER-I	Replacement of flashed insulators at loc -299			
567	132KV DMTCL-RAXAUL D/C	01/09/19	9:00	03/09/17	17:00	ODB	BSPTCL	MAINTENANCE WORK			
568	400kV MTPS-Jamshedpur Ckt	16/09/19	10:30Hrs	17/09/19	17:00Hrs	ODB	DVC	for Annual relay maintenance work by CRITM at MTPS end			
569	400kV MTPS-Maithon PGCIL Ckt#1	19/09/19	10:30Hrs	20/09/19	17:00Hrs	ODB	DVC	for Annual relay maintenance work by CRITM at MTPS end			

Quarterly Preparedness Monitoring -AGENDA

(Status as on :
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S.No.	State	Sector (G/T/D)	Utilities	Status of CISO Nomination	Critical Infra Identified	Crisis managem ent Plan Prepared	Status of CS mock drill	Status of Training/ Workshops organized/ participated by utility	Action taken on CERT- In/NCIIPC Advisories
1	Tamilnadu	T	TANGEDCO	Yes/No	Yes/No	Yes/No	Done on _____		