



भारत सरकार  
Government of India  
केन्द्रीय विद्युत प्राधिकरण  
Central Electricity Authority  
पश्चिम क्षेत्रीय विद्युत समिति

Western Regional Power Committee

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दिनांक

21 DEC 2017

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सेवा में,

विषय:- प.क्षे.वि.समिति, मुंबई की प्रचालन एवं समन्वय समिति की 502 वीं बैठक का कार्यवृत्त।

महोदय,

पश्चिम क्षेत्रीय विद्युत समिति, मुंबई की प्रचालन एवं समन्वय समिति की दिनांक 12.12.2017 को Mumbai में आयोजित 502 वीं बैठक का कार्यवृत्त आपकी सूचनार्थ संलग्न है।

धन्यवाद।

भवदीय,

संलग्न : उपरोक्तानुसार

22/12/17  
(जे के राठोड)  
अधीक्षण अभियंता (प्रचालन)

Western Regional Power Committee  
Mumbai

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<b>Title:</b>	<b>Minutes of the Meeting</b>
<b>Number:</b>	502
<b>Name of meeting:</b>	Operation & Coordination sub-Committee
<b>Date &amp; venue:</b>	12 <sup>th</sup> December 2017 at WRPC, Mumbai.

The 502<sup>nd</sup> meeting of Operation & Co-ordination sub-Committee (OCC) of Western Regional Power Committee (WRPC) was held on 12<sup>th</sup> December 2017 at WRPC, Mumbai. The list of participants is enclosed at **Annexure-A**.

Member Secretary (MS), WRPC extended warm welcome to all the participants of the 502<sup>nd</sup> OCC meeting. He informed that operating frequency was within IEGC band ( $49.9 < f < 50.05$  Hz) for 73.53 % of time during the month of November 2017 as compared to 77.18 % during October 2017. The frequency below IEGC band ( $< 49.9$  Hz) was 16.91 % of time during the month of November 2017 as compared to 13.61 % of time during October 2017. He raised concern about high voltage levels at many 400 kV and 765 kV substations in the region.

He informed that the following events/meetings have taken place since last OCC meeting wherein WRPC Secretariat participated:

- 42<sup>nd</sup> meeting of Standing Committee for Power System Planning of Western Region (SCPSPWR) was held on 17.11.2017 at Mumbai.
- Workshop on PSS tuning activity was organized by NTPC at PMI, Noida during 22<sup>nd</sup>-24<sup>th</sup> November, 2017 wherein MS along with WRP officer participated.
- Validation Committee (via video conferencing) for POC charges was held by CERC on 29.11.2017.
- 4<sup>th</sup> Grid Study Committee meeting would be held shortly as informed by NPC, CEA which require one STU nomination from WR.
- He informed about the tripping incidence at 400 kV Padghe S/S (MSETCL) at 12:58 hrs/09.12.2017, due to bursting of TBC breaker on 400 kV side. He further elaborated that all the lines emanating from 400 kV Padghe S/S tripped due to

above incidence and about 1400 MW load loss occurred in Maharashtra system at Padghe area.

- He raised the concerns about the late submission of tripping details, and submission of incomplete tripping details by the ISTS licensees which lead to delayed issue of availability certification.
- He also pointed out the delay in POCM certification of NTPC gas stations due to delay in data submission by NTPC.
- He informed about a correspondence from NPC, CEA, New Delhi to WRPC requesting all RPCs to convene a Region-wise meeting for review of utilization of PSDF. He further informed that the meeting will be held around third week of January, 2018.
- He raised concern about undesirable power scenario in WR due to low generation of hydro & nuclear plants against their higher schedule.
- He informed that owing to dismal coal stock position in the country, daily basis monitoring of coal stock position has become utmost important. Due to this reason, Fuel Management Division of CEA is closely monitoring the coal stock position in the country on daily basis based on new methodology issued by CEA for monitoring of coal stock at coal based power plants. This new methodology monitoring of coal stock is available at [http://www.cea.nic.in/reports/others/planning/fm/guidelines\\_dcr.pdf](http://www.cea.nic.in/reports/others/planning/fm/guidelines_dcr.pdf).

WRLDC intimated that NPMC has been seeking information of critical coal stock at all thermal plants in the western region to be furnished by 6:00 hrs. The same is not being received from many utilities including NTPC, Chhattisgarh, and MPGCCL etc. WRLDC requested for the same to be furnished by 04:00 hrs.

Subsequently Member Secretary, WRPC requested Superintending Engineer (Opn), WRPC to take up regular agenda items. Thereafter, Superintending Engineer (Opn), WRPC took up the agenda items for discussion.

## ■ Item no. 1: Confirmation of the Minutes

Minutes of 501<sup>st</sup> meeting (MoM) of Operation & Coordination Sub-Committee (OCC) of WRPC held on 15<sup>th</sup> November 2017 at WRPC Mumbai were forwarded vide letter No. WRPC/OPN/OCC-Minutes/2017-18/17073 dated 28.11.2017.

Addl. Chief Engineer, SLDC Jabalpur requested for following correction in 501<sup>st</sup> OCC Minutes - agenda item no 9.1 regarding Critical loading on 400/220 kV ICTs and interconnecting lines in WR:

“Discussion:

- 220kV Gwalior-Malanpur D/C:
- *MP informed that inter tripping scheme was implemented for over loading of ICTs at Gwalior.*”

He requested for replacement of the above Para by following Para:

“Discussion:

- 220kV Gwalior-Malanpur D/C:
- *MP informed that inter tripping scheme was implemented for over loading of 220kV Gwalior-Malanpur line.*”

The Sub-Committee agreed for the above modification. No other Comments have been received. *The sub-committee confirmed the 501<sup>st</sup> MoM with above modification.*

## **■ Item no. 2: Review of system operation during the month of November 2017**

Superintending Engineer (Opn), WRPC took up the item related to performance of the WR Grid during the month of November 2017 in following order:

### **2.1 A. Frequency Particulars**

The average frequency during the month of November, 2017 was 49.97 Hz. The maximum instantaneous frequency was 50.20 Hz on 19th November, 2017 at 06:02:10 hrs, while minimum instantaneous frequency was 49.62 Hz on 7<sup>th</sup> November, 2017 at 06:40:50 hrs. The frequency profile during November, 2017 was as under:

<b>Range</b>	<b>01<sup>st</sup> – 30<sup>th</sup> September, 2017 (% time)</b>	<b>01<sup>st</sup> – 31<sup>st</sup> October, 2017 (% time)</b>	<b>01<sup>st</sup> – 30<sup>th</sup> November, 2017 (% time)</b>
IEGC band (49.9 < f < 50.05 Hz)	78.50	77.18	73.53
< 49.9 Hz	11.77	13.61	16.91
> 50.05 Hz	9.73	9.21	9.56

The frequency particulars is enclosed at Annex-2.1

*The Sub-Committee noted as above.*

### **2.1 B. State wise Power Scenarios' of the Region & PSP**

The power supply position for the month of **November 2017** was as follows:

<b>Demand Availability/Unrestricted Requirement (Ex-Bus) In (Mw)</b>										
		<b>GUJ</b>	<b>MP</b>	<b>CG</b>	<b>MAH</b>	<b>GOA</b>	<b>DD</b>	<b>DNH</b>	<b>ESII</b>	<b>WR</b>
REQUIREMENT	14726	11830	3250	21050	519	336	790	812	49736	
AVAILABILITY	14716	11797	3231	21012	494	336	790	812	49568	
SHORTFALL	11	32	19	38	25	0	0	0	168	
% SHORTFALL	0.07	0.27	0.58	0.18	4.82	0.00	0.00	0.00	0.29	
<b>Energy Availability/ Requirement etc.(Ex-Bus) in (MUs)</b>										
		<b>GUJ</b>	<b>MP</b>	<b>CG</b>	<b>MAH</b>	<b>GOA</b>	<b>DD</b>	<b>DNH</b>	<b>ESIL</b>	<b>WR</b>
Net Actual Energy Supplied	9393.77	6387.17	1871.85	12435.88	351.48	213.5	508.46	245.17	31407.3	

Unrestricted Requirement	9393.77	6387.17	1880.50	12436.41	351.48	213.5	508.46	245.17	31416.5
SHORTFALL	0.00	0.00	8.65	0.53	0.00	0.00	0.00	0.00	9.18
% SHORTFALL	0.000	0.000	0.460	0.004	0.000	0.000	0.000	0.000	0.029

## 2.2 Inter-Regional Exchanges

There was a net inter-regional export of 4639 MUs from WR to other regions against net export schedule of 4408 MUs during the month of November 2017.

(Figures are in MU)

<b>IR link</b>	<b>SCH</b>	<b>DRAWL</b>	<b>OD/UD</b>
WR-ER	586	-837	-1423
WR-NR	-3192	-2399	794
WR-SR	-1802	-1403	399
WR NET	-4408	-4639	-231

(+ import; - export)

### Discussion:

SE (Opn), WRPC stated that power position in the Western Region during the month of November 2017 was satisfactory & there was a shortfall of only 0.29 % in term of MW and 0.029% in term of Energy.

WRPC enquired about the substantial quantum of over drawl /under drawl of energy in inter-regional exchange due to deviation between schedule and actual drawl through individual IR links. WRLDC representative clarified that clear picture can only be known if inter-regional exchange of entire country through all the IR links are taken into account.

*The Sub-Committee noted as above.*

## 2.3 Voltage Profile

Voltage profile at some of 765/400 kV sub-stations during the month of November, 2017 furnished by WRLDC is enclosed at **Annexure-2.3**.

SE, WRPC raised query about high voltage levels at many 400 kV and 765 kV substations in the region and procedures being followed by RLDC and SLDCs to control the voltage at different nodes.

Dy. General Manager, WRLDC informed that possible measures to control the voltages at different S/s are generally taken in following order:

1. Switching-in of reactors.
2. Instruction messages issued to all concerned generators to absorb maximum reactive power according to their capability curve.
3. Even if voltage is not controlled by taking above two measures, then only instruction is given for opening the affected lines. He informed that line opening is the last resort.

It was noted from WRLDC that voltages shown in the table against the substations are the voltages at the stations after opening around 20 to 25 lines on account of HV issues. Line opening by WRLDC on account of HV issue (usually above 425 kV for 400 kV lines) depends on the substation and its fault level.

Member Secretary, WRPC requested SLDCs and concerned utilities to coordinate and cooperate in controlling the high voltage levels by reactor operation, reactive power absorption and line opening operation in real time so that grid parameter can be maintained well within specified limits. It was pointed out that persisting high voltage would stress the insulation which may further cause fast aging and failure.

MSETCL opined that at distribution level (11 & 33 kV) on/off of capacitor banks shall also be monitored so that during light load condition less injection of MVAR can be ensured which would facilitate to improve the voltage profile at concern nodes.

WRLDC intimated that at present many Bus reactors and line reactors are out of service on one or another reason which have to be restored on priority. Further MVAR flow from LV side to HV side of the transformers to be controlled. Further, it was informed that fog is creating severe problems for taking line into/out of service. MPPTCL informed that during Rabi season capacitor banks are taken into circuit.

*The Sub-Committee noted as above.*

## **2.4 U/F Relay Operations**

As per WRLDC records during November, 2017 the system frequency didn't reach 49.2 Hz and no UFR operation was reported to WRLDC.

SE (operation), WRPC informed that the inspection of UFR and df/dt relays is regularly being done by WRPC Secretariat. In the month of November 2017 UFR & df/dt inspection of Sub-stations near Nagpur in MSETCL systems were carried out by the WRPC Secretariat.

*The Sub-Committee noted as above.*

## **2.5 Power Cuts / Load Restrictions**

Details of Power Cuts and Regulatory measures during November, 2017 as furnished by the State utilities are given in **Annexure- 2.5.**

MS, WRPC suggested that reports in this regard would be more informative if timing details are also included in addition to number of hours.

*The Sub-Committee noted as above.*

## **2.6 Details of Generating Units under Forced outages**

Details of generating units under forced outages during November, 2017 are given in **Annexure-2.6.**

### **Discussion:**

SE (operation), WRPC enquired about those generating units which are out since long time. It was also requested that units which are already retired and approved by CEA, shall also be intimated by generators to WRPC & WRLDC.

*The Sub-Committee noted the information.*

## **2.7 Details of Generating Units under Planned outages**

The details of generating units under Planned Outages during November, 2017 are given in **Annexure-2.7.**

*The Sub-Committee noted the information.*

## **2.8 Presentation on operational aspects by SLDCs & RLDC**

### **Discussion:**

Superintending Engineer (Opn), WRPC requested SLDCs and WRLDC to brief the Grid performance during the month of November 2017 in their area of operation. All SLDCs and RLDC made presentations on operational aspects of grid based on data for the month of November, 2017. During the presentations issues related to peak demand, availability, shortages, RE integration, deviation in forecasted RE and actual RE etc. have been highlighted by the SLDCs/RLDC. Presentations are attached at **Annexure-2.8**. He also suggested that it will be better to have participation of real time grid operators from each SLDC, RLDC and Engineers of Control Room from each generating stations in OCC meeting so that the OCC forum get better understanding of operational issues and the same could be resolved effortlessly. He further requested SLDCs and Generators to depute at least one shift Engineer from Control Room to participate in OCC meetings. All members agreed to depute their engineers who are looking after the real time grid operation in OCC meeting henceforth.

*The Sub-Committee agreed/noted as above.*

## **■ Item no. 3: Operational Planning**

### **3.1 Proposed planned maintenance programme of generating units**

The maintenance programme of generating units for the month of December 2017 & January 2018 was discussed. The finalised list of maintenance programme of generating units for the months December 2017 & January 2018 is given in **Annexure 3.1**.

*The Sub-Committee noted as above.*

### **3.2 Outage programme of Transmission Lines/Elements.**

List of finalised proposals for transmission elements outage to be availed during the month of January 2018 is given in **Annexure 3.2**.

*The Sub-Committee noted and agreed as above.*

### **3.3 Anticipated power supply position for the months – December 2017 & January – 2018**

Details of anticipated restricted & un-restricted demands for the months of December 2017 & January, 2018 are given in **Annexure 3.3.**

*The Sub-Committee noted the information.*

### **■ Item no. 4: Operational Statistics for the month of November 2017**

The details of actual generation, demand, drawl of power from grid; exchanges etc. are given in the following Annexure:

**Annexure 4.1** - Actual generation and requirement for November, 2017.

**Annexure 4.2** - Peak demand: Schedule Vs Actual for November, 2017.

**Annexure 4.3** - Integrated operation of the system and operation of Inter-state tie-lines for November, 2017.

**Annexure 4.7** – Details of level of major reservoirs in Western Region  
For November, 2017

*The Sub-Committee noted the information.*

### **■ Item no. 5: System Disturbances in Western Region**

*There was no major grid disturbance in the Western Region during the month of November, 2017. However the details of minor incidences during the month received from WRLDC are enclosed at **Annexure-5.***

#### **Discussion:**

CE, SLDC, Maharashtra informed about tripping incidence at 400 kV Padghe S/S (MSETCL) at 12:58 hrs/09.12.2017. He stated that the incidence took place due to bursting of TBC (Transfer Bus coupler) breaker at 400 kV side. Due to this there was a load loss of about 1400 MW.

The following were noted in regard to the disturbance:

1. Dhane & Palghar districts went into black out.
2. 5 numbers of ICTs got tripped and Mumbai load remaining unchanged. Mumbai is fed by Borivali, Trombay and Kalwa feeders.
3. Critical Aurangabad - Boisar line outage was stalled.
4. On Boisar-Borivali line, 173 MW load trimming was done.
5. Railway traction load of 250 MW got affected.
6. Around 43 MW of distress load-shedding was carried out.
7. System was restored within 30-35 minutes by taking quick action by Maharashtra.

Member Secretary, WRPC suggested that the detail analysis of the incidence at 400 kV at Padghe S/s shall be done in ensuing PCM and he requested SLDC, Maharashtra to furnish all the details related to this incidence to WRPC/WRLDC.

*The Sub-Committee noted.*

## ■ **Item no. 6: Healthiness status of SERs/DRs of equipment in the system.**

The updated status of Constituents who have furnished the status of healthiness of SER/DRs in their systems is given at **Annexure-6**.

WRPC enquired about entities who have not submitted the status of SERs/DRs of equipment in the system. Constituents assured to submit the status on time.

*The Sub-Committee noted as above.*

## ■ **Item No. 7: Status of completion of ongoing schemes in WR**

**7.1 Status of Commissioning of Reactors**

**7.2 Status of Transmission schemes - 765/400 kV and above**

**7.3 Status of Commissioning of new Generating units in WR**

The updated status of above items is at **Annexure-7**.

*The Sub-Committee noted the above information.*

## ■ **Item no. 8: Miscellaneous Operational Items**

### **8.1: Quarterly review of Crisis Management Plan (CMP) and Physical & Cyber Security (P&CS) in power sector**

The current status of submission of CMP and P&CS report (constituent-wise) for the second quarter (July 2017 to September 2017) is given at **Annexure 8.1.**

The forum requested all other constituents to submit the reports positively and timely.

*Sub-committee noted and agreed as above as above.*

## **8.2: Monitoring of Schemes funded from PSDF**

As per the decision taken in NPC meetings, RPC may follow up with the utilities regularly in OCC to expedite the completion of various approved schemes by giving due priority. Accordingly, WRPC has been taking up this issue in OCC forum for discussion.

In this matter, the details related to State-wise sanctioned grant and disbursement amount for the approved schemes to be funded from PSDF is attached at **Annexure-8.2A.**

Also, as per the procedure, the utilities are required to furnish the information in the prescribed format by first week of every month on regular basis to Member Convener, PSDF project monitoring group (AGM, NLDC, POSOCO) with a copy to NPC & WRPC division. A copy of prescribed format is attached at **Annexure-8.2B.** Accordingly, Gujarat, Madhya Pradesh, Maharashtra & Chhattisgarh have submitted progress/status in prescribed format which are attached at **Annexure - 8.2: C1, C2, C3 & C4.**

State-wise details of status of schemes under PSDF are tabulated below:

<b>State</b>	<b>No. of Schemes approved</b>	<b>Work Completed</b>	<b>Work under-progress</b>	<b>Remarks</b>
Gujarat				
Maharashtra				
Madhya Pradesh				
Chhattisgarh				

### **Recent development on review of progress of projects under PSDF:**

As per NPC's email dated 04/12/17, 5<sup>th</sup> meeting of Monitoring Group of PSDF was held on 21/10/2017 wherein it was decided to hold the Monitoring Group Meeting at regional level with participation of all the concerned entities of the region to review the progress of the projects /schemes being funded from PSDF. As per email, Monitoring Group Meeting of Western Region is scheduled to be held during 3<sup>rd</sup> week of January 2018.

The issue of meagre disbursement of PSDF in Western Region with regard to approved schemes /projects have been in discussion in OCC since last several months; however progress is not satisfactorily in almost all the States. Therefore all the constituents are requested to expedite this matter to commence / accrete the works on approved/ sanctioned projects /schemes. If any constraints exist, the

same may be shared. Constituents are also requested to update the information on progress/status of scheme.

#### **502<sup>nd</sup> OCC Discussion:**

It was observed that disbursement of PSDF for the approved scheme was lowest in comparison with the other regions. Considering slow pace of progress, SE (Opn), WRPC requested all the constituents to expedite the activities of all the approved schemes so that disbursement of sanctioned fund in WR could be increased.

WRPC also requested an update on the progress of the schemes as per format at **Annexure 8.2B.**

Member Secretary, WRPC informed that NPC had proposed to convene a region-wise meeting to review the progress of schemes approved under PSDF. He further informed that the meeting of WR is likely to be convened in third week of January, 2018. He also informed that there will be a meeting in first week of January 2018 to clear the proposal received by WRPC for recommendation from WRPC. He further requested states to expedite the projects under PSDF.

*Sub-committee noted and agreed as above as above.*

### **8.3 Ensuring proper functioning of under frequency relays (UFRS) & df/dt relays**

In the 5<sup>th</sup> meeting of NPC, it was agreed that each RPC would ensure proper functioning of UFR and df/dt relays as per the agreed procedure of the region. Actual tripping of feeder may not be required to test the healthiness of the UFRs. It was also agreed that RPCs would send their comments/suggestion on preparation of procedure for certification of healthiness of UFR and df/dt relays.

In the 6<sup>th</sup> meeting of NPC, it was decided that all RPCs Secretariat would furnish to NPC Secretariat the procedure being followed by them to ensure healthiness of UFR & df/dt relays. RPC Secretariat shall carry out periodic inspection, in line with the provisions of IEGC.

#### **502<sup>nd</sup> Discussion:**

The OCC forum further agreed to have periodical inter-circle inspection of UFR and df/dt relays at different Substations of WR to ensure their proper functioning. It was also agreed that the self-certification from Sub-Station in-charge shall also be furnished to WRPC/WRLDC regularly.

WRPC carried out periodic inspection of MSETCL Sub-stations of 220 kV Ambazari, 132 kV Hingna and 220 kV Kalmeshwar in the vicinity of Nagpur on 12.11.2017 regarding proper functioning of UFR & df/dt relays in line with provisions of IEGC.

*Sub-committee noted and agreed as above.*

### **Procedure for Transmission System Availability certification for a Month:**

In line with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014-19, transmission system availability factor for a calendar month (TAFM) for the ISTS transmission licensees of the Western Region shall be certified by the Member-Secretary, WRPC. Since the implementation of this regulation, WRPC Secretariat has been certifying and issuing Transmission System Availability to the ISTS licensees of Western Region based on submitted details (verified by WRLDC) in time bound manner. However, some of ISTS licensees are irregularly submitting the details. Instead of furnishing the details on month-wise basis, some time the details of two–three months are submitted together and in such cases some of the licenses also expect that WRPC Secretariat may issue the certificate immediately.

It is also to be noted that before issuing the availability certification, WRPC need to know the views /comments of concerned beneficiaries on outages taken by ISTS licenses but in present practice comments are not being invited. Due to above reasons, the existing practice for carrying out activities for availability certification necessary to be streamlined with time line.

### **502<sup>nd</sup> OCC Discussion:**

OCC discussed the matter in detailed to streamline the procedure of transmission element certification & suggested following guidelines /procedure:

1. All ISTS licensees (including PGCIL) shall submit tripping details /supporting documents with regard to their transmission system for the period of last month on or before 7th of following month to WRPC, WRLDC and beneficiaries.
2. On receiving the tripping details from ISTS licenses, all concerned beneficiaries shall furnish their comments (if any) with regard to the outages claimed as deemed available by the ISTS licensees on or before 15th of the following month to WRPC/WRLDC.
3. WRLDC shall study the tripping details /supporting documents and subsequently furnish their observation to ISTS licensees (including PGCIL) for clarification between 16th to 18th of the following month.
4. WRLDC shall also submit the verified data for all ISTS licensees (including PGCIL) to WRPC in hard copy & soft form (through E-mail) by 24th of the following month.
5. WRPC Secretariat shall examine, verify & process the case for issue of transmission availability certification taking into account provisions of regulation and comment received from the beneficiaries. Subsequently, WRPC shall issue transmission availability certificate to all transmission licensees within the period of 5 working days from 24th of the following month.

*The sub-committee agreed on the same.*

#### **8.4 Transfer of Rlnfra Western Transco Power Limited (WTPL) (license No.6/ Transmission/CERC) & Western Transmission (Gujarat) Limited (WTGL) license No.7/ Transmission/CERC) to Adani Transmission Limited(ATL)**

M/s Adani Transmission Limited vide letter dated 17.11.2017 (copy enclosed at Annexure 8.4 A) informed that Hon'ble CERC vide its order dated 7<sup>th</sup> August 2017 in the case no 31/MP/2017 approved the transfer of the entire shareholdings of Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) from Rlnfra to Adani Transmission Limited (ATL). Also ATL vide above letter intimated WRPC that all the intimations & communications regarding outages and trippings related to transmission asset of WTPL and WTGL should be done by their General Manager, Adani Enterprises Ltd, Mumbai.

Presently, Transmission availability certificate is issued by WRPC on monthly basis issued in respect of Rlnfra Western Transco Power Limited(WTPL) (license No.6/ Transmission/CERC), Western Transmission(Gujarat) Limited(WTGL) license No.7/ Transmission/CERC) and Adani Transmission Limited (ATL) separately. In the context of Transmission availability certificate, M/s Adani Transmission Limited vide letter dated 07.12.2017 (copy enclosed at Annexure 8.4 B) requested WRPC to issue separate availability certificates for Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL).

#### **502<sup>nd</sup> OCC discussion:**

Superintending Engineer (Opn), WRPC stated that availability certificate will be issued in the name of WTPL, WTGL and ATL separately from November 2017 onwards.

*The Sub-Committee noted as above.*

#### **8.5 State-wise details for Installation of capacitors to be furnished to WRPC**

In accordance with provision in clause 1.5 (ii) of IEGC, "**RPC shall file monthly report on installation of capacitors by states vis-a-vis the requirement/targets, as decided in the RPC**"

In order to fulfil the above obligation, WRPC Secretariat regularly furnish report on 'status of Installation of HT Shunt Capacitors in Western Region' to Hon'ble CERC on monthly basis. However, the report being furnished by WRPC is prepared taking into consideration of the details received from few States /Utilities only because all the States /Utilities are not furnishing the details regularly to WRPC. To furnish proper report to CERC containing complete details, regular availability of input data from States /Utilities is necessary. SLDC's /DISCOMs are therefore requested to expedite the matter and ensure to furnish the status of capacitor report in format attached at **Annexure 8.5** on monthly basis regularly.

SLDC's are also requested to compile the details of various utilities and send the compiled report of entire state by 8th day of every month.

In above context, it is informed that presently, WRPC receiving data from Torrent Power (Ahmadabad & Surat), Rinfra Mumbai, Tata Power, BEST & GETCO only. Other utilities are requested to furnish the data on monthly basis. Even in case of no addition / installation of capacitor in a particular month in respect of any utility, nil report may submit on monthly basis by 8th day of every month.

#### **502<sup>nd</sup> OCC discussions:**

Superintending Engineer (Opn), WRPC requested all utilities to furnish the status of capacitor installation in their system and even if there is no progress in installation of capacitor during the month, nil report shall be submitted to WRPC on monthly basis.

*The Sub-Committee agreed as above.*

#### **8.6 Approval of continuous shutdown of 400 KV D/C Vadavi (Ranchodpura) – Kansari (Zerda) line for LILO of circuit No. 1 at 400 KV Veloda S/S :**

Chief Engineer SLDC Gujarat vide email date 02.12.17 informed that GETCO has requested continuous outage of 400 KV D/C Vadavi (Ranchodpura) – Kansari (Zerda) line (owned by M/s APL) from 08:00 Hrs 19.12.17 to 20:00 Hrs of 27.12.17 for LILO of circuit No. 1 at 400 KV Veloda S/S.

The detailed bar chart of the work is attached herewith.

#### **Contingency plan:**

1. No other 400 KV EHV line (connected to Kansari S/S) outages will be permitted.
2. No ICT outages at Vadavi, Kansari & Soja S/S will be permitted.
3. If require, GTPS generation will be regulated as per system requirement.

Due to onset of winter, the system demand will remain less. All relevant documents will be submitted prior to completion of shutdown.

*The Sub-Committee agreed as above.*

#### **8.7. Installation and commissioning of numerical bus bar protection scheme on 400 KV side at Chorania S/S – Regarding requirement of outages of each 400 KV elements one by one for integration in new busbar protection scheme:**

Chief Engineer SLDC Gujarat vide email date 02.12.17 informed that GETCO has planned replacement of old busbar protection scheme with new numerical busbar

protection scheme on 400 KV side at Chorania S/S from 19.12.17 onwards. The 400 KV bus bar protections will remain out from 19.12.17 to 30.12.17.

To integrate all 400 KV elements in new busbar protection scheme at Chorania S/S, following outages are planned on daily basis:

Sr. no	Line/element	From date	Time	To date	Time	Reason
1	400 KV Asoj- Choraria line-1	19-12-2017	8:00	19-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
2	400 KV Chorania - Hadala	20-12-2017	8:00	20-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
3	400/220 KV 500 MV ICT-1 Chorania	20-12-2017	8:00	20-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
4	400 KV CHORANIA BHACHAU LINE	21-12-2017	11:00	21-12-2017	21:00	for Commissioning of 400KV new numeric Busbar scheme
5	400KV, 50MVAR, Bu reactor CHORANIA	21-12-2017	9:00	21-12-2017	19:00	for Commissioning of 400KV new numeric Busbar scheme
6	400 KV Chorania - Kosamba-1	22-12-2017	8:00	22-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
7	400/220 KV 500 MV ICT-3 Chorania	22-12-2017	8:00	22-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
8	400 KV Chorania - Asoj - 2	23-12-2017	8:00	23-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
9	400/220 KV 500 MV ICT-2 Chorania	23-12-2017	8:00	23-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
10	400 KV Chorania - Amreli	26-12-2017	8:00	26-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
11	400KV, 125MVAR reactor / TBC	26-12-2017	8:00	26-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
12	400 KV Chorania - MANSAR LINE	27-12-2017	10:00	27-12-2017	20:00	for Commissioning of 400KV new numeric Busbar scheme

13	400 KV Chorania - Kasor	27-12-2017	8:00	27-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
14	400 KV Chorania - Kosamba-2	28-12-2017	8:00	28-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
15	400KV Bus coupler	28-12-2017	9:00	28-12-2017	19:00	for Commissioning of 400KV new numeric Busbar scheme
16	400 KV CHORANIA VADAVI LINE-1	29-12-2017	8:00	29-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme
17	400 KV CHORANIA VADAVI LINE-2	30-12-2017	8:00	30-12-2017	18:00	for Commissioning of 400KV new numeric Busbar scheme

Note:- Outage of 400 KV Chorania-Hadala line for 20.12.17 was not availed due to one unit of EPGL is ON bar. This outage will be availed when EPGL generation will be OFF bar.

The following OCC approved outages is rescheduled / deferred:

OCCM approved outage	OCCM approved date	status
400 KV Chorania-Kasor line	20.12.17 & 24.12.17	This outage is rescheduled for 27.12.17
400 KV Chorania bus-1	20.12.17 & 21.12.17	It will be availed in Jan'18
400 KV Chorania bus-2	22.12.17 & 23.12.17	It will be availed in Jan'18

*The Sub-Committee agreed as above.*

## **8.8 Completion of Construction of 2 nos 220 KV feeder bays by June 2018 at Khandwa (PGCIL) 400 KV substation matching with 220 KV down streamline of MPPTC.**

The CE (Planning & Design) MPPTCL vide letter No. 07-05/RPC-14/2870 (copy enclosed at **Annexure – 8.8**) intimated that construction activities of 220 KV Khandwa –Chhanera DC line is as per schedule and will be ready by June 2018(target schedule). He requested PGCIL for construction of 2 nos 220 KV feeder bays by June 2018 at 400 KV Khandwa (PGCIL) substation matching with 220 KV down streamline of MPPTC. He also informed that there was

correspondence made with Chief Operating Officer (CTU-Planning), PGCIL on 13.11.2017(copy enclosed) wherein MPPTCL requested PGCIL to expedite construction of 2 nos of feeder bays at Khandwa (PGCIL) on priority so that 220 KV Khandwa -Chhanera DC line could be commissioned as per target schedule (June 2018).

#### **502<sup>nd</sup> OCC discussions:**

The PGCIL ensured that construction work of 2 nos 220 KV feeder bays will be ready by March 2018.

*The sub-committee noted as above.*

#### **Item No. 9. WRLDC Agenda Items**

##### **1. Suggested revision in System Protection Schemes (SPS) between NEW grid and SR after commissioning of new lines towards and inside Southern Region**

System Protection Schemes (SPS) were commissioned for secure transfer of power towards Southern Region. These schemes presently in operation as communicated vide NLDC letter dated 16<sup>th</sup> March,2016 (NLDC letter is enclosed as Annex-II).As would be observed from Annex-II, presently there are SPS-1A, IB, 1C, SPS-3, SPS-4, SPS-6 and SPS-8in operation.

The following modifications/changes in SPS are proposed considering the present system conditions.

###### I. SPS to be blocked :

- SPS-1C (single circuit operation of 765kV Raichur-Solapur)

SPS Name	SPS logic	SPS Action
SPS-1C  (When only one line in service)	765kV Solapur-Raichur S/C flow:  Flow on Sholapur-Raichur S/C crosses 2000MW and remains above 2000MW for 2.5 sec	-800MW generation back down in WR from JPL, JPL Ext, KSK, LANCO, DB Power, KWPCL, BALCO and NSPCL  -RS1(500MW) & RS2(500MW) load shall be shed immediately in SR

b. SPS-5 (400 kV Wardha – Parli D/C)

SPS Name	SPS logic	SPS Action
SPS-5	<p>400kV Wardha – Parli D/C:</p> <p>Flow on either circuit of 400kV Raipur-Wardha D/C crossing 850MW and remaining above this value for 2.5 sec</p> <p>or</p> <p>Tripping of any one circuit of 400kV Raipur-Wardha D/C carrying 700MW or above</p>	-SPS to be blocked

c. SPS-6 (400 kV Parli-Solapur D/C)

SPS Name	SPS logic	SPS Action
SPS-6	<p>400kV Parli-Solapur D/C:</p> <p>Flow on either circuit of 400kV Parli-Solapur D/C crossing 800MW and remaining above this value for 2.5 sec</p> <p>or</p> <p>Tripping of any one circuit of 400kV Parli-Solapur D/C and flow on other circuit &gt;700MW</p>	<p>-800MW generation back down in WR from JPL, JPL Ext, KSK, LANCO, DB Power, KWPCL, BALCO and NSPCL</p> <p>-KK-1 load of 848MW shall be shed in SR</p>

II. Generation back down in Western Region from all existing SPS may be removed

III. Threshold limits to be modified:

a. SPS-1A (2x765kV Sholapur-Raichur S/C flow)

	SPS Name	SPS logic	SPS Action
Existing logic	<b>SPS-1A (Both lines service)</b>	<p><b>2x765kV Solapur-Raichur S/C flow:</b></p> <p>Total flow on 2x765kV S/C lines crossing a pre-set value of 3500MW in Solapur-Raichur direction and remains above 3500MW for 5 sec</p>	<p>-800MW generation back down in WR from JPL, JPL Ext, KSK, LANCO, DB Power, KWPCL, BALCO and NSPCL</p> <p>-RS2(500MW) load shall be shed immediately in SR</p> <p>-After RS2 load shedding, if the flow remains above 3500MW for 2.5 sec, RS3(500MW) load shall</p>

			be shed in SR
Proposed logic	<b>SPS-1A (Both lines in service)</b>	<b>2x765kV Solapur-Raichur S/C flow:</b> Total flow on 2x765kV S/C lines crossing a pre-set value of 3000MW in Solapur-Raichur direction and remains above 3000MW for 5 sec	-RS2(500MW) load shell be shed immediately  -After RS2 load shedding, if the flow remains above 3500MW for 2.5 sec, RS3(500MW) load shall be shed in SR

b. SPS-1B (2x765kV Sholapur-Raichur S/C flow)

	SPS Name	SPS logic	SPS Action
Existing logic	<b>SPS-1B (Both lines service)</b>	<b>2x765kV Solapur-Raichur S/C flow:</b> Total flow on 2x765kV S/C lines crossing a pre-set value 4000MW in Solapur to Raichur direction and remains above 4000MW for 2.5 sec	- <b>800MW generation back down WR</b> from JPL, JPL Ext, KSLANCO, DB Power, KWPCL, BALCO and NSPCL  -RS1 (500MW), RS2 (500MW), RS3 (500MW) load shell be shed immediately in SR
Proposed logic	<b>SPS-1B (Both lines service)</b>	<b>2x765kV Solapur-Raichur S/C flow:</b> Total flow on 2x765kV S/C lines crossing a pre-set value 3500MW in Solapur to Raichur direction and remains above 3500MW for 2.5 sec	-RS1 (500MW), RS2 (500MW), RS3 (500MW) load shell be shed immediately in SR

c. SPS-3 (Loss of 765kV Sholapur-Raichur lines carrying 1500MW towards SR)

	SPS Name	SPS logic	SPS Action
Existing logic	<b>SPS-3</b>	<b>Loss of 765kV Solapur-Raichur D/C lines carrying 1500MW towards SR:</b> Loss of import of SR on 765 Sholapur-Raichur section more than 1500MW due to tripping these lines	-RS1 (500MW), RS2 (500MW), RS3 (500MW) load shell be shed immediately in SR
Proposed logic	<b>SPS-3</b>	<b>Loss of 765kV Solapur-Raichur D/C lines carrying 1500MW towards SR:</b> Loss of import of SR on 765 Sholapur-Raichur section more	-RS1 (500MW), RS2 (500MW), RS3 (500MW) load shell be shed immediately in SR

		than 1500MW due to tripping these lines	
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d. SPS-8 (Loss of 765kV Aurangabad-Sholapur D/C lines carrying 2500MW)

	SPS Nam	SPS logic	SPS Action
Existing log	<b>SPS-8</b>	<b>Loss of 765kV Aurangabad-Sholapur D/C lines carrying 2500MW</b>  Loss of 765kV Aurangabad-Solapur D/C lines and loss of import Sholapur > 2500MW	<b>-800MW generation back down WR from JPL, JPL Ext, KSLANCO, DB Power, KWPC, BALCO and NSPCL</b>  <b>-Trip bus reactor at Parli (400kW) and 765 kV Pune(PG) in WR</b>  <b>-RS1 &amp; RS3 load shed in SR</b>
Proposed logic	<b>SPS-8</b>	<b>Loss of 765kV Aurangabad-Sholapur D/C lines carrying 2000MW</b>  Loss of 765kV Aurangabad-Solapur D/C lines and loss of import Sholapur > 2000MW	-RS1 (500MW), RS2 (500MW), RS3 (500MW) load shell be shed immediately in SR

Asst.GM, WRLDC informed the suggested revisions in System Protection Schemes (SPS) between NEW grid and SR with the commissioning of 765kV Wardha-Aurangabad D/C, 765kV Angul-Srikakulam D/C, and 765kV Srikakulam-Vemagiri D/C, 765kV Nizamabad-Maheswaram D/C, 2x1500MVA, 765/400kV ICTs at Vemagiri and Maheswaram, 400kV Aurangabad-Boisar and several other lines.

Committee agreed for all the suggested changes in System Protection Schemes (SPS) between NEW grid and SR.

MS, WRPC advised WRLDC to coordinate with Powergrid, CTU to implement the necessary changes in SPS between NEW grid and SR.

## 2. Primary Frequency Response

There was a generation loss of around 1000 MW on 12th Nov'17, 07:14 Hrs resulting fall in frequency by 0.09 Hz. All ISGS and SLDCs may like to present the Frequency Response Characteristics to demonstrate compliance to IEGC 5.2 (f), (g) (h) and (i).

GM, WRLDC informed since the issue was taken up many times with the respective generators and in different forums, still the response of some of the generators was not compliant to IEGC.

As per the decision taken in 501 OCC, WRLDC identified the list of generators whose response is ZERO for the last 3 grid events as mentioned below. WRLDC will organize a meeting with the representatives of below mentioned generators whose response is ZERO for detailed discussion on the issues faced to comply the regulations. The meeting is scheduled to be held on 26th Dec'17 at WRLDC, Mumbai.

Generating stations whose response is zero are given below.

S.No	Station Name
1	KSK
2	DB Power
3	JPL-II Tamnar
4	Maruti Clean Power Ltd
5	Mouda-II

It was decided that the Generating stations mentioned above would depute their representatives to the special meeting on the subject on 26th DEC'17 at WRLDC, Mumbai to demonstrate the action taken to ensure compliance to IEGC provisions regarding FGMO/RGMO.

### **3. Hot line voice communication between WRLDC and Substations/Generating Stations**

In the last month, integration of hot line voice communication was completed at seven (7) stations. These are 400 kV KSK Mahanadi, 400 kV Solapur NTPC, 765kV Sasan, 765kV Indore(PG), 400kV Dehgam (PG), 400kV Navsar(PG) and 220kV Kawas.

The twenty-Eight (28) stations where integration is to be completed are tabulated below. Voice Channel through PLCC/Fibre to be established from station to the CTU point.

**POWERGRID and utilities updated the progress.** The updated status is follows:

S.No	Region	Station	Nearest CTU point	Action by	Status by utilities
	WR-I	400 kV GMR Warora	Bhadrawathi	GMR	-
	WR-I	400 kV GMR RAIPUR	Durg	GMR Raipur	-
	WR-I	400 kV KWPCL	Kotra	KWPCL	-
	WR-I	400 kV BALCO	Dharamjaygarh	Balco	31 <sup>st</sup> Jan'18
	WR-I	400 kV DHARIWAL	Parli_PG	Dhariwal	-
	WR-I	400 kV SKS	Kotra	SKS	-
	WR-I	765 kV DHULE	Aurangabad_PG	BDTCL	Interfacing Aurangabad pending

S.No	Region	Station	Nearest CTU point	Action by	Status by utilities
	WR-I	400 kV RKM	Kotra	RKM	-
	WR-I	400 kV DB POWER	Kotra	DB Power	-
	WR-I	400 kV NSPCL	Raipur	NSPCL	31 <sup>st</sup> Mar'18
	WR-I	400 kV RGPPL	RGPPL	RGPPL	-
	WR-I	400 kV LANCO	Bilaspur	LANCO	-
	WR-I	400 kV Essar Hazira	Gandhar	WRTS-II, PGCIL	Interfacing Gandhar pending
	WR-II	400 kV DGEN	Navsari	DGEN	-
	WR-II	400 kV Jhabua Power	765 KV Jabalpur	Jhabua	-
	WR-II	400 kV MB POWER	765 KV Jabalpur	MB Power	-
	WR-II	400 kV TAPS-3&4	Boisar/Phadga	NPCIL	-
	WR-II	220 kV TAPS-1&2	Boisar/Phadga	NPCIL	-
	WR-II	400 kV Lara	Champa/Kotra	NTPC	-

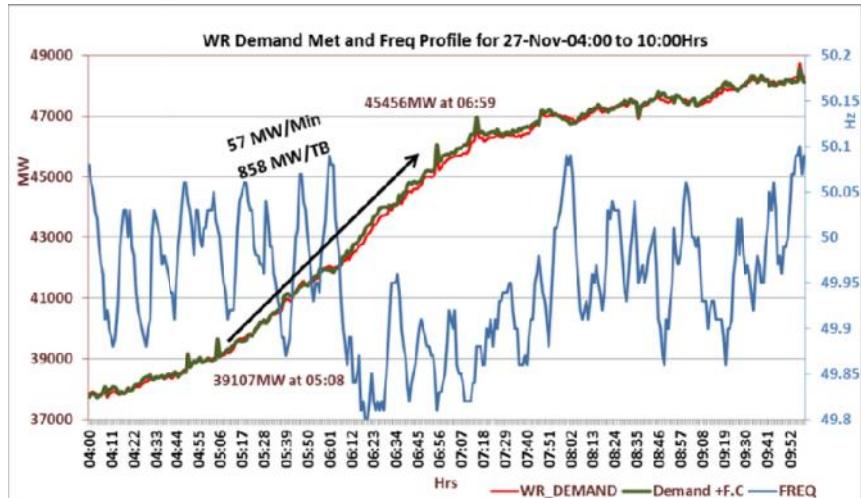
#### **Stations where VOIP phone installation is pending as per last OCC minutes**

S.No	Region	Station	Status by Utilities
	WR-II	765 kV Jabalpur	By 31/12/17
	WR-II	765 kV Gadarwara	-
	WR-II	400 kV Pirana	Completed
	WR-II	765 kV Vadodara	By 31/12/17
	WR-II	400 kV Gandhar	By 31/12/17
	WR-II	400 kV VindhyaChal stage	-
	WR-II	400 kV VindhyaChal stage	-
	WR-II	400 kV VindhyaChal stage	-
	WR-II	220 kV Kakrapar	Powergrid informed that the delay is due to entry issues

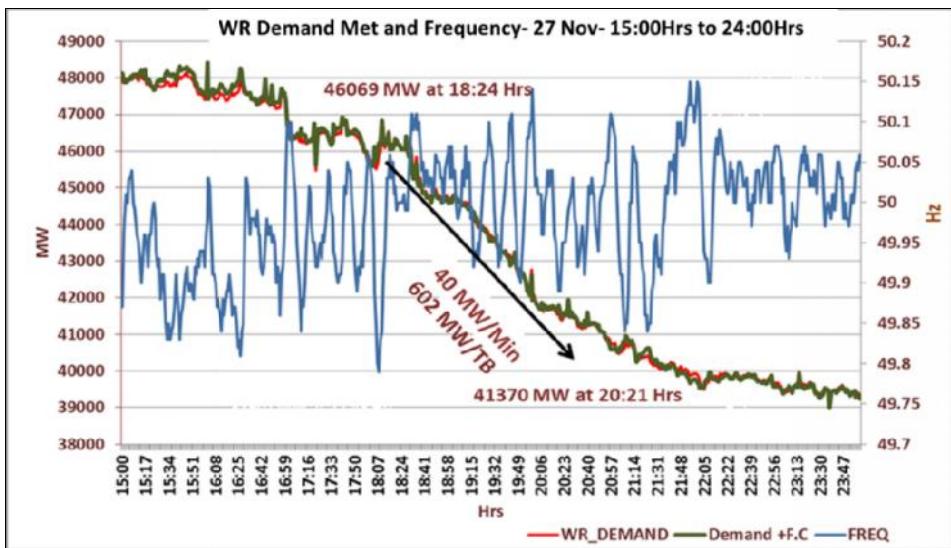
Since many of the utilities informed that the delay is due to interfacing issues at PGCIL stations, MS, WRPC informed PGCIL to share the cost details of interfacing equipment provided by M/s Tejas and subsequently Utilities were requested to coordinate with M/s Tejas for necessary support in interfacing and resolve the issue.

#### **4. Observation of high Ramp Up Rate in morning and Ramp Down in evening**

It has been observed that Western Regional demand starts ramping up at 04:00 hrs and increases with high ramp rate of around 800-900MW/Time Block from 05:00Hrs to 07:00Hrs in the morning for 2 hours of interval resulting frequency dip from 50.1Hz to 49.70Hz. The graph of demand and ramp rate calculated on a typical day is as under



The similar phenomenon is also observed in the evening when ramp down takes place after 15:00Hrs. During 18:00Hrs-22:00Hrs, the demand reduces with high ramp down of around 600-700 MW/Time Block. At the same time frequency jumps up to 50.1Hz-50.2 Hz as shown in following graph-



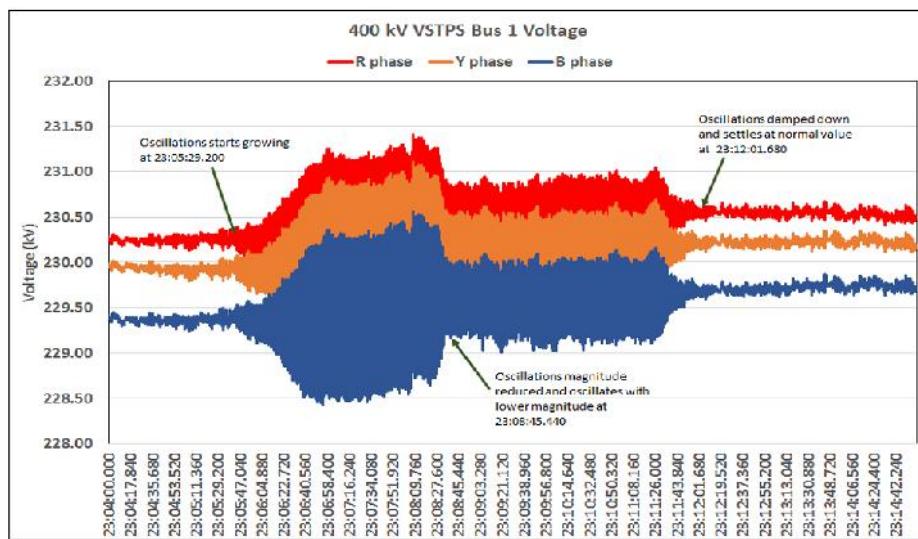
### **Discussion:**

- Maharashtra informed that necessary precautions are being taken to reduce the sudden deviation of the drawl against the schedule during load change over period. During the load change over period, load is connected/ disconnected in 5-minutes block wise with a maximum change of 100MW/5-min.
- MP informed that necessary measures will be taken in load management to match their demand ramp rate with internal generation plus ISGS schedule. It was decided that all SLDC shall take suitable measures to ramp up their internal generation and ISGS requisitions to match the demand ramp and control frequency deviations.

## 5. Oscillations of 0.86 Hz at 23:06 hrs to 23:12 hrs on 24<sup>th</sup> Nov'17

Oscillations of 0.86 Hz was observed in Western region on 24-11-2017 at 23:06 Hrs. The oscillations were lasted in the system for about 6 minutes. No major events or switching operations were observed or reported from the utility side. The oscillations were observed in the Voltage, MW, MVAR and frequency plots. During oscillations it was observed the Nodes at East side of WR was swinging against the West side of WR.

From generators MW SCADA data it is observed that the generators located in the east side(VSTPS,Sasan,Korba, Jaypee Nigri,Tamnar) subjected to more MW change during the Oscillations.



WRLDC vide e-mail dated 27th Nov 17 requested generating stations and SLDCs to inform any abnormalities observed or any switching operations taken place during the above event. Sasan generating station informed that no abnormalities were observed during the said event.

All regional entities / SLDCs to apprise OCC regarding any switching operations or equipment mis-operation that may have triggered the oscillations. Any other observations during the oscillations may also be reported.

### Discussion:

- No observations were reported by utilities for Oscillations of 0.86 Hz at 23:06 hrs to 23:12 hrs on 24<sup>th</sup> Nov'17
- CM, WRLDC requested VSTPS to share the details of the testing that was being carried out at VSTPS. WRLDC also requested VSTPS to share the data pertaining to VSTPS for dated 24<sup>th</sup> Nov'17for further analysis.

## 6. High Voltages in WR

In the month of November'17, voltages were above IEGC band at 765 kV Durg, Kotra, Tamnar, Wardha, Gwalior and Vadodara. At 400 kV level high voltages are observed at Raigarh, Dehgam, Karad, Kalwa, Dhule, Wardha, Mapusa and Parli. The Voltage Deviation Index of above nodes are tabulated below.

Voltage Deviation Index (VDI) - 765 kV Substations										
S.No	Station Name	Voltage (in Volts)		Voltage (in % of Time)			Voltage (in Time)		Total no. of hours out of IEGC range (HH:MM) (iii) (i+ii)	Voltage Deviation Index (iii)/(Total No. of Hours in a Week)
		Max Voltage	Min Voltage	<728 kV	728 kV-800 kV	>800 kV	No. of hours below IEGC (i) <728 kV	No. of hours above IEGC (ii) >800 kV		
1	Durg	817.02	775.96	0.00	80.68	19.32	0:00	139:08	139:08	0.19
2	Kotra	812.54	783.19	0.00	83.72	16.28	0:00	117:11	117:11	0.16
3	Tamnar	811.44	783.45	0.00	89.92	10.08	0:00	72:36	72:36	0.10
4	Wardha	807.61	756.44	0.00	99.13	0.87	0:00	6:17	6:17	0.01
5	Gwalior	800.54	755.78	0.00	99.99	0.01	0:00	0:04	0:04	0.00
6	Vadodara	800.18	758.45	0.00	100.00	0.00	0:00	0:02	0:02	0.00

Voltage Deviation Index (VDI) - 400 kV Substations										
S.N	Station Name	Voltage (in Volts)		Voltage (in % of Time)			Voltage (in Time)		Total no. of hours out of IEGC range (HH:MM) (iii) (i+ii)	Voltage Deviation Index (iii)/(Total No. of Hours in a Week)
		Max Voltage	Min Voltage	<380 kV	380 kV-420 kV	>420 kV	No. of hours below IEGC (i) <380 kV	No. of hours above IEGC (ii) >420 kV		
1	Raigarh	429.17	416.4	0.00	9.38	90.62	0:00	652:28	652:28	0.91
2	Dehgam	439.34	383.18	0.00	32.80	67.20	0:00	483:50	483:50	0.67
3	Karad	432.24	403.81	0.00	44.72	55.28	0:00	398:00	398:00	0.55

4	Kalwa	434.61	389.12	0.00	50.76	49.24	0:00	354:32	354:32	0.49
5	Dhule	434.67	400.2	0.00	52.70	47.30	0:00	340:33	340:33	0.47
6	Wardha	428.52	409.26	0.00	56.82	43.18	0:00	310:52	310:52	0.43
7	Mapusa	433.17	397.97	0.00	62.88	37.12	0:00	267:17	267:17	0.37
8	Parli	432.83	394.83	0.00	71.76	28.24	0:00	203:19	203:19	0.28

Persistent high voltages were observed in Southern Maharashtra at night hours. For voltage control 125 MVAR bus reactors are planned at Nanded, Sholapur-MS and Kholapur substations. The expected dates of commissioning of these reactors are Dec-17.

**Maharashtra SLDC to apprise the present status of commissioning of these bus reactors.** SLDC Maharashtra may also update the status of line reactors of Chandrapur-Parli.

It is proposed that POWERGRID may consider commissioning of NGR bypass scheme at following substations if not envisaged already

- 765kV Wardha-Aurangabad-Q/C at Aurangabad end
- 765kV Durg-Wardha-Q/C at Wardha end
- 765kV Dhule-Vadodara-S/C at Vadodara end.
- 765kV Durg-Kotra-D/C at Durg end.

#### **Discussion:**

- **Status of commissioning of bus reactors in Maharashtra is follows**

S.No	Station	Status by Utilities
	400kV Kolhapur-MS	By Jan'18
	400kV Solapur-MS	By Feb'18
	400kV Nandhed-MS	1 year

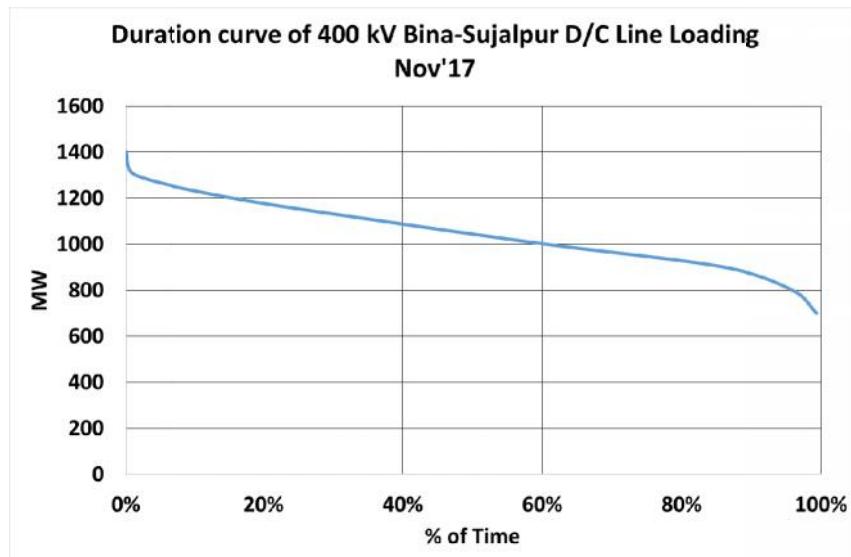
#### **Status of NGR bypass schemes at PGCIL stations is as follows**

- WRLDC suggested that POWERGRID may explore possibilities of constructing NGR bypass schemes at 765kV Durg-Wardha D/C, 765kV Durg-Kotra D/C, 765kV Wardha-Aurangabad-Q/C at Aurangabad end and 765kV Dhule-Vadodara-S/C at Vadodara end.
- POWERGRID suggested that the L/R installed on 765kV Durg-Wardha D/C and 765kV Durg-Kotra D/C could be made Switchable by installing a CB rather than going for NGR bypass scheme.

It was decided that POWERGRID shall put up the detailed scheme for converting the LR at Durg into switchable reactor. The same would be discussed in the next OCC meeting.

## **7. Loading on 400 kV Bina-Shujalpur D/C**

It is observed that flow on 400kV Bina (PG)-Sujalpur (PG)-D/C is more than 600 MW / each circuit 20% of the time, resulting in N-1 insecure operation. One circuit of 400kV Nagda-Dehgam-D/C is being kept open for controlling on above circuits, still the flow on each circuit is on higher side.



The phenomena generally occurs during winter months when the demand in Madhya Pradesh is high.

It is also observed that 220kV Bhopal (MP)-Sujalpur (MP)-D/C is kept open by SLDC Jabalpur. Taking 220kV Bhopal (MP)-Sujalpur (MP)-D/C into service could relieve loading on 400kV Bina-Sujalpur-D/C.

### **Discussion:**

- WRLDC said that SLDC Madhya Pradesh could check the possibilities of shifting the load from Shujalpur(PG) ICTs to Bhopal(MP) and Bina(PG) to control the loading on 400kV Bina-Shujalpur D/C
- It was also suggested that commissioning of Bhopal ICT-4 would also help in relieving the loading of Bhopal ICTs.

## **8. Operationalization of 400 kV Aurangabad-Boisar D/C**

On 2nd Oct 17, 400 kV Aurnagabad-Boisar-I and Aurnagabad-Boisar-II circuits are first time charged. Thereafter due to constraints of Boisar ICTs and for rectification of line defects, one or other circuits was kept out or outages were being availed by POWERGRID.

To control ICTs loading under N-1 contingency load trimming scheme was proposed at Boisar. Taking 400 kV Aurnagabad-Boisar D/C into service could relieve line loadings on 400 kV Bableswar-Padghe D/C and 400 kV Tarapur-Boisar D/C lines.

#### **Discussion:**

- POWERGRID informed that commercial operation of 400kV Aurangabad-Boisar will be declared tentatively by 20<sup>th</sup> Dec'17
- Maharashtra informed that load trimming scheme was already implemented on 220kV lines from Boisar (PG). Load trimming scheme on ICTs at Boisar (PG) is yet to be implemented.

#### **9. Black Start mock drill Exercise in Western Region**

As mandated by IEGC, the Black start capable units need to conduct mock black start exercises once in every 6 months. Western Region has 29 generating stations with black start capability. As per the information available with WRLDC only 8 Black Start stations have completed the Mock exercise in the year 2017.

<b>S.No</b>	<b>Generating station</b>	<b>Date of mock drill</b>
1	Bhivpuri,Maharashtra	19 Feb 2017
2	CLIPL, Gujarat	5 Mar 2017
3	SSP, Gujarat	5 Mar 2017
4	Bargi, Madhyapradesh	23 May 2017
5	Pench, Madhyapradesh	6 June 2017
6	Khopoli, Maharashtra	9 Nov 2017
7	Bhira, Maharashtra	12 Nov 2017
8	Hasdeo Bango,Chhattisgarh	26 Nov 2017

In 501 OCC Gujarat SLDC informed that mock drill of Ukai is planned in Dec'17 and MP SLDC informed that OSP and ISP mock drills are planned in Dec'17. Gujarat and MP SLDCs may apprise OCC the present status of planning black start mock drills.

Constituents/regional entities are requested to plan the Mock exercise of their black start units and submit their plan for compliance of IEGC regulation 5.8(b).

**Discussion:**

- Gujarat informed that mock drill at Ukai is planned on 19<sup>th</sup> Dec'17.
- Maharashtra informed that mock drill at New Koyna is planned on 21<sup>st</sup> Dec'2017. Maharashtra also informed that mock drill at Uran could not be done in 2018 and planned in Feb'18.
- MP stated that due to CT blast at OSP, mock drill at OSP and ISP could not be done in 2017. The mock drill at OSP and ISP will be planned in first half of 2018.
- WRLDC and WRPC informed concerned utilities to carry out the black start mock drills at pending stations by the 31/12/17 to comply IEGC regulations.

**10. Telemetry issues**

Details of utilities whose data is reporting to WRLDC via unreliable communication links and whose data is highly intermittent is given below. These utilities may appraise OCC actions being initiated to ensure 100 % data availability to WRLDC.

*The updated status is as follows:*

Sr. no.	Node	Constraints	Remarks	Status given Utilities
1	BALCO	<p>Communication link is GPRS since commissioning even after permanent connectivity.</p> <p>Primary FO link upto Dharamjaygarh as per connectivity agreement to be expedited.</p> <p>Secondary path through PLCC needs to be established.</p>		-
2	Tillari	The telemetry of 220kV Tillari which have interfacing line with Goa grid is not available causing problems in drawl calculations of Goa and Maharashtra	Maharashtra may update the status	SLDC Maharashtra informed that issue will be resolved at the earliest
3	Maharashtra Hydro	Bhandardara stg. II, Bhira Tail race, Koyna DPH, Koyna I & II, Tillari, Vaitarna	Maharashtra may update the status	SLDC Maharashtra informed that issue will be resolved at the earliest

4	DNH	The telemetry of DNH not available since long	DNH may update the status	
5	SSP CPHH	-	NCA and PGCI may update the status	

**Item No. 10: Date and venue of next OCC meeting**

It is proposed to hold the 503<sup>rd</sup> OCC meeting on 17.01.2018 at WRPC, Mumbai.

*The Sub- Committee may like to note as above.*

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ANNEXURE A			
<u>LIST OF PARTICIPANTS OF 502nd OCC MEETING OF WRPC HELD AT WRPC, MUMBAI ON 12.12.17</u>			
Sl.No.	Organisation, Name & Designation	Mobile No.	E-mail Address
I	<b>WRPC</b>		
1	Shri A. Balan, M.S.	9483540528	<a href="mailto:ms-wrpc@nic.in">ms-wrpc@nic.in</a>
2	Shri J.K. Rathod, S.E.	9987910799	<a href="mailto:opc-wrpc@nic.in">opc-wrpc@nic.in</a>
3	Shri L.K.S. Rathore, E.E.	9833371844	<a href="mailto:lksr_ies@nic.in">lksr_ies@nic.in</a>
4	Shri Ratnesh Kr. Yadav, A.D.	9969948089	<a href="mailto:ratneshkumar7437@gmail.com">ratneshkumar7437@gmail.com</a>
5	Shri P. Peddi Reddy, A.D.	7840894702	<a href="mailto:peddireddy@nic.in">peddireddy@nic.in</a>
II	<b>GETCo. / GSECL</b>		
6	Shri Krishna R. Surati, E.E.	9687635623	<a href="mailto:krs131165@gmail.com">krs131165@gmail.com</a>
7	Shri G.J. Mistry, D.E.	9925213180	<a href="mailto:emisldc.getco@gebmail.com">emisldc.getco@gebmail.com</a>
III	<b>MSETCL / MSEDC/MahaGenco/MSPGCL</b>		
8	Shri Sanjay S. Kulkarni, C.E.	9819363329	<a href="mailto:drsanjaykulkarni@gmail.com">drsanjaykulkarni@gmail.com</a>
9	Shri Bulbule Arvind U., S.E.	9833383882	<a href="mailto:selmkalwa@gmail.com">selmkalwa@gmail.com</a>
10	Shri D.K. Rokade, S.E.	9167831551	<a href="mailto:dkrokade@gmail.com">dkrokade@gmail.com</a>
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12	Mrs. Shageena Arjumand, E.E.	9920162003	<a href="mailto:islamshageena@yahoo.in">islamshageena@yahoo.in</a>
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15	Shri Prashant B. Shinde, A.E.	7506956388	<a href="mailto:selmkalwa@gmail.com">selmkalwa@gmail.com</a>
IV	<b>MPPTCL / MPPGCL</b>		
16	Shri R.A. Sharma, A.C.E.	9425805269	<a href="mailto:rasharma_04@yahoo.co.uk">rasharma_04@yahoo.co.uk</a>
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18	Shri Debasish Chakraborty, E.E.	9425805257	<a href="mailto:deb1asish@gmail.com">deb1asish@gmail.com</a>
V	<b>CSPTCL</b>		
19	Shri Santosh Kumar Tiwari, S.E.	9926164212	<a href="mailto:sktiwari.cseb@gmail.com">sktiwari.cseb@gmail.com</a>
VI	<b>POSOCO/WRLDC</b>		
20	Shri K. Murali Krishna, D.G.M.	9869450219	<a href="mailto:kmuralikrishna@posoco.in">kmuralikrishna@posoco.in</a>
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VIII	<b>NTPC</b>		
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39	Shri B.C. Mahanta, A.G.M.	9425823414	<a href="mailto:bcmahanta@ntpc.co.in">bcmahanta@ntpc.co.in</a>
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45	Shri Rahul Bhor	9870016661	<a href="mailto:rahul.bhor@adani.in">rahul.bhor@adani.in</a>
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माह नवम्बर 2017 में आवृत्ति के आंकड़ों का विवरण  
 (पश्चिम क्षेत्र भार प्रेषण केन्द्र की आवृत्ति रिपोर्ट के आधार पर)  
FREQUENCY PARTICULARS DURING NOVEMBER 2017  
 (AS PER FREQUENCY REPORT OF WRLDC)

**1. INTEGRATED OVER AN-HOUR**  
 एक घंटे में समाकलित

1.1 MAXIMUM FREQUENCY अधिकतम आवृत्ति	50.07	Hz. BETWEEN 0600 Hrs & 0700 Hrs Hrs. ON 18.11.2017
1.2 MINIMUM FREQUENCY न्यूनतम आवृत्ति	48.80	Hz. BETWEEN 1400 Hrs & 1500 Hrs Hrs. ON 08.11.2017
1.3 AVERAGE FREQUENCY औसत आवृत्ति	49.97 Hz.	

**2. INSTANTANEOUS तात्कालिक**

2.1 MAXIMUM FREQUENCY अधिकतम आवृत्ति	50.20	Hz. AT 06:02:10 Hrs. ON 19.11.2017
2.2 MINIMUM FREQUENCY न्यूनतम आवृत्ति	49.62	Hz. AT 06:40:50 hrs Hrs. ON 07.11.2017

3. %AGE OF TIME WHEN FREQUENCY WAS आवृत्ति का समय प्रतिशत में	NOVEMBER 2017	OCTOBER 2017	SEPTEMBER 2017
3.1 BELOW 48.5 Hz. 48.5 हर्टज के नीचे	0.00	0.00	0.00
3.2 BETWEEN 48.5 Hz. AND 48.8 Hz. 48.5 हर्टज और 48.8 हर्टज के बीच	0.00	0.00	0.00
3.3 BETWEEN 48.8 Hz. AND 49.2 Hz. 48.8 हर्टज और 49.2 हर्टज के बीच	0.00	0.00	0.00
3.4 BETWEEN 49.2 Hz. AND 49.5 Hz. 49.2 हर्टज और 49.5 हर्टज के बीच	0.00	0.00	0.00
3.5 BETWEEN 49.5 Hz. AND 49.7 Hz. 49.5 हर्टज और 49.7 हर्टज के बीच	0.00	0.00	0.00
3.6 BETWEEN 49.7 Hz. AND 49.9 Hz. 49.7 हर्टज और 50.2 हर्टज के बीच	16.91	13.61	11.77
3.7 BETWEEN 49.9 Hz. AND 50.05 Hz. 49.9 हर्टज और 50.05 हर्टज के बीच	73.53	77.18	78.50
3.8 BETWEEN 50.05 Hz. AND 51.5 Hz. 50.05 हर्टज और 51.5 हर्टज के बीच	9.56	9.21	9.73
3.9 ABOVE 51.5 Hz. 51.5 हर्टज के ऊपर	0.00	0.00	0.00
4.1 NO. OF TIMES FREQUENCY TOUCHED 48.80 Hz. आवृत्ति 48.80 हर्टज को छूही	0	0	0
4.2 NO. OF TIMES FREQUENCY TOUCHED 48.60 Hz. आवृत्ति 48.60 हर्टज को छूही	0	0	0
4.3 NO. OF TIMES FREQUENCY TOUCHED 51.00 Hz. आवृत्ति 51.00 हर्टज को छूही	0	0	0

Voltage Profile during the month of Nov'2017

ANNEXURE 2.3

दिनांक	भोपाल		खडवा		इटारसी		दमोह		नागदा		इंदौर		ग्वालियर		रायपुर		रायगढ़					
	Date		Bhopal		Khandwa		Itarsi		Damoh		Nagda		Indore		Gwalior		Raipur		Raigarh			
		400kV		400kV		400kV		400kV		400kV		400kV		400kV		400kV		400kV		400kV		
	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम		
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	416	401	420	406	408	396	415	402	420	402	416	401	407	396	420	415	422	418	415	422	418	
2	416	401	421	404	409	394	415	404	419	399	416	399	408	393	420	414	424	417	414	424	417	
3	418	402	423	408	411	395	416	401	422	401	419	400	409	393	423	416	425	418	416	425	418	
4	418	400	424	406	411	393	416	404	423	399	420	399	406	390	422	414	424	418	414	424	418	
5	416	396	423	404	410	392	416	402	424	398	418	397	415	390	421	413	423	416	413	423	416	
6	417	399	424	405	410	393	416	402	420	399	418	398	413	397	422	412	426	418	412	426	418	
7	418	402	422	406	410	394	416	401	419	397	418	399	412	390	421	414	426	419	414	426	419	
8	416	402	422	404	409	394	419	405	420	395	417	398	410	391	420	414	424	418	414	424	418	
9	414	399	422	405	409	392	414	403	419	396	417	399	411	394	421	413	425	419	413	425	419	
10	420	400	424	406	412	393	416	403	423	396	420	400	408	396	422	414	426	419	414	426	419	
11	421	406	425	408	417	396	416	404	425	401	423	400	411	396	422	414	426	420	414	426	420	
12	418	404	422	410	412	401	417	403	420	403	419	404	406	394	423	414	427	421	414	427	421	
13	420	399	425	403	416	391	416	401	422	394	420	397	410	396	424	414	429	421	414	429	421	
14	422	403	424	406	417	397	417	403	421	396	420	400	410	395	422	414	426	419	414	426	419	
15	420	402	425	405	414	395	416	403	422	398	419	400	418	393	424	415	428	419	415	428	419	
16	420	404	425	409	415	396	417	403	421	401	422	404	408	395	423	415	426	420	415	426	420	
17	418	399	424	405	412	392	419	404	421	398	420	400	410	392	422	413	425	417	413	425	417	
18	420	402	426	407	414	395	420	410	423	396	421	401	409	395	424	414	427	419	414	427	419	
19	418	404	424	410	413	399	420	408	423	401	420	404	408	396	423	415	426	420	415	426	420	
20	420	403	424	409	413	396	419	406	421	401	419	402	413	394	422	412	425	418	412	425	418	
21	419	400	426	407	415	393	420	404	422	398	420	400	410	396	421	412	426	418	412	426	418	
22	422	399	426	406	414	394	422	404	422	400	421	400	411	392	423	414	427	419	414	427	419	
23	419	403	423	408	412	397	422	408	421	400	419	400	410	396	424	415	427	420	415	427	420	
24	419	401	423	405	411	393	421	409	421	398	419	397	408	395	425	416	426	420	416	426	420	
25	418	402	420	420	411	395	421	409	421	398	418	400	409	395	425	415	426	419	415	426	419	
26	419	403	420	420	411	396	422	409	421	401	419	402	412	397	425	417	428	421	417	428	421	
27	420	408	424	416	413	403	421	411	421	403	419	406	416	397	425	416	427	421	416	427	421	
28	421	403	426	407	417	397	421	407	423	397	422	399	411	398	425	415	426	419	415	426	419	
29	421	402	426	408	414	396	421	406	425	401	420	402	415	398	424	416	427	420	416	427	420	
30	420	404	423	408	413	397	422	409	421	399	419	402	414	395	425	416	426	419	416	426	419	
	422	396	426	403	417	391	422	401	425	394	423	397	418	390	425	412	429	416	412	429	416	

टिक्ट	सिलाई	तर्फा		धुले		परली		बोइसर		कलवा		कराइ		असोज		देहगाम			
		Date		Bhilai		Wardha		Dhule		Parli		Boisar		Kalwa		Karad		Asoi	
		400kV		400kV		400kV		400kV		400kV		400kV		400kV		400kV		400kV	
		अधिकतम	न्यूनतम																
		Max	Min																
1	416	412	425	417	432	409	429	408	424	406	431	407	427	413	415	404	439	400	
2	416	410	426	412	432	407	430	402	425	402	431	403	427	409	415	403	427	383	
3	419	412	428	416	433	413	430	407	424	412	430	414	428	413	415	404	427	415	
4	418	410	428	414	434	409	430	397	425	406	431	406	428	407	416	403	429	416	
5	417	410	424	412	431	408	433	405	424	410	430	413	429	412	416	405	429	419	
6	418	408	425	414	434	403	432	400	426	401	435	401	429	410	415	400	430	414	
7	418	410	422	412	434	403	429	402	425	402	433	404	428	413	416	401	428	416	
8	424	410	418	418	433	400	426	395	421	395	427	396	425	404	415	400	428	388	
9	418	409	426	413	430	402	426	398	420	396	425	399	425	406	414	400	428	414	
10	418	409	429	413	433	407	429	402	421	408	425	400	427	412	416	402	428	400	
11	418	409	428	413	432	407	427	395	422	401	429	402	428	404	417	403	429	416	
12	419	410	426	414	431	408	429	398	422	407	428	409	428	409	416	404	429	416	
13	420	410	426	414	433	408	429	401	423	405	430	404	429	409	416	403	429	391	
14	418	409	426	412	433	406	429	403	422	406	428	406	430	413	415	401	429	412	
15	420	410	428	412	433	409	428	403	423	404	429	403	430	410	416	403	429	388	
16	419	411	424	412	431	411	427	402	422	404	430	416	431	414	414	404	426	415	
17	418	410	425	409	434	408	428	399	422	410	422	416	431	414	415	403	427	400	
18	420	410	428	413	434	407	428	402	423	406	428	407	430	412	417	404	429	400	
19	419	412	427	415	435	408	428	402	422	409	428	411	432	412	417	406	429	417	
20	418	408	426	411	434	407	428	396	425	404	431	404	431	411	417	403	431	415	
21	417	409	427	412	434	409	428	399	424	403	431	400	431	413	416	403	429	416	
22	419	410	426	411	433	410	426	400	422	402	429	403	429	411	417	403	428	416	
23	420	412	427	412	432	412	429	402	426	406	433	396	429	412	416	403	430	416	
24	421	412	426	413	433	408	428	398	426	410	433	411	427	412	417	401	430	414	
25	421	412	426	412	432	409	429	397	424	407	432	410	428	411	418	402	430	415	
26	422	413	428	415	434	408	429	403	425	405	433	408	429	411	417	403	431	417	
27	421	413	425	413	432	412	427	401	423	404	430	389	427	412	416	404	431	417	
28	421	412	427	412	433	408	428	401	423	404	430	402	427	408	417	402	429	400	
29	420	411	427	416	433	410	428	404	424	404	431	404	427	408	416	403	430	416	
30	421	412	427	414	432	410	427	400	423	403	428	405	429	411	417	403	428	416	
	424	408	429	409	435	400	433	395	426	395	435	389	432	404	418	400	439	383	

दिनांक	कासोर		जेतपुर		अमरेली		वापो		मापुसा		कला		मगरवाडा		हज़ोरा		बोना		इंदौर		
	Kasor		Jetpur		Amreli		Vapi		Mapusa		Kala		Magarwada		Hazira		Bina		Indore		
		400kV		400kV		400kV		765kV		765kV											
	आधिकतम	न्यूनतम	आधिकतम	न्यूनतम	आधिकतम	न्यूनतम	आधिकतम	न्यूनतम	आधिकतम	न्यूनतम											
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max										
1	420	413	408	393	416	402	425	400	424	401	421	405	422	408	418	402	782	764	783	753	
2	421	412	410	395	419	402	426	404	425	405	422	400	423	404	418	401	785	762	782	751	
3	421	413	410	390	416	395	424	409	428	404	421	407	422	407	416	397	786	762	789	755	
4	422	412	411	396	416	401	425	405	428	405	422	402	424	403	418	394	783	758	790	752	
5	422	413	411	397	416	403	424	410	427	404	421	407	423	408	416	399	786	754	791	745	
6	422	411	412	395	418	402	427	403	428	410	424	400	425	401	419	398	782	756	787	747	
7	422	411	410	394	416	401	425	403	426	405	422	400	424	401	417	401	781	762	791	751	
8	422	411	411	395	415	401	423	397	424	401	419	393	421	392	418	398	781	758	784	747	
9	421	410	413	393	418	399	421	397	425	401	418	394	421	397	417	395	778	760	783	755	
10	421	411	412	398	417	400	423	407	428	407	420	405	421	408	418	398	787	761	791	757	
11	422	411	411	396	416	402	424	402	428	399	420	399	421	405	418	401	790	766	793	761	
12	421	411	411	386	423	400	423	407	430	403	420	404	421	408	417	400	779	761	790	761	
13	421	411	411	397	418	403	425	406	431	409	422	404	423	407	419	397	788	754	790	745	
14	421	410	412	393	418	401	424	406	428	408	421	403	422	406	416	398	788	759	794	747	
15	423	412	411	399	417	406	425	405	428	406	421	407	422	405	419	394	791	754	796	747	
16	421	413	410	397	415	404	423	404	427	399	419	401	422	402	416	395	786	764	798	759	
17	421	413	411	402	416	404	424	408	428	405	421	408	422	412	417	394	782	756	795	760	
18	422	412	412	395	417	401	424	407	429	407	421	404	422	407	418	397	788	760	791	753	
19	422	414	413	399	418	404	423	408	433	411	421	405	422	408	417	400	784	762	784	756	
20	422	411	413	397	419	402	426	405	430	409	422	402	425	404	418	395	782	758	783	756	
21	422	407	412	396	420	398	425	405	429	405	422	401	422	404	418	395	788	759	789	755	
22	418	408	413	401	419	407	423	403	426	405	419	399	421	403	418	399	787	750	789	745	
23	418	410	412	401	417	405	426	406	427	408	423	403	424	405	418	396	784	756	785	753	
24	419	406	412	401	418	407	426	408	425	398	422	406	423	408	418	392	781	757	787	747	
25	423	410	417	399	419	405	425	407	424	407	421	404	423	406	420	395	783	759	783	760	
26	424	412	416	401	418	402	427	406	429	401	422	404	424	406	419	399	787	762	784	751	
27	423	412	416	399	418	403	425	405	428	411	421	402	424	403	418	399	791	765	789	763	
28	421	411	411	401	416	407	424	404	427	406	421	400	421	403	417	396	788	762	788	749	
29	422	412	413	401	418	404	424	404	428	407	421	401	423	404	419	397	791	762	791	752	
30	422	411	411	397	416	404	423	404	427	405	419	401	422	403	417	396	787	756	793	752	
	424	406	417	386	423	395	427	397	433	398	424	393	425	392	420	392	791	750	798	745	

टिलांक	सासन		सतना		तमनार		कोटरा		वडोदरा		टर्गा		ग्वालियर		सिपत		सियोनि		वर्धा			
	Date		Sasan		Satna		Tamnar		Kotra		Vadodara		Durg		Gwalior		Sipat		Seoni		Wardha	
			765Kv		765Kv		765Kv		765Kv		765Kv		765Kv									
	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम	अधिकतम	न्यूनतम								
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min								
1	765	756	769	762	795	786	796	786	791	770	804	783	789	766	768	760	787	767	798	771		
2	766	756	767	762	797	784	799	784	791	766	806	779	791	764	769	758	789	763	801	762		
3	769	756	777	767	799	788	801	787	794	769	807	785	793	763	771	760	791	767	802	772		
4	766	755	777	777	798	786	799	787	794	766	807	786	786	759	770	756	789	760	803	772		
5	766	753	777	777	795	783	796	783	793	765	801	777	794	758	768	756	782	756	795	759		
6	764	754	777	760	804	786	806	786	790	760	809	785	791	765	770	757	787	759	800	769		
7	763	754	767	757	810	790	810	790	795	764	812	784	791	756	773	754	784	758	800	766		
8	764	753	761	760	799	789	800	789	791	758	799	782	791	759	770	761	783	756	797	756		
9	763	754	760	760	803	791	804	792	789	759	808	786	788	763	769	758	786	761	801	765		
10	765	755	772	760	804	789	805	789	794	765	809	783	791	767	770	758	790	760	803	766		
11	766	756	773	760	804	792	806	792	796	760	812	791	794	767	771	758	792	763	803	773		
12	763	755	769	756	804	795	805	795	791	766	809	792	785	765	769	760	788	767	801	776		
13	767	754	774	753	811	791	813	793	800	761	817	789	794	765	770	757	788	760	804	770		
14	770	756	779	758	803	789	804	788	792	760	809	782	792	764	770	758	788	760	801	766		
15	772	757	784	757	806	789	807	789	794	763	813	783	801	762	770	757	789	758	802	761		
16	770	758	780	759	802	792	802	791	791	769	805	787	789	766	769	759	783	763	795	769		
17	766	754	776	756	800	785	800	784	792	765	804	776	793	759	768	754	783	754	797	759		
18	768	754	775	754	806	788	807	787	797	768	810	782	791	764	772	758	791	774	802	770		
19	767	756	775	758	801	792	802	792	796	769	805	787	789	767	770	761	786	765	799	768		
20	766	754	773	752	800	788	801	788	791	765	806	787	793	763	768	756	786	762	800	768		
21	767	757	776	759	803	787	805	787	796	765	810	782	793	767	769	756	791	759	808	764		
22	768	752	776	752	804	789	805	790	795	763	809	786	793	759	770	756	788	756	798	765		
23	768	754	773	753	804	790	806	790	792	765	809	784	791	763	770	758	786	760	800	761		
24	764	753	770	754	803	789	804	790	794	762	808	784	790	764	775	757	790	760	800	770		
25	766	754	774	755	802	790	803	790	795	763	804	787	792	764	772	759	787	762	796	769		
26	767	756	770	760	805	790	807	791	793	766	811	786	795	768	774	761	791	764	802	769		
27	771	757	780	760	804	791	806	792	793	768	808	786	799	766	775	761	790	766	796	770		
28	767	757	773	756	801	789	803	789	796	760	804	787	793	769	776	760	793	763	800	769		
29	767	756	772	752	805	789	807	789	794	762	812	785	797	767	776	761	795	765	805	773		
30	768	754	773	752	803	788	804	788	793	766	809	783	795	761	774	761	792	763	802	768		
	772	752	784	752	811	783	813	783	800	758	817	776	801	756	776	754	795	754	808	756		

## ANNEXURE 2.5

### नवम्बर 2017 के दौरान पश्चिम क्षेत्र में विद्युत कटौतियां/ पाबंदियां Power Cut/Restrictions in Western Region for the month of November-2017

#### **क : गुजरात Gujarat**

**1 उद्योगों के लिये विद्युत कटौतियां**

#### **1 Power Cut/ Restriction on Industries**

- a) All industries are allowed to run their units on all days of week & if they want to avail staggered holiday, then they will have to staggered on notified day only & cannot avail as per their choice.
- b) All industries are required to keep their recess timings staggered.

**2 कृषि व ग्रामीण क्षेत्रों को विद्युत आपूर्ति**

#### **2. Power supply to Agricultural & Rural Sectors**

- a) 08 Hrs. power supply in staggered form in rotation of day & night is given to Ag. Single Phase supply given during rest of 16 Hrs by providing LSTC.
- b) Jyotigram Yojana 24 hrs.

**3 अन्य जानकारी**

#### **3. Any other information: NIL.**

#### **ख : मध्य प्रदेश Madhya Pradesh**

**1 उद्योगों के लिये विद्युत कटौतियां / पाबंदियां , राज्य में भार नियमन आदि**

#### **1 Power Cut/ Restriction on Industries, Load Shedding in the state etc**

विवरण Details	विद्युत कटौती की मात्रा Quantum of power cut (MW)	पावन्दी का समय Restriction Timing		प्रति दिन कुल ऊर्जा कटौती Total Energy Cut (MUs /day)
		से From दिनांक Date	तक To दिनांक Date	
(a) Power Restrictions(Evening peak Hour) on non continuous process HT/LT Industries	शून्य Nil	शून्य Nil	शून्य Nil	शून्य Nil
(b) भार नियमन Load Shedding	शून्य Nil	शून्य Nil	शून्य Nil	शून्य Nil
(c) अन्य जानकारी Other information 1. Weekly Off 2. Staggering of power supply	शून्य Nil शून्य Nil	शून्य Nil शून्य Nil	शून्य Nil शून्य Nil	शून्य Nil शून्य Nil

**2 कृषि क्षेत्र को विद्युत आपूर्ति**

#### **2. Power supply to Agricultural Sector: -**

विवरण Details	से From दिनांक Date	तक To दिनांक Date	प्रति दिन आपूर्ति घंटे Supply Hours per day		
			Max. (Hrs)	Min. (Hrs)	Average (Hrs)
2.1 Three-Phase Supply(DLF)	01.11.2017	30.11.2017	23:31	23:12	23:23
2.1 Three-Phase Supply(Irrigation)	01.11.2017	30.11.2017	23:38	23:21	23:32
2.1 Three-Phase Supply(Mixed)	01.11.2017	30.11.2017	09:54	09:50	09:52

### 3 अन्य जानकारी

#### 3. Any other information

शहरी क्षेत्रों में नियमन विद्युत कटौतियां

Scheduled Power cuts in Urban Areas

विवरण Details	से From दिनांक Date	तक To दिनांक Date	ओसत प्रतिदिन आपूर्ति घंटे			Average Supply Hours per day
			Max. (Hrs)	Min. (Hrs)	Average (Hrs)	
3.1 Commissionary H. Qtrs.	01.11.2017	30.11.2017	23:53	23:38	23:48	
3.2 District Head Qtrs.	01.11.2017	30.11.2017	23:56	23:48	23:53	
3.3 Tehsil Head Qtrs.	01.11.2017	30.11.2017	23:51	23:40	23:47	

#### ग : महाराष्ट्र Maharashtra

1 उध्योगों के लिये विद्युत कटौतियां / पार्वदियां , राज्य में भार नियमन आदि

#### 1. Power Cut/ Restriction on Industries, Load Shedding in the state etc

विवरण Details	विद्युत कटौती की मात्रा Quantum of power cut (MW)	पावनी का समय Restriction Timing		प्रति दिन कुल ऊर्जा कटौती Total Energy Cut (MUs/day)
		From	To	
(a) Power Cuts/Restriction on HT/ LT Industries	शून्य Nil	शून्य Nil	शून्य Nil	शून्य Nil
(b) Load Shedding From 01.11.17 to 30.11.17	@ 0-46 MW	00.00	24.00	@ 0.02MUs/day
(c) Any other information 1. Weekly Off 2. Staggering of power supply Industrial Staggering LS withdrawn from 03/02/2012	शून्य Nil	शून्य Nil	शून्य Nil	शून्य Nil

2 कृषि क्षेत्र को विद्युत आपूर्ति

#### 2. Power supply to Agricultural Sector

	From	To	Supply Hours per Day		
			Max.	Min.	Average
	(Date)	(Date)	(HRs)	(HRs)	(HRs)
2.1 Three-Phase Supply	01.11.2017	30.11.2017	8	8	8
2.2 Single-Phase Supply	01.11.2017	30.11.2017	18	18	18
2.3 Remarks/Notes/Any other information.	8 hours w.e.f dt.17.09.2017				

#### 3 अन्य जानकारी Any other information:

There is no load shedding on industrial feeders in Maharashtra

### घ : छत्तीसगढ़ Chhattisgarh:

1 उध्योगों के लिये विद्युत कटौतियां / पावंडियां , राज्य में भार नियमन आदि

### 1 Power Cut/ Restriction on Industries, Load Shedding in the state etc

विवरण Details	विद्युत कटौती की मात्रा Quantum of power cut (MW)	पावन्दी का समय Restriction Time		प्रति दिन कुल ऊर्जा कटौती Total Energy Cut (MUs /day)
		से From	तक To	
<b>(A) Scheduled</b>				
(a) (i) Power Cuts/ Restriction on HT Industries	00.00(Av)	-	-	-
(ii) Power Cuts/Restriction on LT Industries	00.00(Av)	-	-	-
(iii) Power Cuts/Restriction on Rural	00.00 (Av)	-	-	-
(iv) Agriculture pump*	00.00 (Av)	00.00	00.00	0.00
(v)Urban/ Sub-Urban	00.00(Av)	-	-	-
(iv)Town feeders(C-1to C-6)	00.00 (Av)	-	-	-
<b>(B) Un-Scheduled</b>				
(a) Load Shedding	1) Rural: 55.40 MW (Avg) For 125:23 Hrs 2.Town Feeders (C-1to C-6 & X) : 0.00(Av)	-	-	0.230
	3. Industries 84.96 MW (Avg) For 17:53 Hrs			0.040
Total Energy Cut/day				0.270
( b) Any other information 1. Weekly Off/staggering of power supply	-	-	-	-

### 2 कृषि क्षेत्र को विद्युत आपूर्ति

### 2. Power supply to Agricultural Sector

विवरण Details	से From दिनांक Date	तक To दिनांक Date	प्रति दिन आपूर्ति घंटे Supply Hours per day		
			Max. (Hrs)	Min. (Hrs)	Average (Hrs)
2.1 Three-Phase Supply	01.11.2017 to 30.11.2017			18.00	
2.2 Single-Phase Supply	-	-	-	-	-
2.3 Remarks/Note/	-	-	-	-	-

### 3 अन्य जानकारी / Any other information: शून्य Nil

# पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(भारत सरकार का उद्यम)  
POWER SYSTEM OPERATION CORPORATION LIMITED

(A Government of India Enterprise)



पश्चिम क्षेत्र भार प्रेषण केन्द्र

एफ-३, सेन्ट्रल रोड, एम.आई.डी.सी. एरिया, मरोल, अन्धेरी (पूर्व), मुंबई - 400 093.

दुरभाष : 022-28202691 • फैक्स : 022-28235434, 28202630 • ई-मेल : wrldc@posoco.in

WESTERN REGIONAL LOAD DESPATCH CENTRE

F-3, Central Road, MIDC Area, Marol, Andheri (East), Mumbai – 400 093.

Phone : 022-28202691 • Telefax : 28235434, 28202630 • E-mail : wrldc@posoco.in

CIN : U40105DL2009GOI188682

संलग्नक Annex-2.6

## अनिवार्य युनिट आऊटेज का नवम्बर2017का विस्तारित व्यौरा

Details of forced unit outages during the month of Nov.2017

अनु क्रमांक Sl.No	युनिट Unit	संघटक Constituent/IP P	क्षमता Cap.MW	From समय दिनांक		To समय दिनांक		Reason
				Time	Date	Time	Date	
1.	Ukai-2	GSECL	120	16:00	09-04-2016	Still out	Still out	Long restoration period
2.	Ukai 1	GSECL	120	03:18	07-05-2016	Still out	Still out	Excitation problem
3.	एसटोपोएस STPS 2	GSECL	120	13:05	24-09-2016	Still out	Still out	Bunker problem
4.	एसटोपोएस STPS 1	GSECL	120	18:00	26-09-2016	Still out	Still out	RSD
5.	BECL 2	GSECL	250	16:34	22-08-2017	Still out	Still out	Drum level high
6.	GPPC 1	GSECL	351	05:00	07-10-2017	22:00	06-11-2017	Non availability of gas
7.	GPPC 2	GSECL	351	23:47	25-10-2017	Still out	Still out	RSD
8.	Hazira(Extn)	GSECL	351	23:04	26-10-2017	11:14	07-11-2017	RSD
9.	DGBP 3	GSECL	375	06:00	27-10-2017	Still out	Still out	RSD
10.	DGBP 2	GSECL	112	06:00	27-10-2017	08:31	15-11-2017	RSD
11.	GPEC 3	GSECL	218	15:29	02-11-2017	13:40	06-11-2017	RSD
12.	GPEC-2	GSECL	218	11:24	03-11-2017	09:43	05-11-2017	RSD/ Costly gas
13.	BECL-1	GSECL	250	12:35	04-11-2017	04:25	05-11-2017	Combustion temperature low
14.	Ukai-3	GSECL	200	11:58	05-11-2017	20:38	06-11-2017	BTL
15.	GPEC-2	GSECL	218	20:02	05-11-2017	14:38	06-11-2017	RSD /Costly gas
16.	GPEC-3	GSECL	218	19:15	06-11-2017	07:00	07-11-2017	RSD
17.	GPEC 1	GSECL	218	20:18	06-11-2017	09:07	07-11-2017	RSD
18.	GIPCL STG-2	GSECL	165	22:00	06-11-2017	10:00	07-11-2017	RSD
19.	GPEC-2	GSECL	218	15:50	06-11-2017	05:56	08-11-2017	RSD
20.	GPPC 1	GSECL	351	22:01	06-11-2017	18:25	08-11-2017	Rotor earth fault
21.	GPEC-3	GSECL	218	19:23	07-11-2017	06:30	08-11-2017	RSD
22.	GPEC 1	GSECL	218	15:15	07-11-2017	06:01	11-11-2017	RSD

23.	SLPP-3	GSECL	125	23:00	07-11-2017	11:30	11-11-2017	BTL
24.	BECL-1	GSECL	250	07:30	08-11-2017	17:30	09-11-2017	Main steam temperature low
25.	GPEC-3	GSECL	218	08:22	08-11-2017	06:07	09-11-2017	RSD
26.	GPEC-2	GSECL	218	12:32	08-11-2017	06:00	09-11-2017	RSD
27.	GIPCL STG-2	GSECL	165	22:00	08-11-2017	12:00	09-11-2017	RSD
28.	GPEC-2	GSECL	218	07:27	09-11-2017	08:04	10-11-2017	RSD
29.	GIPCL STG-2	GSECL	165	21:53	09-11-2017	12:30	10-11-2017	RSD
30.	GIPCL STG-2	GSECL	165	19:00	10-11-2017	12:43	11-11-2017	RSD
31.	GPEC 2	GSECL	218	19:00	10-11-2017	08:25	14-11-2017	RSD
32.	GPPC 1	GSECL	351	00:12	10-11-2017	09:00	15-11-2017	RSD
33.	उत्तरण एसटोजी UTRAN STG II- 1	GSECL	375	10:13	09-11-2017	18:28	13-11-2017	RSD
34.	GPEC-1	GSECL	218	07:45	11-11-2017	15:01	12-11-2017	RSD
35.	Hazira(Extn)	GSECL	351	21:16	11-11-2017	Still out	Still out	RSD
36.	GIPCL STG-2	GSECL	165	22:22	11-11-2017	15:21	13-11-2017	RSD, Costly generation
37.	एएलटोपोएस ALTPS 1	GSECL	125	00:31	13-11-2017	01:13	16-11-2017	Leakage of ash cooler line
38.	GPEC-1	GSECL	218	18:48	12-11-2017	09:00	13-11-2017	RSD / Costly Generation
39.	GPEC 1	GSECL	218	18:23	13-11-2017	09:40	19-11-2017	RSD
40.	उत्तरण एसटोजी UTRAN STG II 1	GSECL	375	19:57	14-11-2017	05:51	23-11-2017	RSD costly gas
41.	GIPCL STG 2	GSECL	165	00:00	15-11-2017	06:06	19-11-2017	RSD costly gas
42.	GPPC 1	GSECL	351	09:00	15-11-2017	18:15	26-11-2017	RSD costly gas
43.	DGBP 1	GSECL	107	10:44	15-11-2017	Still out	Still out	RSD
44.	GIPCL STG 1	GSECL	145	16:25	15-11-2017	09:28	21-11-2017	Bus fault at Nandesari
45.	BECL 1	GSECL	250	01:09	17-11-2017	04:24	03-12-2017	Lignite fuel problem
46.	SLPP 1	GSECL	125	23:15	18-11-2017	11:27	23-11-2017	BTL
47.	SUGEN 3	GSECL	382	23:28	18-11-2017	Still out	Still out	Major O/H work
48.	एएलटोपोएस ALTPS 1	GSECL	125	14:45	19-11-2017	11:55	23-11-2017	BTL
49.	GPEC 3	GSECL	218	14:58	21-11-2017	Still out	Still out	RSD
50.	उत्तरण स्टेज UTRAN STG II 1	GSECL	135	19:28	23-11-2017	11:42	01-12-2017	RSD
51.	GIPCL STG 2	GSECL	165	18:55	24-11-2017	12:05	28-11-2017	RSD
52.	GPEC 1	GSECL	218	19:34	25-11-2017	09:39	30-11-2017	RSD
53.	Gandhinagar 4	GSECL	120	00:00	28-11-2017	07:00	05-12-2017	To attend various defects
54.	GPPC 1	GSECL	351	07:00	29-11-2017	18:43	03-12-2017	Turbine vibration high.
55.		GSECL	125	09:33	30-11-2017	Still out	Still out	BTL

	SLPP 4							
56.	ACBIL-1	CSPGCL	135	13:24	10-11-2017	16:28	13-11-2017	BTL
57.	CGPL 40	CGPL	830	02:38	08-11-2017	22:46	14-11-2017	HP BP problem
58.	AECO D	TPGL	120	00:02	19-10-2017	08:38	07-11-2017	RSD
59.	Koradi-6	MAHAGENCO	210	01:02	20-03-2015	Still out	Still out	Economic shutdown
60.	परलो Parli 4	MAHAGENCO	210	19:47	05-07-2015	Still out	Still out	Economic shutdown
61.	परलो Parli 5	MAHAGENCO	210	14:55	06-07-2015	Still out	Still out	Economic shutdown
62.	डबल्यूपीसाएल WPCL 1	MAHAGENCO	135	17:03	16-02-2016	Still out	Still out	Low Schedule
63.	डबल्यूपीसाएल WPCL 2	MAHAGENCO	135	21:46	29-02-2016	Still out	Still out	Change over against unit-3 as per scheduled dispatch
64.	Bhusawal 2	MAHAGENCO	210	19:35	14-06-2016	Still out	Still out	BTL
65.	PIONEER(262+127) 1	MAHAGENCO	388	17:45	07-02-2017	Still out	Still out	Low schedule
66.	डबल्यूपीसाएल WPCL 3	MAHAGENCO	135	17:40	26-08-2017	01:52	30-11-2017	BTL
67.	Khaparkheda 3	MAHAGENCO	210	00:00	12-09-2017	Still out	Still out	Poor Coal Receipt
68.	चंद्रपुर Chandrapur 3	MAHAGENCO	210	00:45	25-10-2017	23:54	26-11-2017	BTL
69.	चंद्रपुर Chandrapur 4	MAHAGENCO	210	04:45	29-10-2017	19:20	26-11-2017	Auxiliary supply fail
70.	नासेक Nasik 3	MAHAGENCO	210	02:35	31-10-2017	10:45	17-11-2017	Governor system problem
71.	Bhusawal 3	MAHAGENCO	210	22:37	31-10-2017	22:55	29-11-2017	coal shortage
72.	परलो PARLI 6	MAHAGENCO	250	00:00	01-11-2017	19:30	14-11-2017	Coal shortage from 1st Nov
73.	परलो PARLI 7	MAHAGENCO	250	00:00	01-11-2017	19:30	14-11-2017	Coal shortage from 1st Nov
74.	डबल्यूपीसाएल WPCL 4	MAHAGENCO	135	00:02	01-11-2017	00:17	22-11-2017	BTL
75.	Koradi 7	MAHAGENCO	210	00:05	01-11-2017	16:36	26-11-2017	Poor coal receipt
76.	चंद्रपुर Chandrapur 9	MAHAGENCO	500	08:00	03-11-2017	02:09	07-11-2017	BTL
77.	Khaparkheda -5	MAHAGENCO	500	08:56	08-11-2017	10:57	11-11-2017	BTL
78.	KORADI-2-9	MAHAGENCO	660	14:44	13-11-2017	11:37	18-11-2017	Tripped due to Hydraulic oil pressure low, converted to BTL
79.	नासेक Nasik 5	MAHAGENCO	210	04:45	16-11-2017	Still out	Still out	Flame failure
80.	Khaparkheda 1	MAHAGENCO	210	19:23	18-11-2017	Still out	Still out	Coal shortage
81.	Khaparkheda 2	MAHAGENCO	210	12:14	20-11-2017	19:00	29-11-2017	Tripped on protection alarm/ kept out on Coal shortage
82.	परलो PARLI 7	MAHAGENCO	250	21:00	20-11-2017	07:32	25-11-2017	Coal Shortage
83.	परलो PARLI 8	MAHAGENCO	250	12:50	24-11-2017	12:45	27-11-2017	BTL
84.	चंद्रपुर Chandrapur 7	MAHAGENCO	500	14:00	25-11-2017	02:01	30-11-2017	Secondary preheater problem
85.	Khaparkheda 4	MAHAGENCO	210	19:19	25-11-2017	Still out	Still out	Flame failure due to CHP bunkering problem
86.	Jaigad 1	MAHAGENCO	300	08:50	28-11-2017	22:53	01-12-2017	CWL Duct leakage
87.	KORADI-2	MAHAGENCO	660	05:00	29-11-2017	Still out	Still out	Withdrawn due to BTL
88.	Paras 3	MAHAGENCO	250	22:55	29-11-2017	Still out	Still out	Coal bunkering problem
89.	Paras 4	MAHAGENCO	250	00:01	30-11-2017	10:48	03-12-2017	Coal bunkering problem
90.	Jaigad 4	MAHAGENCO	300	07:16	30-11-2017	Still out	Still out	Turbine vibration

91.	ट्रॉम्बे Trombay8	TPC	250	19:40	18-11-2017	Still out	Still out	Tripped while withdrawing unit. Unit was withdrawing due to turbine inspection which was planned outage up to 13.12.2017
92.	RGPPL-1B	RGPPL	320	23:00	31-03-2014	Still out	Still out	Dry preservation/Gas shortage
93.	RGPPL-1A	RGPPL	320	13:30	8-07-2014	Still out	Still out	Less requisition
94.	RGPPL 2B	RGPPL	230	03:50	17-10-2017	15:20	24-11-2017	Unit Change Over;Gas shortage
95.	RGPPL 2A	RGPPL	230	17:29	17-10-2017	Still out	Still out	Unit Change Over;Gas shortage
96.	Satpura II 7	MPPGCL	210	02:20	14-09-2017	Still out	Still out	Economizer tube leakage
97.	बिना JP Bina 2	MPPGCL	250	11:59	06-10-2017	18:24	14-11-2017	BTL
98.	Satpura II 6	MPPGCL	200	14:15	14-10-2017	Still out	Still out	Coal shortage
99.	Sanjay Gandhi TPS-4	MPPGCL	210	11:27	06-11-2017	12:35	14-11-2017	HP turbine abnormality sound
100.	सिंगाजी Singaji 1	MPPGCL	600	23:55	20-11-2017	17:57	24-11-2017	Coal shortage.
101.	सिंगाजी Singaji 2	MPPGCL	600	13:25	23-11-2017	03:56	29-11-2017	Station transformer trip
102.	MB Power	MPPGCL	600	11:40	07-11-2017	20:00	08-11-2017	Vibration problem
103.	सिंगाजी Singaji 1	MPPGCL	600	17:35	28-11-2017	07:43	02-12-2017	Economizer tube leakage
104.	MB Power 1	MPPGCL	600	11:45	29-11-2017	Still out	Still out	PA fan blade pitch problem.
105.	कोरबा पांचेम KORBA(W) EXTN	CSPGCL	500	04:30	03-11-2017	12:00	07-11-2017	BTL
106.	Marwa TPS 1	CSPGCL	500	09:58	13-11-2017	01:19	23-11-2017	GT Replacement work
107.	APL Mundra 6	Adani Power Ltd	660	20:20	20-10-2017	Still out	Still out	Turbine bearing temperature high.
108.	APL Mundra5	Adani Power Ltd	660	23:43	01-11-2017	Still out	Still out	APH Á'guide VAN temperature high
109.	एपोएल तिरोड़ा APML Tiroda 3	Adani Power Ltd	660	20:59	17-11-2017	Still out	Still out	HP heater bellow problem
110.	तिरोड़ा APML Tiroda 5	Adani Power Ltd	660	20:40	19-11-2017	Still out	Still out	Leakage in seal air duct.
111.	टोपोपो AMRAVATI TPP(INDIABULL)-3	RATTAN POWER INDIA LTD	270	02:01	17-09-17	Still out	Still out	Coal shortage
112.	टोपोपो AMRAVATI TPP(INDIABULL)-2	RATTAN POWER INDIA LTD	270	00:00	10-11-2017	Still out	Still out	Coal shortage
113.	JPL Stg-II 4	JPL	600	16:13	24-06-2017	Still out	Still out	Loss of all fuel due to heavy jerk
114.	JPL Stg-II I	JPL	250	00:05	25-06-2017	Still out	Still out	RSD / less schedule
115.	स्टेज JPL Stg-I 2	JPL	250	00:02	01-10-2017	10:24	14-11-2017	Due to Non availability of coal
116.	जेपीएल स्टेज JPL Stg-II 2	JPL	600	14:42	05-11-2017	05:24	20-11-2017	Ash evacuation problem / Low schedule at present
117.	स्टेज JPL Stg-I 3	JPL	250	21:44	17-11-2017	Still out	Still out	Coal shortage

118.	स्टेज JPL Stg-II 3	JPL	600	17:41	25-11-2017	00:00	28-11-2017	Less schedule
119.	स्टेज JPL Stg-II 3	JPL	600	00:00	28-11-2017	Still out	Still out	Ash evacuation problem
120.	EPGL 2	ESSAR	600	20:25	24-10-2017	Still out	Still out	Coal shortage
121.	EPGL 1	ESSAR	600	23:54	31-10-2017	Still out	Still out	Coal shortage
122.	एस्सार( ) ESSAR(Mahan) I	ESSAR	600	00:08	23-11-2017	23:48	30-11-2017	BTL
123.	UNOSUGEN-1	TPGL	382	21:55	04-03-2016	Still out	Still out	RSD
124.	DGEN-52	TPGL	400	20:00	25-11-2016	Still out	Still out	No schedule
125.	DGEN-51	TPGL	400	19:28	02-12-2016	Still out	Still out	No schedule
126.	DGEN-53	TPGL	400	19:12	23-12-2016	Still out	Still out	Low schedule
127.	जौएमआरछत्तीशगढ GMR_CHHATISGARH 1	GMR	685	02:00	22-07-2017	Still out	Still out	No Schedule; GMR intimated no PPA on 10-09-2017
128.	जौएमआर छत्तीशगढ GMR CHHATISGARH 2	GMR	685	14:15	15-10-2017	Still lout	Still out	No schedule.
129.	कडबलूपासाएल KWPCL 1	KWPCL	600	22:12	22-05-2017	Still out	Still out	Stator Earth fault protection operated
130.	RKM Power 2	RKMPPL	360	19:13	22-07-2017	18:36	21-11-2017	Low Schedule
131.	RKM Power 2	RKMPPL	360	19:50	21-11-2017	Still out	Still out	Due to turbine tripped
132.	केएसके महानदो KSK Mahanadi 1	KMPCL	600	04:37	03-11-2017	19:35	08-11-2017	Bottom ash evacuation problem
133.	केएसके महानदो KSK Mahanadi 1	KMPCL	600	13:39	2111-2017	Still out	Still out	Coal Shortage
134.	धारीवाल Dhariwal(STU) 1	DIL	300	17:31	27-10-2017	Still out	Still out	Drum level high
135.	Sasan 3	SASAN	660	21:55	01-11-2017	03:56	05-11-2017	PA fan problem
136.	SKS Power 2	SKS	300	02:03	03-11-2017	07:56	08-11-2017	Boiler Tube Leakage
137.	CGPL 4	CGPL	830	00:07	04-11-2017	13:07	07-11-2017	BTL
138.	DB Power 2	DBPL	600	14:03	03-11-2017	08:52	05-12-2017	Due to high Hydrogen pressure drop rate in generator
139.	टोआरएन एनाजे TRN Energy 1	ACBIL	300	16:31	18-11-2017	21:45	21-11-2017	ID fan vibration
140.	Jhabua Power 1	JHABUAP	600	17:15	13-11-2017	22:33	17-11-2017	Coal shortage
141.	IEPL I	IEPL	270	23:15	21-11-2017	Still out	Still out	Tripped due to turbine vibration high
142.	लंकोLanco 2	LANCO	300	22:30	25-11-2017	Still out	Still out	oil leakage in turbine lube oil line
143.	कॉप्स KAPS 2	NPCIL	220	14:09	01-07-2015	Still out	Still out	Nuclear reactor side problem
144.	कॉप्स KAPS 1	NPCIL	220	08:52	11-03-2016	Still out	Still out	Reactor side problem
145.	प्स TAPS 4	NPCIL	540	19:55	23-04-2017	05:13	10-11-2017	BI-Annual maintenance and routine surveillance test
146.	प्स TAPS 1	NPCIL	160	19:09	04-06-2017	Still out	Still out	Refueling
147.	Gandhar GT ST 1	NTPC	219	00:11	29-10-2017	00:00	09-11-2017	Boiler inspection

148.	Mouda 1	NTPC	500	17:30	30-10-2017	09:48	13-11-2017	Coal shortage
149.	Mouda 2	NTPC	500	20:30	31-10-2017	12:24	09-11-2017	Coal Shortage
150.	कावास Kawas GT 2A	NTPC	106	23:52	05-11-2017	00:00	16-11-2017	Combustion inspection
151.	Gandhar GT ST-3	NTPC	219	17:37	09-11-2017	20:45	10-11-2017	Flame failure due to gas supply line problem
152.	सोलापुर एसटीपीएस Solapur STPS-1	NTPC	660	23:11	10-11-2017	07:05	13-11-2017	BTL
153.	वीएसटीपीएस VSTPS-7	NTPC	500	16:49	10-11-2017	18:21	12-11-2017	BTL
154.	Gandhar GTST 3	NTPC	219	20:45	10-11-2017	05:34	14-11-2017	RSD
155.	वीएसटीपीएस VSTPS-7	NTPC	500	18:51	12-11-2017	00:49	13-11-2017	Tripped while changeover of Auxiliary supply from ST to UAT.
156.	Mouda 2	NTPC	500	22:28	15-11-2017	14:57	20-11-2017	PAPH-2B support bearing problem and also coal shortage
157.	Gandhar GT ST 2	NTPC	219	00:27	17-11-2017	06:00	20-11-2017	Less schedule taken out on RSD
158.	Kawas GT 1A	NTPC	106	19:12	18-11-2017	12:37	21-11-2017	RSD
159.	सोलापुर एसटीपीएस Solapur STPS 1	NTPC	660	13:10	19-11-2017	06:27	03-12-2017	Coal Shortage
160.	Gandhar GT ST 2	NTPC	219	06:00	20-11-2017	01:00	01-12-2017	Under B-inspection
161.	Kawas GT 1A	NTPC	106	19:59	21-11-2017	Still out	Still out	RSD
162.	केएसटीपीएस KSTPS 5	NTPC	500	00:05	22-11-2017	Still out	Still out	AOH
163.	MOUDA 3	NTPC	660	23:52	22-11-2017	16:50	29-11-2017	BTL
164.	Kawas ST 1C	NTPC	106	15:00	25-11-2017	Still out	Still out	RSD
165.	Kawas GT 1B	NTPC	106	16:31	25-11-2017	Still out	Still out	RSD

Note: Units out for more than 72 hrs are only included.

# नियोजित युनिट आऊटेज का नवम्बर2017 का विस्तारित ब्यौरा

## Details of planned unit outages during the month of Nov.2017

क्रमांक Sl.No	युनिट Unit	Constituent/IP P	क्षमता Cap.MW	From समय दिनाक		To समय दिनाक		Reason
				Time	Date	Time	Date	
1.	ट्रॉम्बेTrombay 6	TPC	500	00:00	06-03-2016	Still out	Still out	Unit 6 is kept under economic shutdown since 4th May'16, 00:00hrs after AOH
2.	वानकबोरीWanakbori 3	GSECL	210	00:00	25-07-2017	06:44	01-11-2017	AOH
3.	ALTPS 2	GSECL	125	00:26	30-10-2017	12:30	02-12-2017	AOH
4.	चंद्रपुरChandrapur 5	MAHAGENCO	500	09:20	01-11-2017	Still out	Still out	AOH
5.	सिंगाझीSingaji 1	MPPGCL	600	00:01	02-10-2017	14:25	17-11-2017	AOH
6.	कोरबा पार्श्चम KORBA(W) CSETCL 1	CSPGCL	210	23:50	18-11-2017	Still out	Still out	AOH
7.	कोरबा पार्श्चम KORBA(W) CSETCL 4	CSPGCL	210	23:28	23-10-2017	10:54	20-11-2017	AOH
8.	धारीवाल Dhariwal(CTU) 2	DIL	300	00:01	25-10-2017	20:43	20-11-2017	AOH
9.	केएसटीपीएस KSTPS 5	NTPC	500	00:05	22-11-2017	Still out	Still out	AOH

## ANNEXURE 2.8

### Power System Analysis of Gujarat State for the month Of November-2017



Gujarat Energy Transmission Corporation Limited

[ An ISO 9001 : 2008 Company ]

#### Sector wise Installed Capacity & Generation

##### Installed Capacity in MW (Sector-wise)

Installed Capacity (MW)	State Sector	Private Sector	Central Sector	Wind Farm	Solar	Biomass	Private Mini Hydro	Total Gujarat
30-Nov-16	6371.67	8161.86	5904.54	4306.53	1108.94	41.10	8.56	25903.20
30-Nov-17	5516.67	6411.86	6198.34	5483.45	1482.85	41.10	8.56	27142.83

##### Sector-wise Generation in MUs

Sector	GSECL	Private	Central	WEG	Solar	Biomass	Private Mini Hydro	Total MUs
Nov-16	1250.29	4000.29	2227.05	258.66	147.56	2.08	4.36	7890.29
Nov-17	2419.62	3577.04	2708.99	612.11	167.67	3.33	4.98	9393.73

Generation break - up in MW for maximum demand catered during the month November- 17.

Date	MW	Time
10-Nov-17	15232	14:00

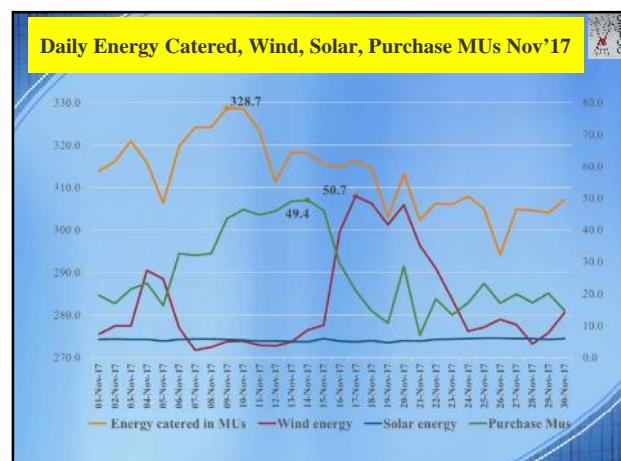
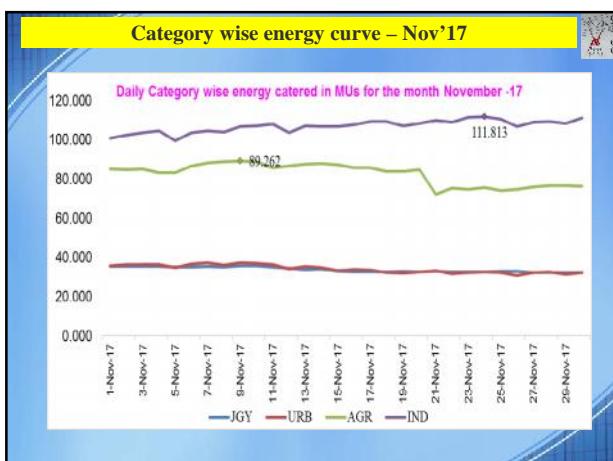
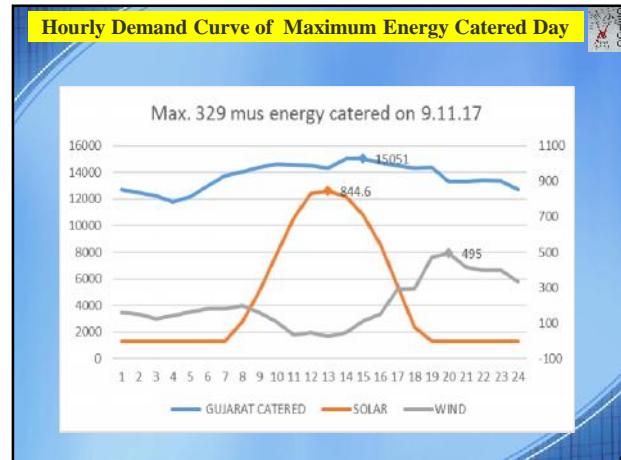
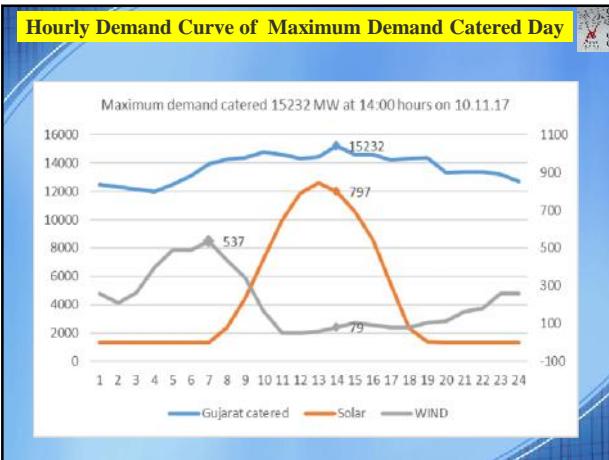
GSECL (Hydro)	GSECL (Thermal and Gas)	IPP / CPP	Private Mini Hydro	C.S	Wind	Solar	Biomass	Total
140	3562	5723	7	5018	79	697	6	15232

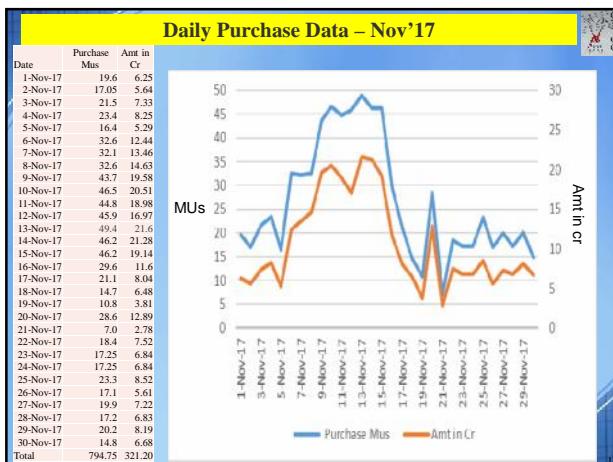
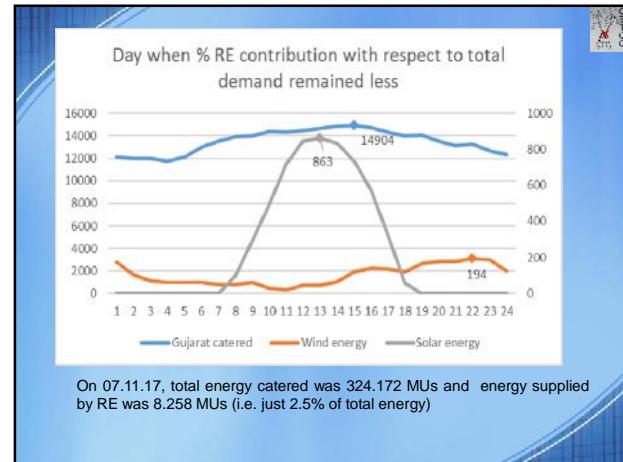
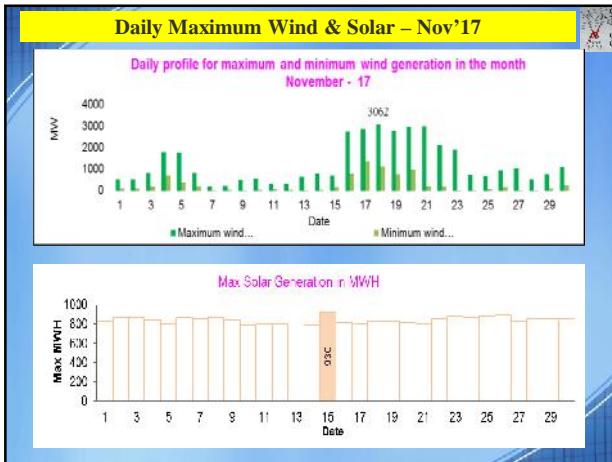
#### Daily Maximum & Minimum Demand Curve



#### Difference between Maximum and Minimum catered in a day during November - 17







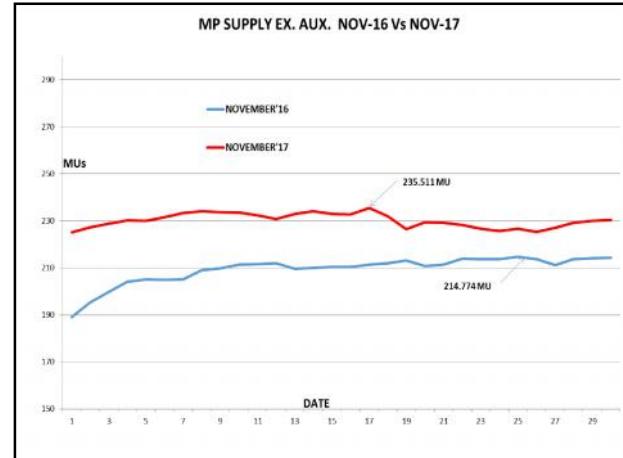
**Gas based units Generation data – Nov'17**

Unit	Hrs of working	Generation in MWH
GSEG-2	106.24	27844.00
GPPC-1	94.25	25934.48
DGB-1	329.21	23886
DGB-2	375.29	29711
DGB-3	0	0
Utran Stage - 2	102.42	23448
GIPCL GT-1	714.11	21067.81
GIPCLGT-2	131.20	3776.16
GIPCL GT-3	718.40	22422.71
GIPCL STG-1	679.55	22811.74
GIPCL GT-4	110.27	8370.63
GIPCL STG-2	88.55	3700.97

**Major 400 KV Elements outages facilitated – Nov'17**

Outage particular	Out date/time	In date/time	Reason
400 KV DEHGAM-PIRANA(PG) LINE NO-2	23.11.17  09:50	14.11.17  20:19	FOR LILLO WORK AT 400KV NIKOL-2(TPL) S/S BOTH LINE CHARGED DENGAM TO NICOL SS & NOCOL TO PIRANA PG SS
400 KV HADALA - VADINAR LINE NO-1	10.11.17  08:50	10.11.17  15:46	For LILLO work of 400KV kalavad S/S. Outage demanded by EE const. Jamnagar
400 KV AMRELI - JETPUR LINE NO.1	10.11.17  08:40	10.11.17  17:55	For 400kv Amrell Jetpur line-1- 400kv Bus-1 PG Iso. (29A) V-pint assembly replacement work.
400 KV BUS 1 AMRELI	10.11.17  10:30	10.11.17  17:25	For 400kv Amrell Jetpur line-1- 400kv Bus-1 PG Iso. (29A) V-pint assembly replacement work.
400 KV Charanka - Veloda line No. 2	06.11.17  09:10	06.11.17  18:20	For stringing work of new 400KV Banaskantha - Sankhari D/C line at section 29/0 to 30/0
400 KV Charanka - Veloda line No. 1	06.11.17  09:05	06.11.17  18:25	For stringing work of new 400KV Banaskantha - Sankhari D/C line at section 29/0 to 30/0
220 KV TAPS – Vapi line	22.11.17  10:02	02.12.17  18:07	For 220 KV TAPS – Vapi & 220 KV Vapi – KAPP line-2 Shifting work
220 KV KAPP – VAPI line 2	22.11.17  09:42	02.12.17  17:20	For 220 KV TAPS – Vapi & 220 KV Vapi – KAPP line-2 Shifting work
<b>APL HVDC POLE -1 outage was facilitated from 27.11.17 to 30.11.17 on daily basis for insulator replacement work</b>			

**Thank you**

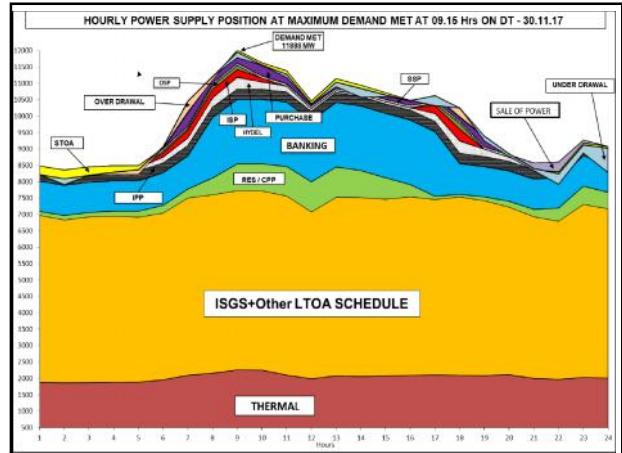


ENERGY AVAILABLE DURING MAXIMUM MP SUPPLY (235.51 MU) IN NOVEMBER-2017 on 17.11.2017		
S.NO.	PARTICULARS	MU
1.	STATE THERMAL	48.733
2.	STATE HYDEL	5.383
3.	IPP (STATE)	7.425
4.	CENTRAL SECTOR	62.41
5.	IPP (INTER STATE)	63.375
6.	RAILWAY	5.067
7.	RENEWABLE ENERGY	7.373
8.	OTHERS	-0.784
9.	BANKING / PURCHASE / SALE	37.905
10.	DEVIATION	-1.375

MAX. & MIN. MP DEMAND FOR NOVEMBER-2017									
STATE DEMAND DETAILS									
MAXIMUM DEMAND MET							MINIMUM DEMAND MET		
DATE	TIME	MAXIMUM DEMAND MET in MW	FREQUENCY	UNRESTRICTED DEMAND in MW	LOAD SHEDDING	MIN DEMAND in MW	DATE	TIME	
30.11.17	09.15	11888	49.91	11920	0	7688	24.11.2017	21:45	

**SOURCES AVAILABLE DURING PEAK DEMAND 11888 MW IN NOVEMBER-2017 on 30.11.2017 at 09:15 Hrs.**

S.NO.	PARTICULARS	MW
1.	STATE THERMAL	2253
2.	STATE HYDEL	659
3.	IPP (STATE)	318
4.	CENTRAL SECTOR	2669
5.	IPP (INTER STATE)	2653
6.	RAILWAY	213
7.	RENEWABLE ENERGY	822
8.	OTHERS	-78
9.	BANKING / PURCHASE / SALE	2359
10.	DEVIATION	19

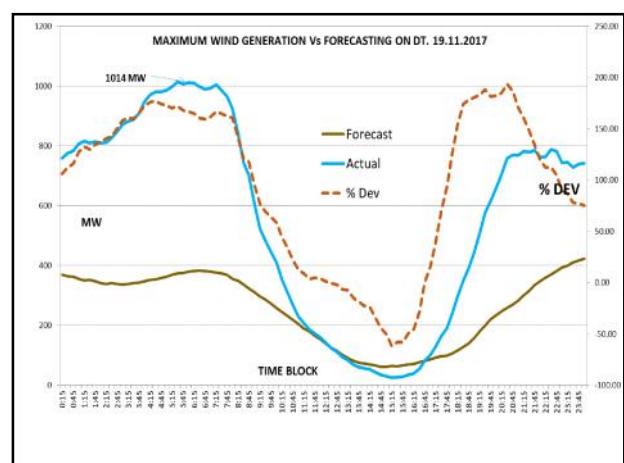
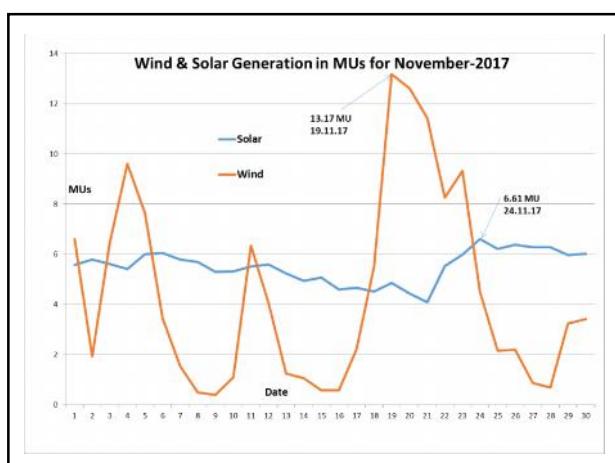
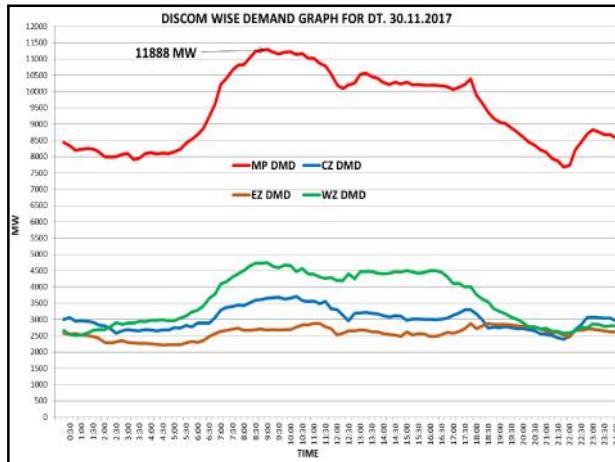


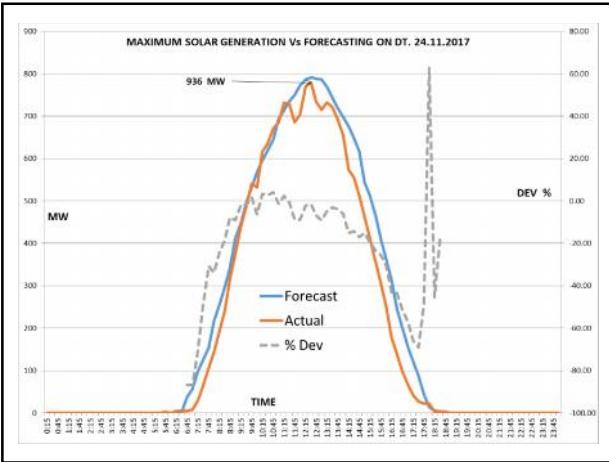
COMPARISON OF MAXIMUM DEMAND MET NOV-17 AND NOV-16  
(AVERAGE DIFFERENCE 1311 MW)



**ENTITY WISE MAX. & MIN. MP DEMAND FOR NOVEMBER-2017**

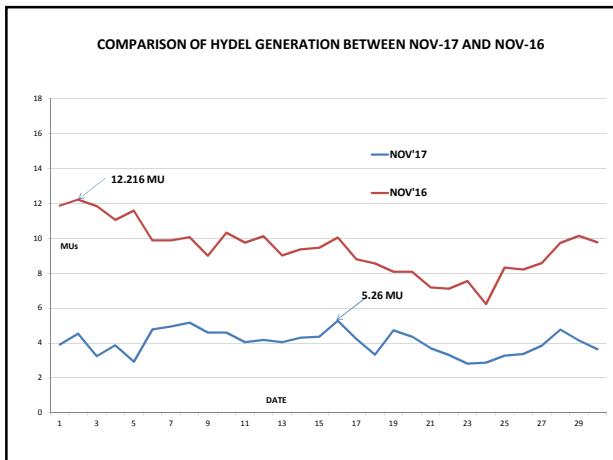
DISCOME WISE DEMAND DETAILS									
S.N O.	ENTITY	MAXI MUM DEMA ND MET In MW	RESTRICT ED DEMAND in MW	LOA D SHE DDI NG	DATE	TIME	MIN DEMA ND in MW	DATE	TIME
1	EAST DISCOM	2958	2966	0	30.11.17	09:15	2461	24.11.17	21:45
2.	CENTRAL DISCOM	3748	3758	0	30.11.17	09:15	2477	24.11.17	21:45
3	WEST DICOM	4947	4960	0	30.11.17	09:15	2549	24.11.17	21:45
4	RAILWAY	235	236	0	30.11.17	09:15	201	24.11.17	21:45





### FRL & MDDL OF HYDEL POWER STATION OF MP

S.NO.	NAME	FRL	MDDL	RESERVOIR LEVEL AS ON 30.11.17
1.	GANDHISAGAR	1312.00 ft.	1250.00 ft.	1296.83
2.	PENCH	490.00 Mtr.	464.00 Mtr.	477.40
3.	BARGI	422.76 Mtr.	403.50 Mtr.	420.65
4.	TONS	280.50 Mtr.	277.00 Mtr.	279.10
5.	BIRSINGHPUR	477.00 Mtr.	471.00 Mtr.	476.86
6.	RAJGHAT	371.00 Mtr.	361.50 Mtr.	367.85
7.	DEVLONE	341.64 Mtr.	323.10 Mtr.	337.60
8.	JHINNA	341.64 Mtr.	329.86 Mtr.	337.70
9.	MADIKHEDA	346.25 Mtr.	320.05 Mtr.	329.92
10.	ISP	262.13 Mtr.	243.23 Mtr.	253.21
11.	OSP	196.60 Mtr.	193.30 Mtr.	192.68



MADHYA PRADESH FREQUENCY RESPONSE CHARACTERISTICS								
				Analysis		Time	Frequency	
						Starting from	To	
<b>EVENT:</b> Generation Loss of 1000 MW						12.11.2017 07:14:10	50.00	
<b>A)</b> GENERATION AREAS						12.11.2017 07:16:00	49.91	
Sr No	Particulars	Dimension	STP_08	STP_10	STP_11	SGTPS_1	SGTPS_2	SGTPS_3
1	Actual Net Interchange before the Event	MW	159.26	189.67	202.25	155.27	166.59	177.58
2	Actual Net Interchange after the Event	MW	159.26	192.46	205.86	156.27	166.92	178.91
3	Change in Net Interchange (2 - 1)	MW	0.00	3	4	1	0	1
4	Generation Loss (+/-) Load Throw off during the Event	MW	0	0	0	0	0	0
5	Control Area Response (4:3)	MW	0.00	-2.79	-3.61	-1.00	-0.33	-1.33
6	Frequency before the Event	Hz	50.00	50.00	50.00	50.00	50.00	50.00
7	Frequency after the Event	Hz	49.91	49.91	49.91	49.91	49.91	49.91
8	Change in Frequency (7-6)	Hz	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09
9	Frequency Response Characteristic (5 / 8)	MW/Hz	0	31	40	11	4	15
10	Net System Demand met before the Event	MW	0	0	0	0	0	0
11	Initial Generation before the Event (10 - 1)	MW	159	190	202	155	167	178
12	Ideal load response assuming 4% per Hz (0.04*Row 10)	MW/Hz	0.0	0.0	0.0	0.0	0.0	0.0
13	Ideal generator response assuming 5% drop per Hz (40% of Row 11)	MW/Hz	63.7	75.9	80.9	62.1	66.6	71.0
14	Composite ideal response (12 + 13)	MW/Hz	63.7	75.9	80.9	62.1	66.6	71.0
15	Percentage ideal response (9/14)	%	0.0%	40.9%	49.6%	17.9%	5.5%	20.8%

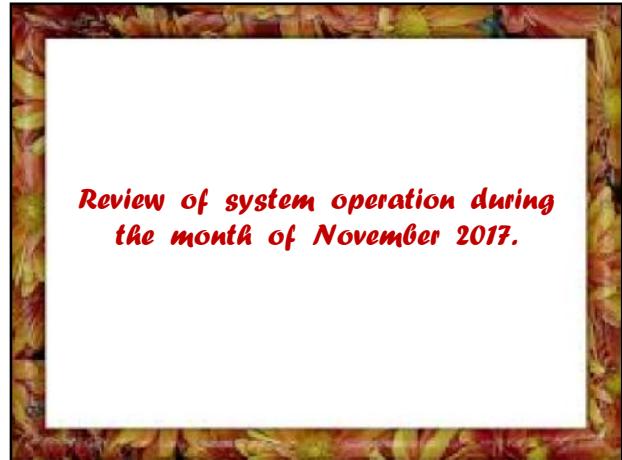
MADHYA PRADESH FREQUENCY RESPONSE CHARACTERISTICS									
		Analysis	Time	Frequency					
Starting from		12.11.2017		50.00					
To		12.11.2017		49.91					
<b>EVENT: Generation Loss of 1000 MW</b>									
<b>A) GENERATION AREAS</b>									
Sr No	Particulars	Dimension	SGTPS_5	SSTPS_2	ATPS	JBBINA_1	TONS_3	ISP_4	ISP_5
1	Actual Net Interchange before the Event	MW	499.75	319.57	211.67	173.50	100.35	119.20	120.70
2	Actual Net Interchange after the Event	MW	498.29	319.99	211.06	173.30	100.35	119.20	120.70
3	Change in Net Interchange (2 - 1)	MW	-1	0	-1	0	0	0	0
4	Generation Loss (+) / Load Throw off (-) during the Event	MW	0	0	0	0	0	0	0
5	Control Area Response (4-3)	MW	1.46	-0.42	0.61	0.20	0.00	0.00	0.00
6	Frequency before the Event	Hz	50.00	50.00	50.00	50.00	50.00	50.00	50.00
7	Frequency after the Event	Hz	49.91	49.91	49.91	49.91	49.91	49.91	49.91
8	Change in Frequency (7-6)	Hz	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09
9	Frequency Response Characteristic (5-8)	MW/Hz	-16	5	-7	-2	0	0	0
10	Net System Demand met before the Event	MW	0	0	0	0	0	0	0
11	Internal Generation before the Event (10 - 1)	MW	500	320	212	174	100	119	121
12	Ideal load response assuming 4% per Hz (0.04*Row 10)	MW/Hz	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Ideal generator response assuming 5% drop.....40% per Hz (40% of Row 11)	MW/Hz	199.9	127.8	84.7	69.4	40.1	47.7	48.3
14	Composite ideal response (12 + [3])	MW/Hz	199.9	127.8	84.7	69.4	40.1	47.7	48.3
15	Percentage ideal response (9/14)	%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%

### SUMMARY OF MP SYSTEM FOR THE MONTH OF NOVEMBER - 2017

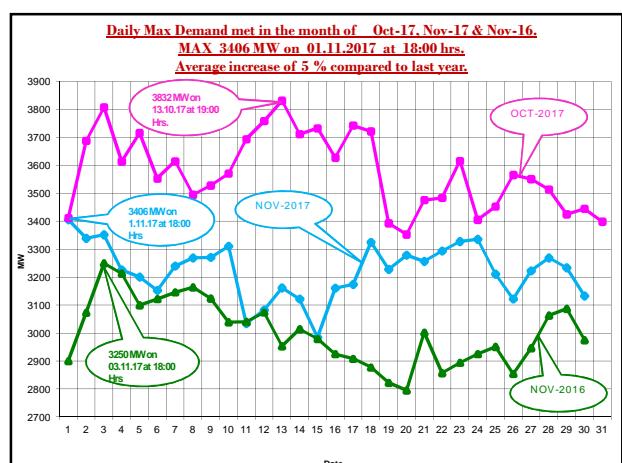
1. Peak Demand was 11888 MW on 30th November 2017 at 09:15 Hrs.
2. Maximum Hydel Generation in the month of Nov-17 is 12.216MU.
3. Maximum Wind injection for the month of November-2017 was 1014 MW.
4. Maximum Solar injection for the month of November-2017 was 936 MW.
5. Load shedding - 0 MW.
6. 220 KV Satna (MP) – Chhatarpur Ckt LILO at 765 KV S/s Satna (PGCIL) resulted in overloading relief to 220 KV Satna – Satna(PGCIL) interconnector – I, II & III. New circuit were charged as below-
  - i. 220 KV Satan – Satna(PGCIL) Interconnector – IV, charged at 12:09 Hrs. on 26.11.2017.
  - ii. 220 KV Satna (PGCIL) – Chhatarpur Ckt, charged at 21:07 Hrs. on 23.11.2017.
  - iii. 220 KV Tons – Satna Ckt made LILO at 220 KV S/s Kotar, hence at present double ckt available between 220 KV Tons to Kotar and 220 KV Satna to Kotar.
7. After rectification work of 400/220 KV, 315 MVA ICT – IV at 400 KV S/s Indore, transformer charged at 13:46 Hrs. on 02.12.2017 and load taken on 14:55 Hrs. on 03.12.2017.

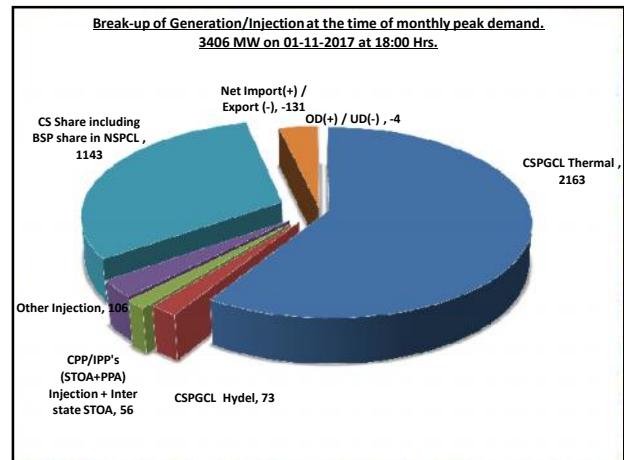
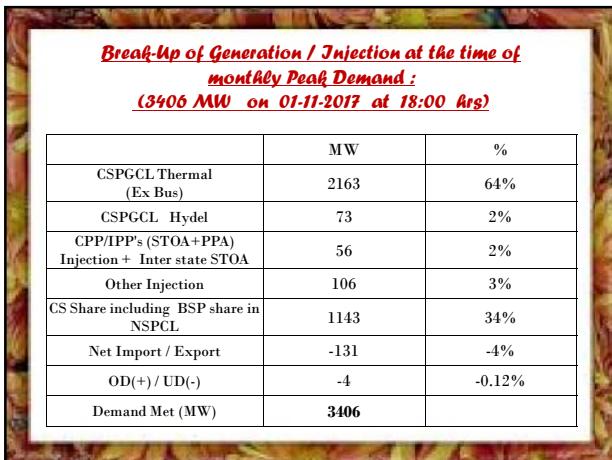
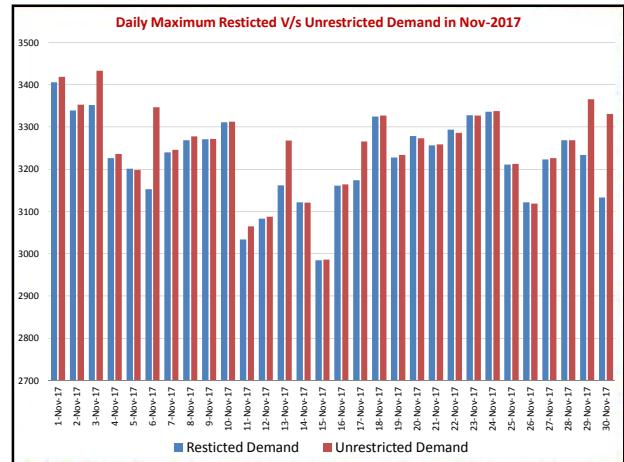
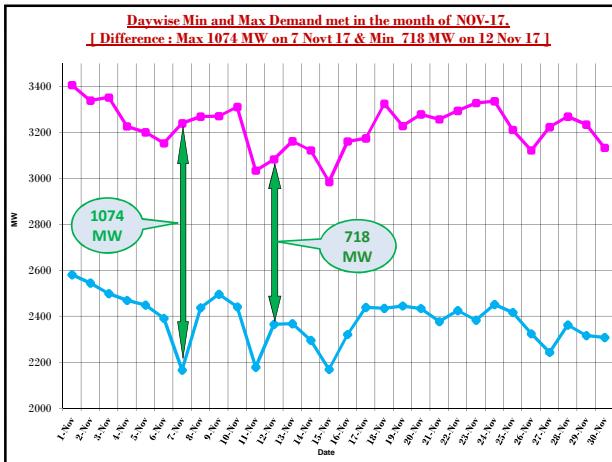


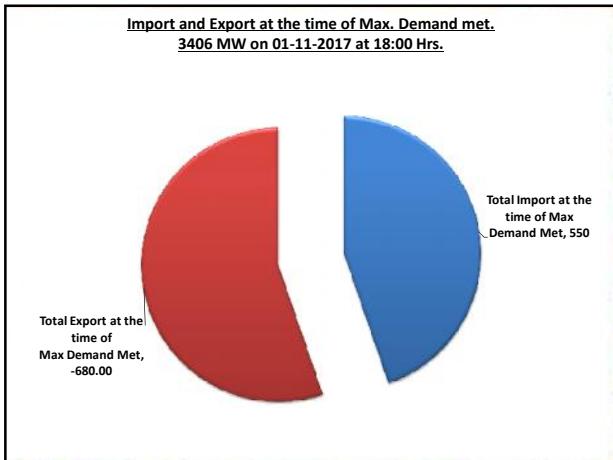
Thank You !



<b>Demand Pattern.</b>				
	OCT-17	NOV-17	NOV-16	% Change compared to previous year
Max. Demand Met	3832 MW 13-10-2017 19:00	<b>3406 MW 01-11-2017 18:00</b>	3250 MW 03-11-16 18:00	5%
Max. Unrestricted Demand at the time of Max. Demand Met	3910 MW	<b>3419 MW</b>	3239 MW	6%
Min. Demand Met	2274 MW 28-10-2017 12:45	<b>2166 MW 07-11-2017 07:45</b>	1973 MW 22-11-16 14:00	10%
Max. Unrestricted Demand	3910 MW 13-10-2017 19:00	<b>3433 MW 03-11-2017 19:15</b>	3256 MW 07-11-16 18:00	5%







**SOLAR POWER INJECTION (At 132 KV)**  
From Apr-17 to Nov-17

		M/s ACME Raipur Solar Private Limited	M/s Azure power Dhamdha	M/s Parampujya
APR-17	MU	4.624	4.650	---
MAY-17	MU	4.595	4.107	---
JUN-17	MU	3.680	3.335	---
JUL-17	MU	2.894	2.991	---
AUG-17	MU	3.288	3.243	---
SEP-17	MU	3.43	3.62	---
OCT-17	MU	3.677	4.045	2.641
NOV-17	MU	3.735	3.699	7.961





**Outline**

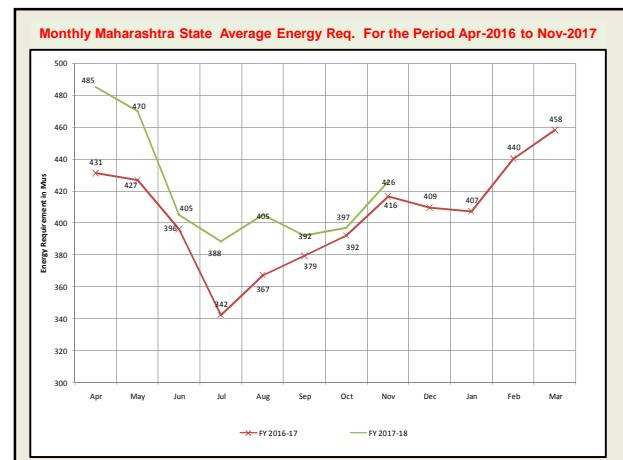
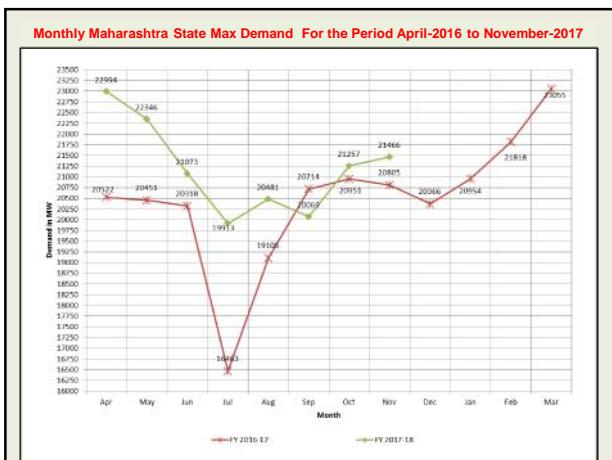
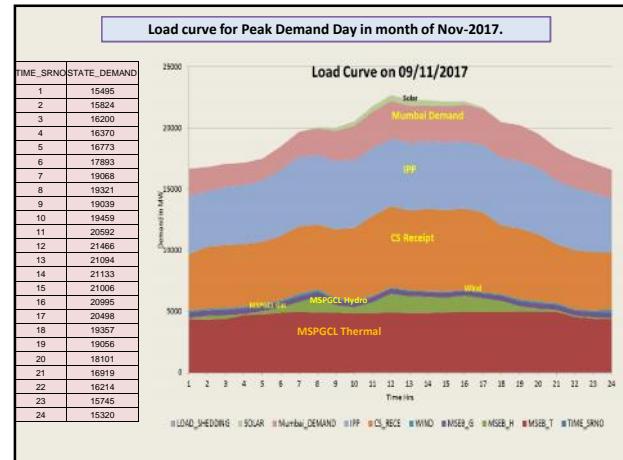
- Maharashtra System Demand Scenario for the month of November-2017
- Peak Demand, Generation Availability and resources.
- Load curve for Peak Demand Day in month of Nov.-2017.
- Frequency profile for the month of Nov.- 2017
- Load curve of state for demand and daily Energy Requirement for the month of Nov-2017 and comparison.
- Summary of daily generation and demand pattern.
- Highlights for the month of Nov.-2017.

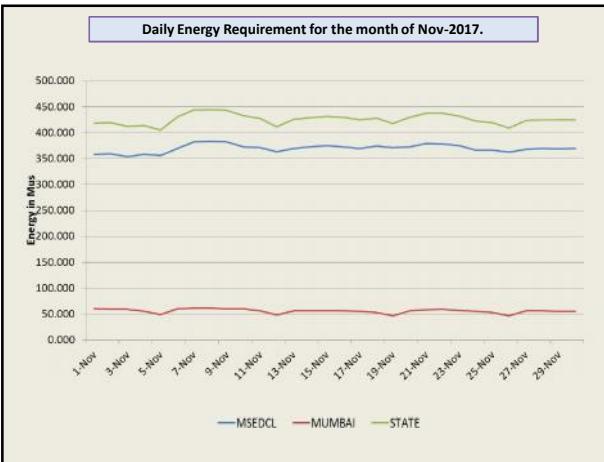
Maharashtra System Demand Scenario for the month of November-2017								
STATE Demand Details								
Month	Peak Demand (MW)	Catered Demand (MW)	Load Shedding /Shortfall (MW)	Date	Time (Hrs)	Min. Demand (MW)	Date	Time(Hrs)
Nov-17	21466	21466	0	09.11.2017	12:00	14157	26.11.2017	24:00
MSEDCL Demand Details (including open access )								
Month	Peak Demand (MW)	Catered Demand (MW)	Load Shedding /Shortfall (MW)	Date	Time (Hrs)	Min. Demand (MW)	Date	Time(Hrs)
Nov-17	18401	18401	0	09.11.2017	12:00	12112	05.11.2017	24:00
Mumbai Demand Details (including open access )								
Month	Peak Demand (MW)	Catered Demand (MW)	Load Shedding /Shortfall (MW)	Date	Time (Hrs)	Min. Demand (MW)	Date	Time(Hrs)
Nov-17	3088	3088	0	08.11.2017	12:00	1529	17.11.2017	4:00

Peak Demand Generation Availability (in MW)	
Particulars	Nov-2017
MSPGCL Thermal	09-Nov-2017
MSPGCL Hydro	12:00 Hrs
MSPGCL Gas	4906
<b>MSPGCL Total generation</b>	<b>1552</b>
Central Sector Share	413
Central Sector Receipt	6871
WIND	6606
CPP/IPP	99
SOLAR	6629
Exchange with Mumbai	5548
MSEDCL DEMAND MET	478
MSEDCL DEMAND (INCL. LS)	-1224
Load Shedding (LS)	18401
MSEDCL DEMAND (INCL. LS)	0
TPCL GENERATION	18401
R INFRA GENERATION	1342
MUMBAI DEMAND	499
<b>STATE DEMAND MET</b>	<b>3065</b>
<b>STATE DEMAND</b>	<b>21466</b>
Frequency (Hz)	21466

System Performance Report for the month of Nov-2017 ➔

Peak Demand Sources on 09.11.2017 (in MW)	
Particulars	Nov-17
	09-Nov-17
	12:00 Hrs
Total Thermal Generation	11682
Total Hydro Generation	1983
Total Gas Generation	595
Wind injection	99
Solar injection	478
Centra Sector Receipt	6629
Load Shedding	0
Total Demand	21466





**Highlights for the month of November - 2017**

- Peak Demand was **21466 MW** on 9<sup>th</sup> November and Maximum Energy Catered was **445 Mus** on 8<sup>th</sup> for the month of November-2017
- Total Energy Catered by State is **12776 Mus** for the month of Nov-2017.
- Maximum Wind injection for the month of November was **1389 MW** on 4<sup>th</sup> Nov 2017 at 11:00hrs.
- Maximum Solar injection for the month of November was **524 MW** on 6<sup>th</sup> Nov 2017 at 12:00 hrs.
- Black start Mock drill conducted by TPC at Khopoli HPS on 12.11.2017.
- Koyna Water utilization for the month of November was **4.433 TMC**

**Highlights for the month of November - 2017**

- M/s Ideal Energy Projects Limited(IEPL), 1x270 MW Coal Based Thermal Power Plant near Village Bela, is back into operation after 2013 on dt 13.11.2017.
- New 400/220kV 500 MVA ICT -5 charged at 400 kV Padgha on dt 27.11.2017 at 19:32 hrs.
- AMP of HVDC Poles Chandrapur-Padghe (Pole 1- 08-14 Nov , Pole 2 - 26 Nov - 3 Dec 2017 & BI Pole - 01 Dec to 03 Dec 2017)
- Koradi TPS Unit 5 (200 MW) de-commissioned w.e.f 02.03.2017.
- Bhusawal TPS Unit 2 (210MW) de-commissioned w.e.f 01.04.2017.
- Under voltage Load Trimming Scheme taken in service on dt 14.09.2017 at 400 kV Lambot.

**State Load Dispatch Center Airoli (MSETCL)  
Details of Maharashtra System for Nov-2017**

Date	MSECL			Mumbai			STATE			MHDCL			WID Generation			Wind Generation			Batteries (in MWh)			Requirements (in MWh)			Reg. Price (₹/MWh)		NET TMC
	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Max Dem (MW)	L2 Dem (MW)	Wind Dem (MW)	Reg. Price (₹/MWh)	Gen. Price (₹/MWh)				
1-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
2-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
3-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
4-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
5-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
6-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
7-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
8-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
9-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
10-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
11-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
12-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
13-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
14-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
15-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
16-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
17-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
18-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
19-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
20-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
21-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
22-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
23-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
24-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
25-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
26-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
27-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
28-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
29-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
30-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
31-Nov-2017	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	
Average	1000	0	0	360	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	1000	0	0	300	300	300	300	300	

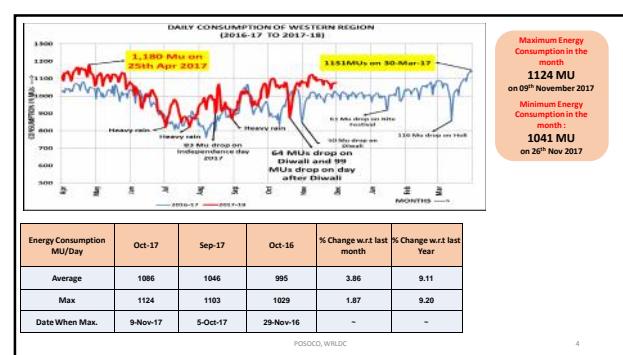
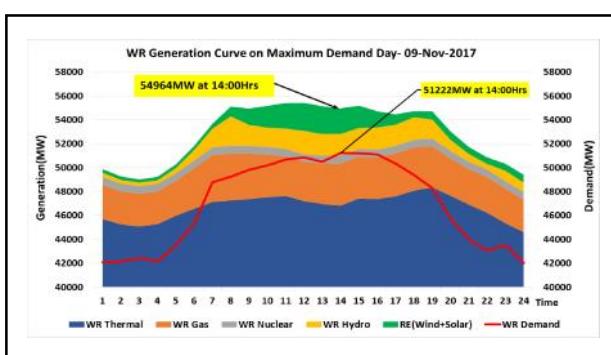
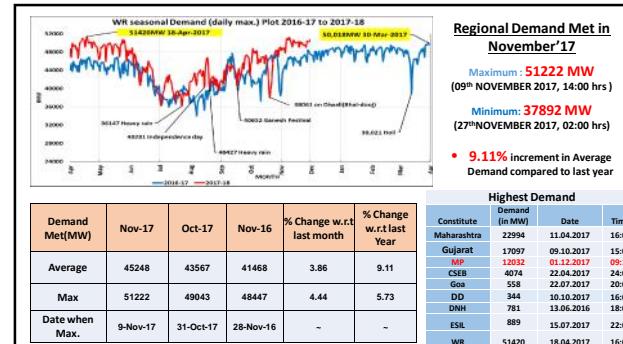


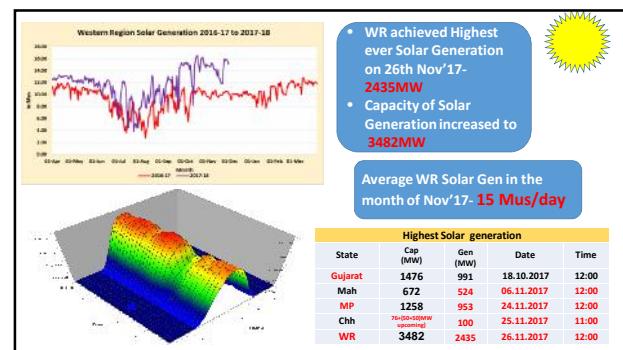
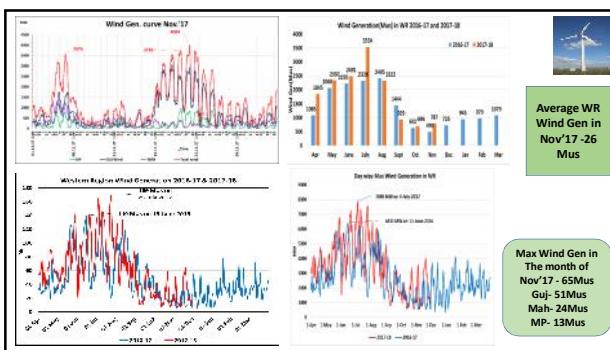
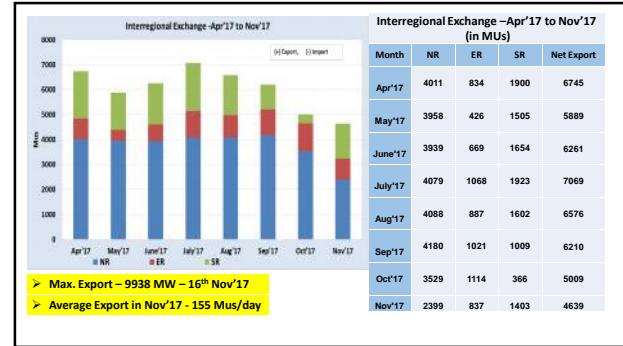
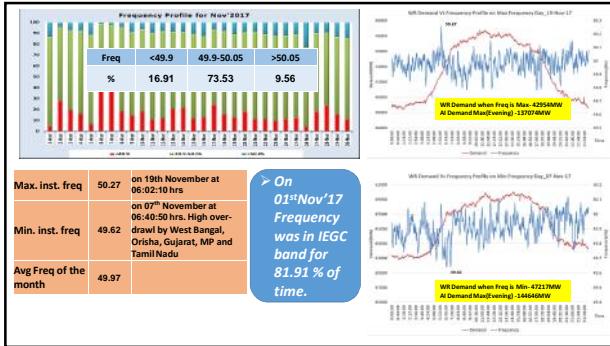
**Power System Operation Corporation Ltd.**

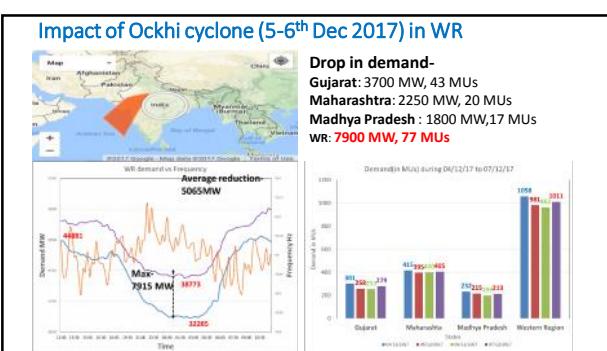
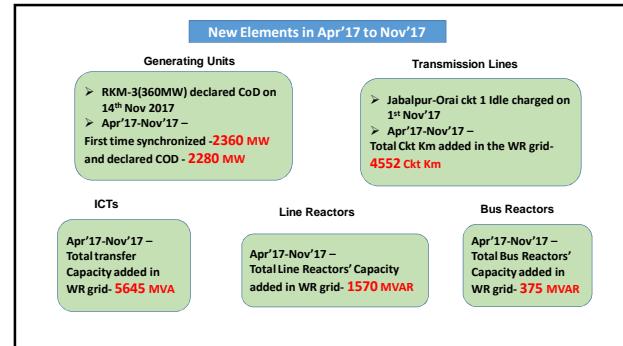
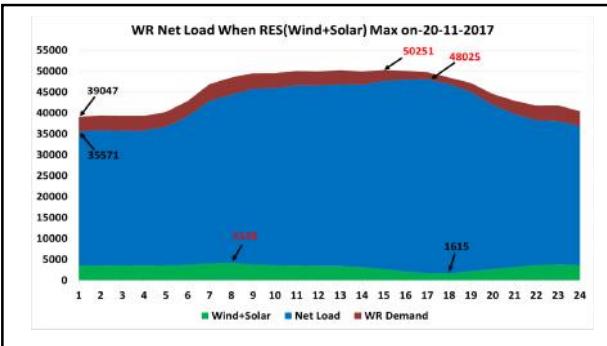
**502<sup>nd</sup> OCC Meeting**

At Mumbai  
12<sup>th</sup> December, 2017  
**Grid Operation Highlights**

WRDC POSOCO







**Agenda:5 Grid Event: Tripping at 400 kV Phadge S/S in Maharashtra: GD-1**

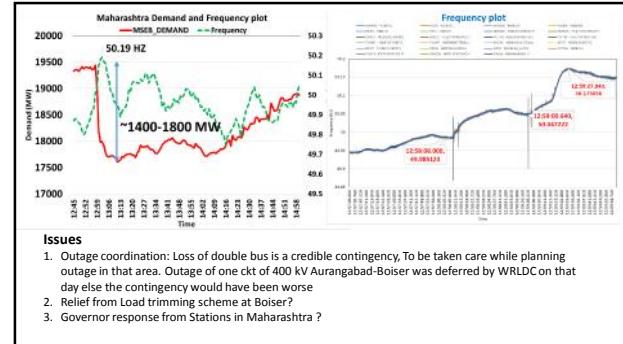
- Blackout in 400/220 kV Padghe on **9 Dec 17, 12:58** Hrs due to TBC breaker blast
- Near miss event for Mumbai
- About **1400 MW** load was thrown off in Maharashtra
- Frequency increased from **50.05 Hz to 50.17 Hz (0.12 Hz increase)**
- Loading of 400 kV Tarapur-Boiser D/C increased from 451 MW to 1050 MW

**Elements Tripped**

- 400 kV Padghe Bus A & B : 410.4 kV
- 400 kV Padghe – Bableshwar – I & II: 950 MW
- 400 kV Padghe – Kalwa – I & II: 524 MW
- 400 kV Padghe – Tarapur – I & II: 600 MW
- 400 kV Padghe – Boisar – I: 213 MW
- 400 kV Padghe – Nagothane – I & II: 338 MW
- 400/220 kV Padghe ICT's carrying: 1147 MW
- Chandrapur-Padghe HVDC Bipole carrying: 500 MW

**Actions Taken**

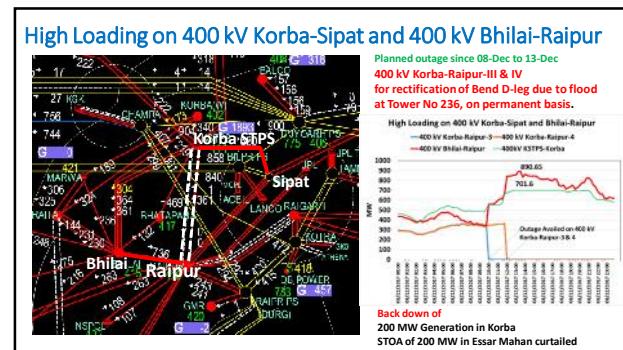
- Bus reactors at Indore Itarsi and Gwalior were taken into service to control the voltages.
- Immediate restoration started by taking Bableshwar – Padghe – I into service there by charging Padghe Bus B at 13:25 hrs.
- Maharashtra surrendered ISGS power and backed down their own state generation to reduce the under drawal



**Agenda:5 Grid Incident: Tripping of HVDC Champa-Kurukshetra : GI-2**

- In Nov'17 HVDC Champa-Kurukshetra Bipole tripped on two occasions
  - 10/11/17-Both poles tripped on Line Winding Under Voltage protection operation
  - 21/11/17: Both poles tripped on Transient Over Voltage control protection operation
- It is observed that several tripping of HVDC Champa-Kurukshetra occurred since its commissioning.
  - Till now 4 times both poles have tripped simultaneously
  - Many of the trippings occurred due to mal-operation of control system and protection system
- WR-NR TTC increased, LTA has also been released
- PGCIL may kindly look into the above issues**

Month	No of times Pole-1 tripped	No of times Pole-2 tripped
April'17	2	-
May'17	7	-
June'17	12	-
July'17	2	-
Aug'17	4	1
Oct'17	8	5
Nov'17	4	7
Total	<b>39</b>	<b>13</b>

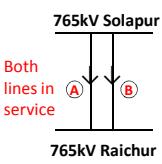


# Agenda

## 9.1 Suggested revision in System Protection Schemes (SPS) between NEW grid and SR

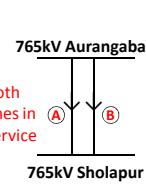
- **SPS to be blocked**
  - SPS-1C (single circuit operation of 765kV Raichur-Solapur)
  - SPS-5 (tripping of one ckt of 400 KV Wardha-Parli D/C)
  - SPS-6 (tripping of one ckt of 400 KV Parli-Solapur D/C)
- **Generation backing down in WR to be disarmed from all SPS**
  - JPL, JPL-Extn, KSK, Lanco, DB Power, KWPC, BALCO, NSPCL, Tirora, Mouda to disarm
- **SPS setting revised for tripping of 765 kV Aurangabad Solapur D/C**
- **New SPS for tripping of 765 kV Wardha-Nizamabad D/C**

### a) SPS for tripping of 765 kV Wardha-Nizamabad D/C



- Power flow (A+B) > 3000 MW for 5 sec
- 1000 MW Load shedding in SR
- Power flow (A+B) > 3500 MW for 2.5 sec
- Load shedding of 1500 MW in SR

### b) SPS-8 (Loss of 765kV Aurangabad-Sholapur D/C lines carrying 2500MW)



- Existing:** Power flow (A+B) > 2500MW and both lines are tripped,
- **WR side:**
    - 800MW generation back down
    - tripping of B/R at 400KV Parli (PG) and 765kV Pune (PG)
  - **SR side:**
    - Load shedding of 1000MW immediately
- Proposed:** Power flow (A+B) > 2000MW and both lines are tripped,
- **SR side:**
    - Load shedding of 1500MW immediately

### 9.2 Persistent non-compliance of IEGC 5.2 (f), (g), (h), (i)

- Events analysed
  - Date: 09 Dec 17 Time: 12:58 Hrs, Load throw off of ~1400 MW in WR, Frequency rise of 0.12 Hz
  - Date: 12 Nov 17, Time: 07:14 Hrs, Generation loss of 1097 MW in NR, Frequency dip of 0.09 Hz
  - Date: 30 Oct 17, Time: 21:37 Hrs, Generation loss of 1267 MW in SR, Frequency dip of 0.12 Hz
- Stations persistently non-complying with IEGC 5.2 (f), (g), (h), (i)
  - KSK, DB Power, Jindal Tamnar, Maruti & Mouda-II, CGPL, JP Nigrie
- Above stations to attend meeting on 26.12.2017 at WRLDC
- Matter being reported to CERC for third party testing

### 9.3 Hot line voice communication between WRLDC and Substations/Generating Stations

- Voice Channel through PLCC/Fibre to be established from station to the CTU point

S.No	Region	Station	Nearest CTU point	Action by
1	WR-I	400 kV GMR Warora	Bhadrawathi	GMR
2	WR-I	400 kV GMR RAIPUR	Durg	GMR Raipur
3	WR-I	400 kV KWPCL	Kotra	KWPCL
4	WR-I	400 kV BALCO	Dharamjaygarh	Balco
5	WR-I	400 kV DHARIWAL	Parli_PG	Dhariwal
6	WR-I	400 kV SKS	Kotra	SKS
7	WR-I	765 kV DHULE	Vadodara	BDTCL
8	WR-I	400 kV RKM	Kotra	RKM
9	WR-I	400 kV DB POWER	Kotra	DB Power
10	WR-I	400 kV NSPCL	Raipur	NSPCL
11	WR-I	400 kV RGPLL	RGPLL	RGPLL

### 9.3 Hot line voice communication between WRLDC and Substations/Generating Stations

S.No	Region	Station	Nearest CTU point	Action by
12	WR-I	400 kV LANCO	Bilaspur	LANCO
13	WR-I	400 kV Essar Hazira	Gandhar	WRTS-II, PGCIL
14	WR-II	400 kV DGEN	Navsari	DGEN
15	WR-II	400 kV Jhabua Power	765 KV Jabalpur	Jhabua
16	WR-II	400 kV MB POWER	765 KV Jabalpur	MB Power
17	WR-II	400 kV TAPS-3&4	Boisar/Phadge	NPCIL
18	WR-II	220 kV TAPS-1&2	Boisar/Phadge	NPCIL
19	WR-II	400 kV Lara	Champa/Kotra	NTPC

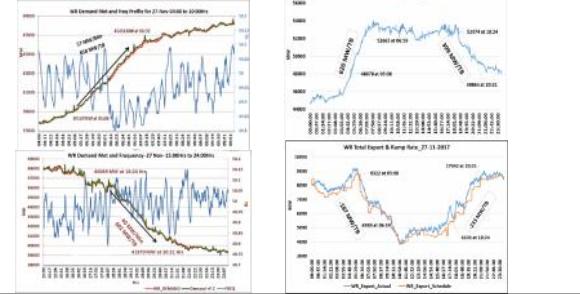
### 9.3 Hot line voice communication between WRLDC and Substations/Generating Stations

VOIP(Orange) phone installation is pending in following stations:

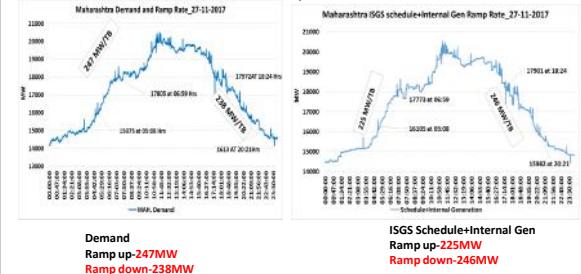
S.No	Region	Station
1	WR-II	765 KV Jabalpur
2	WR-II	765 KV Gadarwara
3	WR-II	765 KV Vadodara
4	WR-II	400 KV Gandhar
5	WR-II	400 KV VindhyaChal stage 3
6	WR-II	400 KV VindhyaChal stage 4
7	WR-II	400 KV VindhyaChal stage 5
8	WR-II	220 KV Kakrapar

POWERGRID and utilities may update the progress

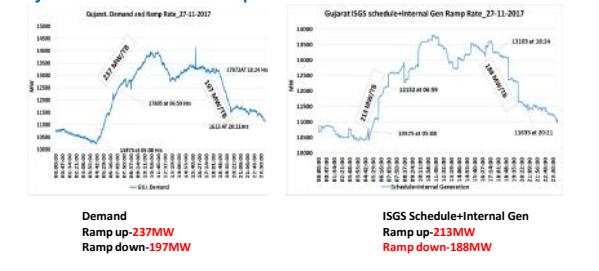
#### 9.4 Observation of high Ramp Up Rate in morning and Ramp Down in evening



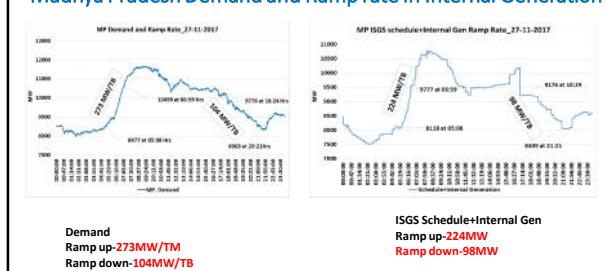
#### Maharashtra Demand and Ramp rate in Internal Generation

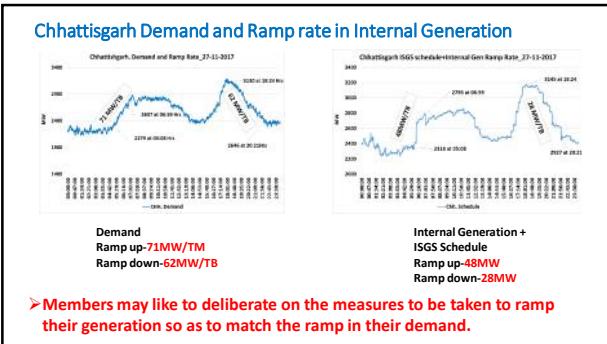


#### Gujarat Demand and Ramp rate in Internal Generation



#### Madhya Pradesh Demand and Ramp rate in Internal Generation

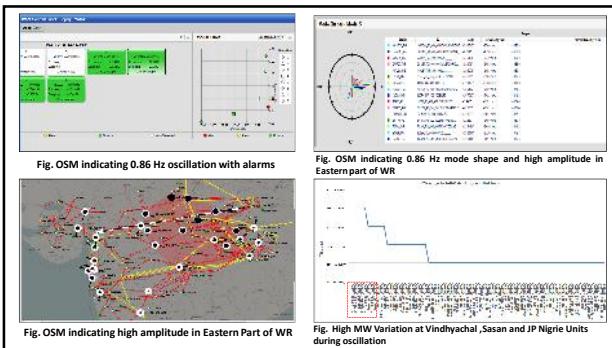
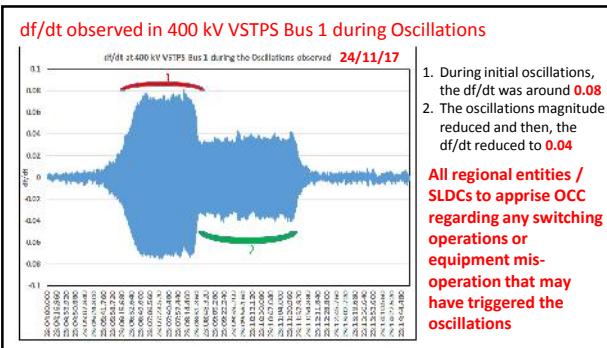
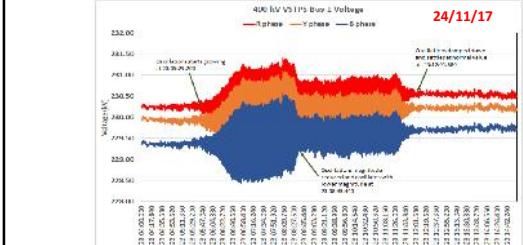




### 9.5 Oscillations of 0.86 Hz at 23:06 hrs to 23:12 hrs on 24<sup>th</sup> Nov'17

- Oscillations of 0.86 Hz was observed in Western region on 24-11-2017 at 23:06 Hrs. Oscillations were lasted for 6 minutes.

400 kV VSTPS Bus 1 Voltage during Oscillations



**9.6 High Voltages in WR**

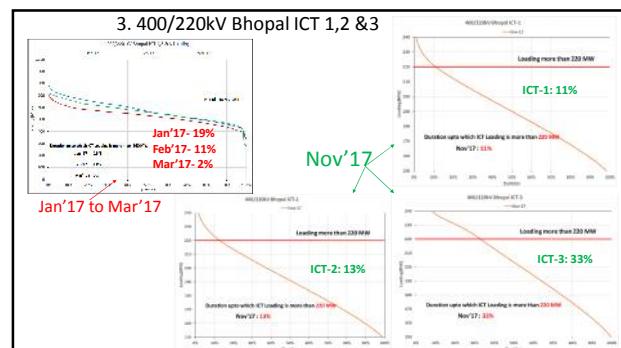
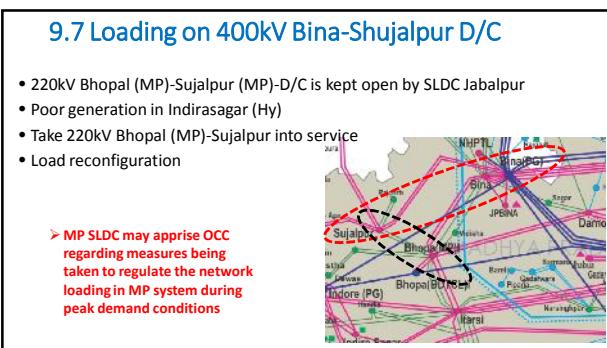
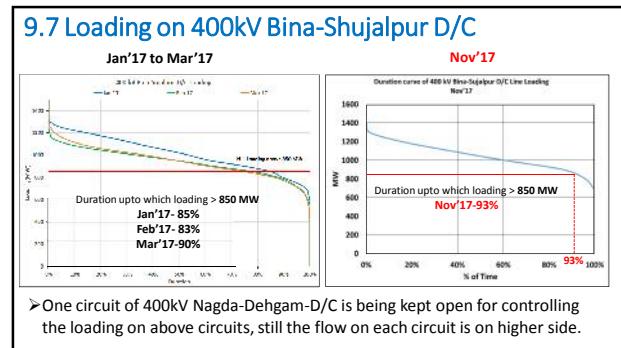
400kV Stations		
S.No.	Station Name	% of time Voltage >420kV
1	Raigarh	<b>90</b>
2	Dehgam	<b>67</b>
3	Karad	<b>55</b>
4	Kalwa	<b>49</b>
5	Dhule	<b>47</b>
6	Wardha	<b>43</b>
7	Mapusa	<b>37</b>
8	Parli	<b>28</b>

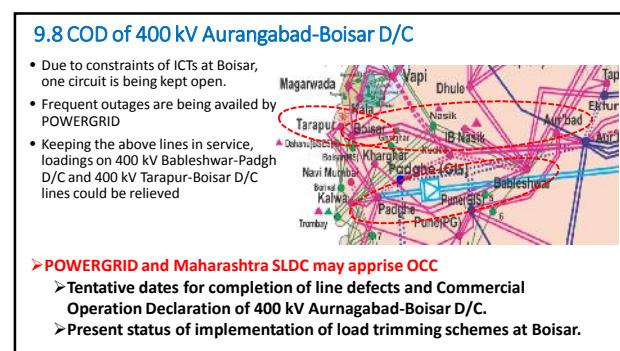
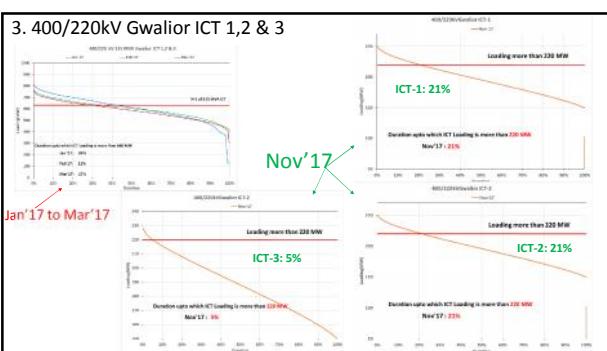
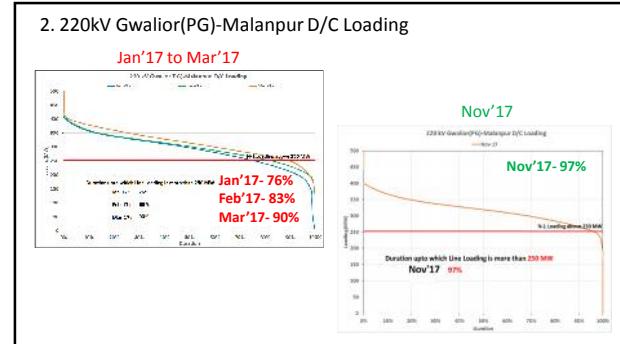
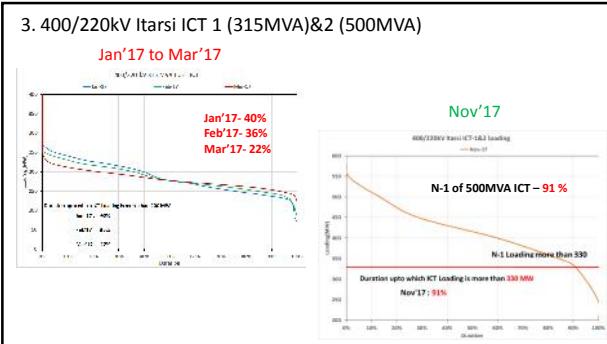
**765kV Stations**

S.No.	Station Name	% of time Voltage >800kV
1	Durg	<b>19</b>
2	Kotra	<b>16</b>
3	Tamnar	<b>10</b>

➤ POWERGRID may consider commissioning of NGR bypass scheme at following substations if not envisaged  
 ➤ 765kV Durg-Wardha-Q/C at Wardha end  
 ➤ 765kV Durg-Kotra-D/C at Durg end.  
 ➤ 765kV Dhule-Vadodara-S/C at Vadodara end.  
 ➤ 765kV Wardha-Aurangabad-Q/C at Aurangabad end.

➤ Maharashtra SLDC to apprise the present status of Commissioning of BR in Nanded, Solapur, Kolhapur Line reactors of 400 kV Chandrapur-Parli





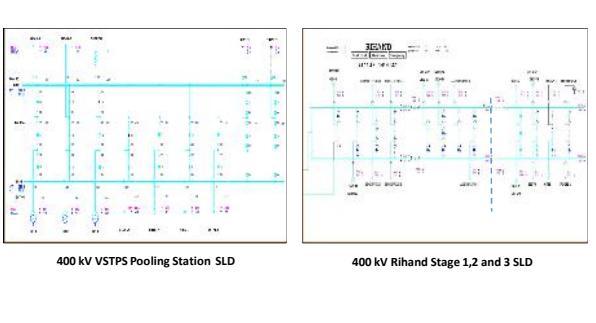
### 9.9 Black Start Mock Drill Exercise in Western Region 2017

Mock Black start exercise in WR- 2017 (As on 10<sup>th</sup> December 2017)

Sl.No	Generating station	Date of mock drill exercise done							
State	Black start Sources (as Reported)	Black Start Capability Tested (status)							
		2011	2012	2013	2014	2015	2016	2017	
Madhya Pradesh	9	1	3	4	4	7	2		
Maharashtra	9		3	2	3	4	4	3	
Gujarat	10		2	3	2	6	7	2	
Chhattisgarh	1		1		1	1	1	1	
Total	29	1	9	5	10	15	19	8	

### Online Changeover of Rihand Stage-III (2X500 MW) Units from NR to WR on 28-11-17

- As per 29<sup>th</sup> SCM of WR : Rihand Stage 3 evacuation is planned with 765/400 kV Vindhya Chal Pooling station.
- The line through which Rihand Stage 3 has to be connected with Vindhya Chal pooling station is 765 kV Rihand(II)-Vindhya Chal PS 2 X 5/c lines (Initially charged at 400kV)
- 400 KV VSTPS PS, Rihand Stage 3 D/C lines were ready and all pre-commissioning test and activity has been completed by 26<sup>th</sup> Nov'17.
- On 28<sup>th</sup> Nov'17, Online changeover was done for the Rihand Stage 3 from NR to WR.
- Process was monitored with the help of SCADA as well as URTDSM for smooth changeover.
- After connecting it with Vindhya Chal PS through the D/C lines, bus sectionaliser between stage 3 and 1&2 at Rihand was opened.



### Monitoring of Process through URTDSM



Fig : Main Monitoring screen showing angular difference, Geo-Graphical power flow map and SLD map in which currents, MVA, Voltages and angles

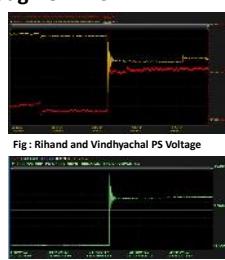
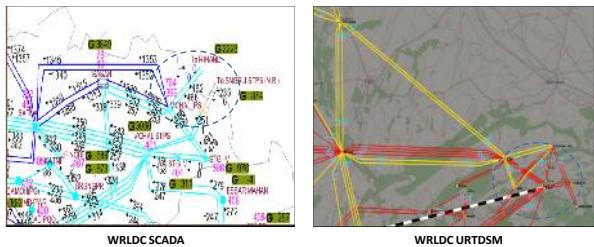
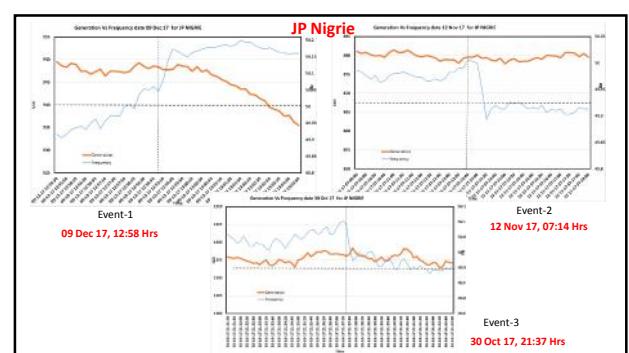
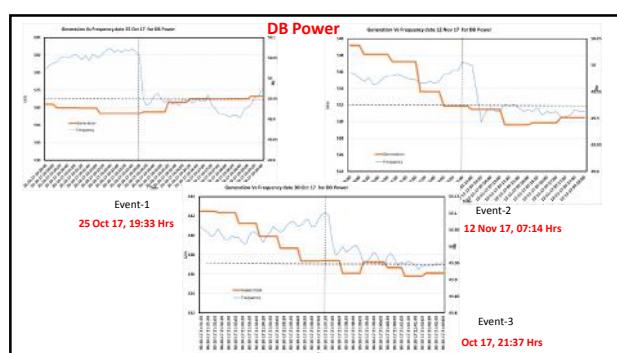
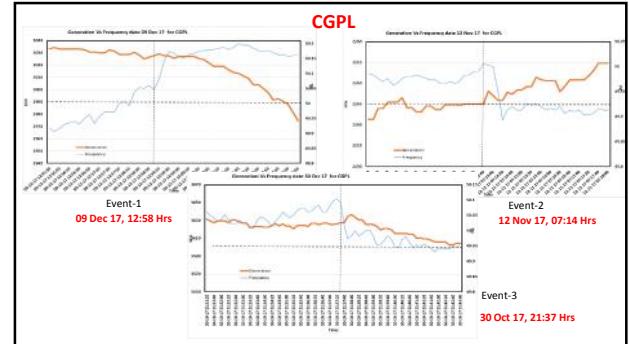
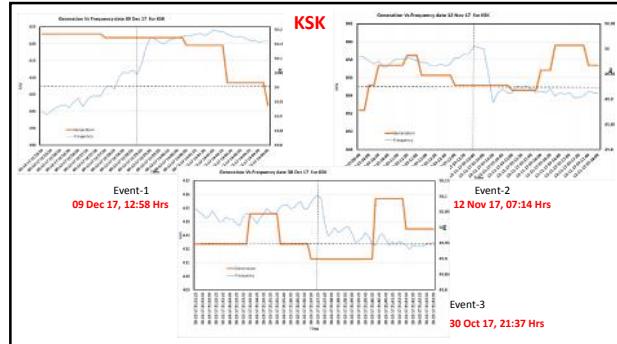


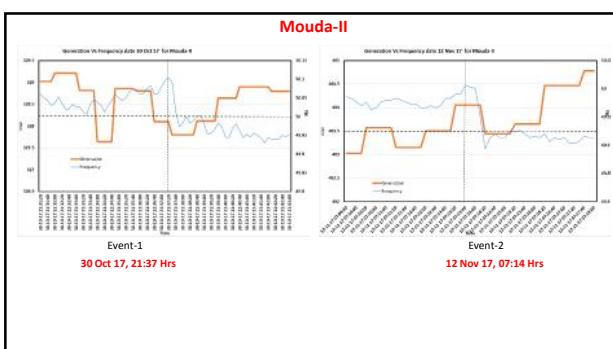
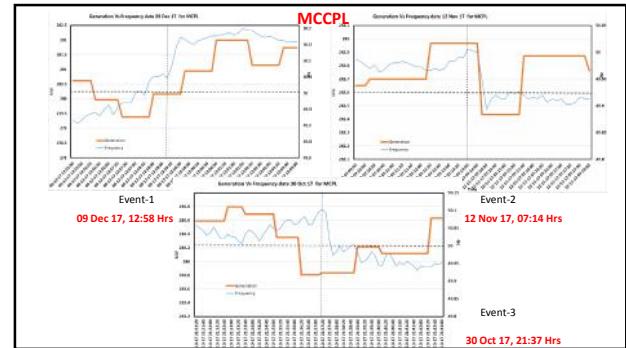
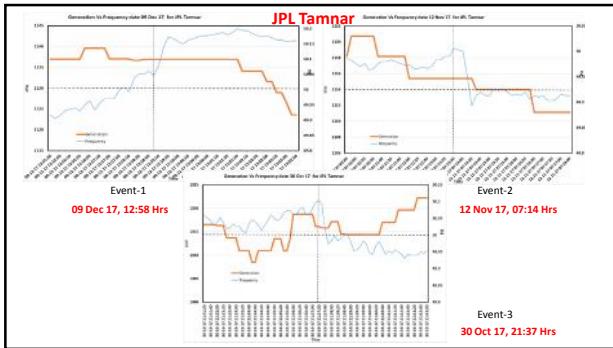
Fig : Rihand and Vindhya Chal PS Angular Separation. Smooth changeover done at Zero degree.

**Post Changeover**



Thank you !





**ANNEXURE 3.1**

**DETAILS OF MAINTENANCE PROGRAM OF GENERATING UNITS PROPOSED DURING DECEMBER 2017 AND JANUARY 2018**

S. No.	Unit	No.	Capacity (MW)	Outage Plan		Reason
				From	To	
1	<b>GUJARAT</b>					
1.1	WTPS	2	210	20-Dec-17	25-Mar-18	COH
1.2	STPS	4	250	16-Dec-17	11-Jan-18	AOH
1.3	TORRENT POWER ABD	E	121 MW	12/10/2017	19-12-2017	Boiler Annual Survey
2	<b>MADHYAPRADESH</b>		<b>NIL</b>			
3	<b>CHHATTISHGARH</b>					
3.1	DSPM	1	250	3-Jan-2018	25-Jan-2018	AOH
4	<b>MAHARASHTRA</b>					
4.1	TATA	5	500	03-Jan-18	17-Jan-18	flushing
4.2	DTPS Dahnu	2	250	06-Jan-18	04-Feb-18	AOH
5	<b>Central Sector and IPPs</b>					
5.1	SUGEN	10	382.5	08-Jan-18	12-Jan-18	Minor Inspection
5.2	SUGEN	20	382.5	29-Jan-18	24-Feb-18	Major Inspection
5.3	KORBA STPS	2	200	02-Jan-18	29-Jan-18	AOH
5.4	SIPAT	5	500	03-Feb-18	20-Mar-18	BLR+TUR+GEN
5.5	TAPS	2	160	20/Dec/2017	8/Feb/2018	For carrying out mandatory checks, regulatory upgradation and two unit outage related jobs
5.6	SSP RBPH	1	200	20-Jan-18	09-Feb-18	Routine AOH WORK
5.7	SSP CHPH	1	50	16-Jan-18	01-Feb-18	Routine AOH WORK
5.8	Jhanor	GT 3	144.3	19/Dec/2017	24/Dec/2017	Special Inspection

Annexure 3.2

Sr. No	Voltage	Line / Element	From		To		Daily/Cont.	Reason	System	Agency	Type	S/S	REMARKS
			Date	Time	Date	Time							
1	400	400kv Rourkela-Raigarh Fdr -II ( Direct)	12-Dec-17	8:00	01-Jan-18	17:00	Continuous	For Diversion/ modification of 220kv Budhipadhar-Korba S/C from Loc 20 to 20 and 400kv D/C Wardha Raigarh line II / direct	ER- Wardha/Central	ER- Wardha/Central			
2	400	400kv Sundargarh-Raigarh-Fdr-II	12-Dec-17	8:00	01-Jan-18	17:00	Continuous	For Diversion/ modification of 220kv Budhipadhar-Korba S/C from Loc 20 to 20 and 400kv D/C Wardha Raigarh line II / direct	ER- Wardha/Central	ER- Wardha/Central			
3	400	400kv Ramgundam-Chandrapur-1	14-Dec-17	7:00	14-Dec-17	19:00	Daily	for shifting the line from ERS to normal new towers	POWERGRID	POWERGRID			500MW TTC Curtailment in WR-SR
4	400	400kv Ramgundam-Chandrapur-1 & 2	17-Dec-17	7:00	17-Dec-17	19:00	Daily	Line crossing works of Jaipur- Jagityal line for shifting the line from ERS to normal new towers	POWERGRID	POWERGRID			1000MW TTC Curtailment in WR-SR
5	220	220kv Budhipadar-Korba S/C Fdr-III	18-Dec-17	8:00	21-Jan-18	17:00	Continuous	This s/d needs to be extended for Diversion/ modification of 220kv Budhipadar-Korba S/C from Loc 20 to 20 and 400kv D/C Wardha Raigarh line II / direct	ER- Wardha/Central	ER- Wardha/Central			
6	400	400KV Rourkela-Raigarh Ckt-2	25-Dec-17	8:00	26-Dec-17	18:00	Continuous	1. Disconnect of jumper at Loc. No. 881 of 400KV Rourkla- Raigarh line 2 and connection of jumper at 400KV Rourkla- Raigarh line 1	ER- Wardha/Central	ER- Wardha/Central			
7	400	400KV Rourkela-Raigarh Ckt-4	27-Dec-17	8:00	29-Dec-17	18:00	Continuous	1. Disconnect of jumper at Loc. No. 267 of 400KV Rourkla- Raigarh line 4 and connection of jumper at 400KV Rourkla- Raigarh line 3	ER- Wardha/Central	ER- Wardha/Central			
8	400	400KV WARDHA-PARLI I	01-Jan-18	6:00	15-Jan-18	18:00	Daily	A/R to be kept in Non auto mode for Online OPGW work.	WRTS-I	WRTS-I	C	LINE-A/R	
9	400	JP NIGRIE- SATNA 1	01-Jan-18	7:00	01-Jan-18	18:00	Daily	E/W DIAMOND FORMATION & PEAK STRENGTHNING WORK.	JP NIGRIE	WRTS-II	C	REW	JP Nigrie shall not bid in Power
10	400	A Bus @ Talandge	01-Jan-18	7:00	01-Jan-18	20:00	Daily	New Reactor Bus conductor jumping work	MSETCL	MSETCL			NLDC to be informed
11	400	400 KV SUGEN BUS-1 FOR SUGEN UNOSUGEN LINE BUS- A ISOLATOR	01-Jan-18	8:00	01-Jan-18	12:30	Daily	Sugen - UnoSugen line Bus-A Isolator Maintenance with Bay on Transfer Bus	TPL-SUGEN	TPL-SUGEN	R		
12	400	Lambotri - Parli	01-Jan-18	8:00	01-Jan-18	17:00	Daily	Replacement of Polymer Long rod Insulator String by Composite Long rod Insulator string	MSETCL	MSETCL			
13	400	400kv Dhule-SSNNL Ckt-I & II	01-Jan-18	8:00	02-Jan-18	17:00	Daily	On Line PID Testing	MSETCL	MSETCL			
14	400	400 KV Soja- Dehgam line	01-Jan-18	8:00	01-Jan-18	18:00	Daily	1st six monthly maint & Yearly testing	GETCO	GETCO			
15	220	Itarsi-Hoshangabad#2 Line (Bay-206) at Itarsi	01-Jan-18	9:00	01-Jan-18	14:00	Daily	For checking interlocks of newly commissioned equipments and with Due Consideration	POWERGRID	WRTS-II	R	ITARSI	line to be inservice through TBC
16	400	765kV ICT1 & 400kV ICT 1 TIE BAY (411) at Seoni	01-Jan-18	9:00	01-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
17	HVDC	DIA 50 Q 50 Tie bay of Ramagundam -2 & filter-4 Bus at Phadewar	01-Jan-18	9:30	01-Jan-18	18:00	Daily	AMP , Power regulation not required	WRTS-I	WRTS-I	R	Bay	
18	765	765KV/400 KV ICT-2 at Bina	01-Jan-18	9:30	01-Jan-18	0:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
19	400	400 KV SUGEN BUS-1 FOR SUGEN PIRANA LINE BUS- A ISOLATOR	01-Jan-18	13:30	01-Jan-18	17:30	Daily	Sugen - Pirana line Bus-A Isolator Maintenance with Bay on Transfer Bus	TPL-SUGEN	TPL-SUGEN	R		
20	400	400 KV Kasor - GPEC Line	01-Jan-18	8:00	02-Jan-18	18:00	Daily	For condition monitoring work	GETCO	GETCO			
21	400	400 kV DGEN GT-52 (BAY 407) with 400kv Transfer Bus	01-Jan-18	8:00	02-Jan-18	19:00	Continuous	Annual PM of 407 89 C and 407 89D isolators along with Earth switches Transfer Bus and CT E2 bays were removed	TPL	TPL	R		
22	220	Kakrapar - Haldarwa # 2	01-Jan-18	9:00	02-Jan-18	18:00	Daily	AMP of line and removing grading rings of all polymer insulator sections from tower sides	POWERGRID	WRTS-II	R	RHQ	
23	765	765kv ICT#1 & FUTURE TIE BAY 702 AT SOLAPUR	01-Jan-18	9:00	02-Jan-18	18:00	Continuous	ERCTION OF BAY EQUIPMENT OF 765KV PARLI	WRTS-I	WRTS-I	C	BAY	
24	400	NTPC Solapur to Solapur line-4	01-Jan-18	10:00	02-Jan-18	18:00	Continuous	PLCC wavetrap sound problem	NTPC	NTPC			
25	765	765KV Bus-I at Pooling station,jabalpur	01-Jan-18	10:00	02-Jan-18	18:00	Daily	For VindhyaChal Bay Extension work at Pooling station,Jabalpur	POWERGRID	WRTS-II	C	JBP PS	NLDC consent is required
26	400	400KV Bus 1 at bhachau	01-Jan-18	8:00	03-Jan-18	18:00	Daily	RTV Coating of Bus 1 Isolator	POWERGRID	WRTS-II	R	BHACHAU	If CGPL Generation is less than 3250 MVA
27	400	400kv BR Main Bay( 407) at Bhatapara	01-Jan-18	9:00	03-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
28	220	ICT2 Bay (Bay 204) at Dehgam( ICT remain in service)	01-Jan-18	9:00	03-Jan-18	18:00	Continuous	CB Overhauling work	POWERGRID	WRTS-II	R	DEHGAM	
29	400	400 KV Khadka-Aurangabad Ckt @ khadka ss	01-Jan-18	8:00	03-Jan-18	20:00	Daily	Faulty string replacement	MSETCL	MSETCL			
30	400	Online PID testing work of 400KV Bus @ 400/220KV	01-Jan-18	8:00	05-Jan-18	17:00	Daily	Online PID testing work of 400KV Bus, daily for 08 Hrs.	MSETCL	MSETCL			No outage required work will be
31	400	315MVA X-mer-2 Main CB-Bay at 400KV S/s Bina	01-Jan-18	8:00	06-Jan-18	17:00	Continuous	Replacement of main bay CT(RYB)	MPPTCL	MPPTCL	R		
32	400	400kv KORBA-BIRSINGHPUR-II	01-Jan-18	9:00	07-Jan-18	18:00	Daily	A/R in Non auto mode for PID work line will be in serviece	WRTS-I	WRTS-I	R	Line-A/R	
33	400	INDORE-ITARSI CKT 1 at Indore	01-Jan-18	10:00	08-Jan-18	18:00	Continuous	EQUIPMENT SHIFTING AND COMMISSIONING FOR MAKING LINE REACTOR SWITCHABLE ON DATE 09.01.2018 LINE SHALL BE	POWERGRID	WRTS-II	C	INDORE PS	
34	400	Padghe- Bhabheshwar ckt 1	01-Jan-18	8:00	15-Jan-18	18:00	Daily	Routine maintenance activity of PID work of disc Insulator. A/R in Non auto mode	MSETCL	MSETCL			
35	220	Kawas - Haldarwa Ckt.1&2	01-Jan-18	9:00	15-Jan-18	18:00	Daily	Online PID testing of insulator strings. A/R of both Ckt.1 & 2 to be done in non auto mode during the testing period	POWERGRID	WRTS-II	R	RHQ	
36	765	765 Kv Wardha #4 & Future Tie bay (723) at Durg PS	01-Jan-18	9:00	15-Jan-18	18:00	Continuous	For Rajnand Ckt-1 work	WRTS-I	WRTS-I	C	Bay	
37	765	765kV D'JAIGARH-BILASPUR	01-Jan-18	6:00	31-Jan-18	18:00	Daily	A/R to be kept in Non auto mode for Online OPGW work.	WRTS-I	WRTS-I	C	LINE-A/R	
38	220	Deoli (PGCIL)- Pusad line	01-Jan-18	7:00	31-Jan-18	17:00	Daily	For PID Work,Shifting of auto reclose switch to non auto mode.	MSETCL	MSETCL			
39	400	400KV New Koyna- Karad Ckt I&II	01-Jan-18	7:00	31-Jan-18	19:00	Daily	Taking Auto Reclose in Non AR Mode for stringing of OPGW work	MSETCL	MSETCL			These lines come under Non Imp. Grid elements. But since A/R of
40	400	400KV Jejur - Lonikand	01-Jan-18	7:00	31-Jan-18	19:00	Daily	Taking Auto Reclose in Non AR Mode for stringing of OPGW	MSETCL	MSETCL			

41	400	400KV Babhaleshwar - Aurangabad	01-Jan-18	7:00	31-Jan-18	19:00	Daily	Taking Auto Reclose in Non AR Mode for stringing of OPGW	MSETCL	MSETCL				
42	400	400KV Parli -Solapur (M) S/c line	01-Jan-18	7:00	31-Jan-18	19:00	Daily	Taking Auto Reclose in Non AR Mode for stringing of OPGW	MSETCL	MSETCL				
43	400	400KV Kharhgarh - Talegaon	01-Jan-18	7:00	31-Jan-18	19:00	Daily	Taking Auto Reclose in Non AR Mode for stringing of OPGW	MSETCL	MSETCL				
44	765	Sasan-Satna Ckt-I	01-Jan-18	9:00	15-Jan-18	18:00	Daily	Online OPGW Stringing work. A/R to be kept in non mode during the work.	POWERGRID	WRTS-II	R	ULDC		
45	400	Korba-Birsinghpur Ckt-1	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	POWERGRID	WRTS-II	R	ULDC		
46	400	Mundra-Jetpur Ckt-1	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	POWERGRID	WRTS-II	R	ULDC		
47	400	Dehgam-Nagda Ckt-1	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	POWERGRID	WRTS-II	R	ULDC		
48	220	Chhegaon-Khandwa Ckt-2 MPPTCL	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	MPPTCL	WRTS-II	R	ULDC		
49	220	Seoni-Seoni MPPTCL	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	MPPTCL	WRTS-II	R	ULDC		
50	220	Bina-Shivpuri S/c line	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	MPPTCL	WRTS-II	R	ULDC		
51	765	765kv SEONI-WARDHA I	01-Jan-18	9:00	31-Jan-18	18:00	Daily	Keep A/R in non -auto mode for OPGW work	WRTS-I	WRTS-I	A/R	line		
52	400	50MVAR Bina-I Line Reactor at Shujalpur.	01-Jan-18	10:00	15-Jan-18	18:00	Continuous	Construction of Reactor Switching Scheme bays at Shujalpur.	POWERGRID	WRTS-II	C	SHUJALPUR		
53	765	765kv S/C,Bhopal Jabalpur Line	01-Jan-18	8:00	15-Jan-18	18:30	Daily	AR-OFF : A/R on Non -auto mode for online OPGW rectification	BDTCL	BDTCL	R	Shall be deferred on Jabalpur Bus		
54	400	J P NIGRIE-SATNA-1	01-Jan-18	6:00	01-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE		JP Nigrie shall not bid in Power Purchase		
55	400	C Bus @ Talandge	02-Jan-18	7:00	02-Jan-18	20:00	Daily	New Reactor Bus conductor jumping work	MSETCL	MSETCL				
56	400	400 KV SUGEN BUS-1 FOR SUGEN JHANOR LINE BUS- A ISOLATOR	02-Jan-18	8:00	02-Jan-18	12:30	Daily	Sugen - Jhanor line Bus-A Isolator Maintenance with Bay on Transfer Due	TPL-SUGEN	TPL-SUGEN	R			
57	400	Lambotri -Solapur	02-Jan-18	8:00	02-Jan-18	17:00	Daily	Replacement of Polymer Long rod Insulator String by Composite Long rod Insulator string	MSETCL	MSETCL				
58	400	400 KV Chorania-Assoj-1 Line	02-Jan-18	8:00	02-Jan-18	18:00	Daily	For PG Iso. Overhauling work.	GETCO	GETCO				
59	400	ICT1_400/220kv_SEONI	02-Jan-18	9:00	02-Jan-18	13:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	ICT		
60	400	DEHGAM - PIRANA # 2 BAY 404 at Pirana	02-Jan-18	9:00	02-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	line to be inservice through tie bay	
61	220	220KV ICT-1 Main Bay-201 at Vapi	02-Jan-18	9:00	02-Jan-18	17:00	Daily	AMP of CB, line taken on TBC	POWERGRID	WRTS-II	R	VAPI	ICT to be inservice through TBC	
62	765	765KV Bus-2 Sectionizer Bay (714) at Champa PS	02-Jan-18	9:00	02-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay		
63	400	400KV Kharhgarh main bay (403) at Talegaon	02-Jan-18	9:00	02-Jan-18	17:30	Daily	For AMP works	WRTS-I	WRTS-I	R	Bay		
64	765	715R ( GWALIOR # 2) REACTOR BAY For replacing Y phase Reactor with Coaxial SWITCHBOARD AT SATNA	02-Jan-18	9:00	02-Jan-18	18:00	Daily	To attain leakage in Y Phase. main tank back side top	POWERGRID	WRTS-II	C	SATNA		
65	765	765/400 KV ICT #3 at V-CHAL PS	02-Jan-18	9:00	02-Jan-18	18:00	Daily	CSD commissioning (Make:-CGL) in main bay of ICT-3	POWERGRID	WRTS-II	C	V-CHAL PS	NLDC consent is required / Rihand / VCTC site 4 are now connected	
66	400	63 MVAR BR AT JABALPUR	02-Jan-18	9:00	02-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	JABALPUR		
67	400	Main Bay 412 of 400 KV line-1 of korad II - Koradi III at Koedas	02-Jan-18	9:00	02-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL				
68	765	765 Kv Kotra # 2 L/R 713R at Durg PS	02-Jan-18	9:00	02-Jan-18	18:00	Daily	AMP of L/R & bay (713R)	WRTS-I	WRTS-I	R	SLR	Line to be inservice w/o LR / NLDC consent required	
69	765	765 KV NIZAMBADH# 2 & ICT2 tie bay 705 at Wardha	02-Jan-18	9:00	02-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY		
70	HVDC	DIA 50 Q 51 filter-4 Bus main bay at Bhadravati	02-Jan-18	9:30	02-Jan-18	18:00	Daily	AMP , Power regulation not required	WRTS-I	WRTS-I	R	Bay		
71	765	ICT3_765/400kv_TAMNAR PS	02-Jan-18	10:00	02-Jan-18	14:00	Daily	For Spare Transformer unit switching with AT Bank # 03 for AT Bank # 03 "B" th unit HV Bushing Replacement	WRTS-I	WRTS-I	C	ICT		
72	400	BAY 402 (TIE BAY FOR PITHAMPUR #1) at Indore	02-Jan-18	10:00	02-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS		
73	400	400 KV SUNDERGARH CKT-2 MAIN BAY (413) at Raigarh	02-Jan-18	10:00	02-Jan-18	18:00	Daily	AMP 2017-18	WRTS-I	WRTS-I	R	BAY		
74	400	400kv SUGEN BUS-1 FOR BUS COUPLER BAY BUS-A ISOLATOR	02-Jan-18	13:30	02-Jan-18	17:30	Daily	Maintenance of Bus coupler Bay Bus -1 isolator.	TPL-SUGEN	TPL-SUGEN	R			
75	400	400KV SUGEN BUS COUPLER BAY	02-Jan-18	13:30	02-Jan-18	17:30	Daily	Maintenance of Bus coupler Bay Bus -1 isolator.	TPL-SUGEN	TPL-SUGEN	R			
76	400	400 KV Dehgam -Vadavi - 1	02-Jan-18	0:00	03-Jan-18	0:00	Daily	PMM work	GETCO	GETCO				
77	400	JP NIGRIE- SATNA 2	02-Jan-18	7:00	03-Jan-18	18:00	Daily	E/W DIAMOND FORMATION & PEAK STRENGTHNING WORK.	JP NIGRIE	WRTS-II	C	REW	JP Nigrie shall not bid in Power Purchase	
78	400	400 KV 125 MVAR Bus Reactor at 400 KV S/S Nagda	02-Jan-18	9:00	04-Jan-18	17:00	Continuous	HCB Isolator replacement work	MPPTCL	MPPTCL	R		if voltage is less than 415kV	
79	765	SIPAT- 765/400KV ICT-1	02-Jan-18	7:30	04-Jan-18	19:00	Continuous		NTPC	NTPC				
80	220	220KV JHANOR HALDARWA 01	02-Jan-18	10:00	06-Jan-18	18:00	Continuous	04 Nos. of Isolator Replacement work at GETCO Haldarwa SS and Duv AMD work.	POWERGRID	WRTS-II	R	NAVASARI	SLDC Gujarat to be informed	
81	220	220kv KORBA(EAST)-BUDDHIPADAR III	02-Jan-18	8:00	07-Jan-18	18:00	Continuous	For diversion of Line at 345-346 on a/c of IRCON railway Xing.	WRTS-I	WRTS-I	C	Line	NLDC consent is required	
82	400	TIE CB OF 400 BDTCL-1. 315MVA X-MER NO-1 at 400KV c/s Phases	02-Jan-18	9:00	09-Jan-18	17:00	Continuous	For CB replacement	MPPTCL	MPPTCL	R			
83	400	400kv Rourkela-Raigarh Fdr -II ( Direct)	02-Jan-18	8:00	21-Jan-18	17:00	Continuous	For Diversion/ modification of 220kv Budhipadhar-Korba S/C	ER-	ER-				

84	400	400kv Sundargarh-Raigarh-Fdr-II	02-Jan-18	8:00	21-Jan-18	17:00	Continuous	For Diversion/ modification of 220kv Budhipadhar -Korba S/C	ER- WRTS-II	ER- WRTS-II			
85	400	J P NIGRIE-SATNA-2	02-Jan-18	6:00	02-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
86	765	705,Satna-2 & ICT-2 tie bay at Bina	03-Jan-18	9:30	03-Jan-18	0:00	Daily	For CB ,CT tan? & tigting of equipment connectors.	POWERGRID	WRTS-II	R	BINA	
87	765	701 Bay (Jaipur#2 main bay) at Gwalior	03-Jan-18	10:00	03-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
88	765	702 Bay (Jaipur# 2 Tie bay) at gwalior	03-Jan-18	12:00	03-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
89	765	703 Bay (765KV B/R- main Bay) at Gwalior	03-Jan-18	14:30	03-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
90	765	704 Bay (Jaipur#1 Main Bay) at gwalior	03-Jan-18	16:30	03-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
91	400	VindhyaChal ICT-3 with Bus-5	03-Jan-18	7:30	04-Jan-18	19:00	Continuous	PENTOGRAPH ISOLATOR (89A)REPLACEMENT AND BAY MAINTENANCE	NTPC	NTPC			Other bus tripping would result in generation loss at NTPC if
92	400	400 KV SUGEN BUS-1 FOR SUGEN VAPI LINE BUS- A ISOLATOR	03-Jan-18	8:00	03-Jan-18	12:30	Daily	Sugen - Vapi line Bus-A Isolator Maintenance with Bay on Transfer Bus	TPL-SUGEN	TPL-SUGEN	R		
93	400	Lamboti - Parli	03-Jan-18	8:00	03-Jan-18	17:00	Daily	Replacement of Polymer Long rod Insulator String by Composite	MSETCL	MSETCL			
94	400	400 KV MAIN Bus -2 with 400 KV Bus Coupler at Kansari	03-Jan-18	8:00	03-Jan-18	18:00	Daily	PMM Plan	GETCO	GETCO			NLDC to be informed
95	400	400 KV Chorania-Kasor line	03-Jan-18	8:00	03-Jan-18	18:00	Daily	For PG Iso. Overhauling work.	GETCO	GETCO			
96	400	DEHGAM - PIRANA # 2 TIE BAY 405 at Pirana	03-Jan-18	9:00	03-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
97	220	220KV ICT-2 Main Bay-203 at Vapi	03-Jan-18	9:00	03-Jan-18	17:00	Daily	AMP of CB, line taken on TBC	POWERGRID	WRTS-II	R	VAPI	
98	132	Kanhan-Pench ckt	03-Jan-18	9:00	03-Jan-18	17:00	Daily	Routine Maintenance & Diagnostic testing work	MSETCL	MSETCL			
99	400	400KV Pune GIS-2 Main bay (407) at Talegaon	03-Jan-18	9:00	03-Jan-18	17:30	Daily	For AMP works	WRTS-I	WRTS-I	R	Bay	
100	220	220 kV Bus-1 at Mapusa	03-Jan-18	9:00	03-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bus	Goa to be informed / All lines from Maharashtra to Goa to be informed
101	220	207 Main Bay Maiher- Satna line at Satna SS	03-Jan-18	9:00	03-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
102	400	400kV Damoh-Katni	03-Jan-18	9:00	03-Jan-18	18:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
103	765	ICT_765/400kv_SOLAPUR	03-Jan-18	9:00	03-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	ICT	
104	400	400 KV Parli#1 765kV ICT1 Tie bay 405 at Wardha	03-Jan-18	9:00	03-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
105	400	ICT2_400/220kv_SEONI	03-Jan-18	9:00	03-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	ICT	
106	765	765KV JABALPUR-3 & Future Tie bay(723) AT BHADAKAVALI/AGARHUKORPALA	03-Jan-18	9:00	03-Jan-18	18:00	Daily	AMP WORKS OF BAY	WRTS-I	WRTS-I	R	BAY	
107	400	400 KV RAIPUR-RAIGARH I	03-Jan-18	9:30	03-Jan-18	17:30	Daily	AMP & Relay testing at Raipur SS and A/R in Non auto for other circuit	WRTS-I	WRTS-I	R	Line	
108	HVDC	DIA 50 Q 52 Main bay Ramagundam-2 main bay at Bhadravathi	03-Jan-18	9:30	03-Jan-18	18:00	Daily	AMP , Power regulation not required	WRTS-I	WRTS-I	R	Bay	
109	765	707,Satna-1 main bay at Bina	03-Jan-18	9:30	03-Jan-18	18:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
110	765	BUS REACTOR_765kV_240MVAR_TAMNAR PS	03-Jan-18	10:00	03-Jan-18	12:00	Daily	For Spare Reactor switching	WRTS-I	WRTS-I	R	BR	
111	765	240MVar Bus Reactor at Vadodara	03-Jan-18	10:00	03-Jan-18	13:00	Daily	Changeover of Spare Reactor as a Y phase for AMP work	POWERGRID	WRTS-II	R	VADODARA	
112	400	BAY 405( TIE BAY FOR PITHAMPUR #2) at Indore	03-Jan-18	10:00	03-Jan-18	18:00	Daily	AMP TESTING	POWERGRID	WRTS-II	R	INDORE PS	
113	400	400 KV SUNDERGARH CKT-1 & BR TIE BAY 414 at Bairagarh	03-Jan-18	10:00	03-Jan-18	18:00	Daily	AMP 2017-18	WRTS-I	WRTS-I	R	BAY	
114	400	400 KV Bus bar-I at Parli PG	03-Jan-18	10:00	03-Jan-18	18:00	Daily	For AMP works & Construction works	WRTS-I	WRTS-I	R	Bus	
115	400	400KV SUGEN BUS-1 FOR TRANSFER BAY BUS- A ISOLATOR	03-Jan-18	13:30	03-Jan-18	17:30	Daily	Maintenance of Transfer Bay Bus-A isolator.	TPL-SUGEN	TPL-SUGEN	R		
116	400	400KV SUGEN TRANSFER BAY	03-Jan-18	13:30	03-Jan-18	17:30	Daily	Maintenance of Transfer Bay Bus-A isolator.	TPL-SUGEN	TPL-SUGEN	R		
117	400	400 KV DGEN Navsari Line 1 (BAY 406) with with 400kV Transf	03-Jan-18	7:00	04-Jan-18	18:00	Daily	Annual PM of 406 89 C and 406 89D isolators alongwith Earth	TPL	TPL	R		
118	400	400 KV BUS-I AT 400 KV ISP S/S	03-Jan-18	9:00	04-Jan-18	17:00	Continuous	Conductor stringing for extension of main bus -I & II	NHDC	NHDC	R		
119	220	Kakrapar - Vav # 2	03-Jan-18	9:00	04-Jan-18	18:00	Daily	AMP of line and removing grading rings of all polymer insulator strings from tower side	POWERGRID	WRTS-II	R	RHQ	
120	400	80MVAR BUS REACTOR at GMR warora	03-Jan-18	9:00	04-Jan-18	18:00	Continuous	for schedule maintenance , jumper tightness	GMR - WARORA	GMR - WARORA			
121	765	765 kV Bus-I at Bilaspur PS	03-Jan-18	9:00	04-Jan-18	18:00	Daily	Stringing of Bus in construction bays	WRTS-I	WRTS-I	C	Bus	
122	765	765kv ICT#2 & FUTURE TIE BAY 705 AT SOLAPUR	03-Jan-18	9:00	04-Jan-18	18:00	Continuous	ERECTION OF BAY EQUIPMENT OF 765KV PARLI	WRTS-I	WRTS-I	C	BAY	
123	765	715 Line reactor bay ( SWITCHABLE L/R BINA # 2) AT GWALIOR	03-Jan-18	10:00	04-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
124	400	400 KV Hadala-Amreli	03-Jan-18	8:00	04-Jan-18	18:00	Daily	Condition monitoring + Line maintenance + Signature test	GETCO	GETCO			
125	400	400kV ICT-2 Main Bay 406 at Bhatapara	03-Jan-18	9:00	05-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
126	220	220KV Mahalgaon- PGCL-I Ckt	03-Jan-18	10:00	06-Jan-18	17:00	Daily	Shutdown for 220 KV Isolator Replacement work under PSDF	MPPTCL	MPPTCL	R		

127	400	400 KV B BUS Outage at Padghe	03-Jan-18	0:00	10-Jan-18	24:00:00	Continuous	Replacement of B Bus Quadruple conductor in upper section <small>upper side</small>	MSETCL	MSETCL			Detail Outage schedule will be confirmed in D-3
128	400	400 KV Chorania-Kasor line	03-Jan-18	8:00	03-Jan-18	18:00	Daily	PMM Plan	GETCO	GETCO			
129	400	400kV S/C,Korba(NTPC)-bhilai	03-Jan-18	8:00	04-Jan-18	18:00	Continuous	Overhead Stringing of U/C 765kV D/C Raipur-Sundergarh Line	PGCIL	OGPTL(Sterlite)	R		Ckt ID to be confirmed in D-3
130	400	400kV Padghe Nagothane Ckt-1	03-Jan-18	0:00	04-Jan-18	24:00:00	Continuous	Replacement of B Bus Quadruple conductor in upper section <small>upper side</small>	MSETCL	MSETCL			
131	400	J P NIGRIE-SATNA-2	03-Jan-18	6:00	03-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
132	400	400 KV Kasor - SSP Line and Keep A/r in N/a of SSP-Asoj	04-Jan-18	8:00	05-Jan-18	18:00	Daily	PMM work & tan delta testing work	GETCO	GETCO			
133	765	765kV CHAMPA1 MAIN BAY (715) AT KOTRA PS	04-Jan-18	9:00	04-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BAY	
134	765	705 Bay (Jaipur#1 Tie Bay) at Gwalior	04-Jan-18	10:00	04-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT <small>GWALIOR</small>	POWERGRID	WRTS-II	R	GWALIOR	
135	400	Bay 403 (Rajgarh-Khandwa#1 Line MAIN BAY) AT <small>Dainbach Substation</small>	04-Jan-18	10:00	04-Jan-18	16:00	Daily	Annual Maintenance of CB & CT	POWERGRID	WRTS-II	R	RAJGARH	
136	765	706 Bay (765kV ICT-1 main Bay) at Gwalior	04-Jan-18	12:00	04-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT <small>GWALIOR</small>	POWERGRID	WRTS-II	R	GWALIOR	
137	765	707 Bay (Agra#1 Main bay) at Gwalior	04-Jan-18	14:30	04-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT <small>GWALIOR</small>	POWERGRID	WRTS-II	R	GWALIOR	
138	765	708 Bay ( Agra#2 Tie Bay) at Gwalior	04-Jan-18	16:30	04-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT <small>GWALIOR</small>	POWERGRID	WRTS-II	R	GWALIOR	
139	400	400 KV Bus 2 Kansari	04-Jan-18	8:00	04-Jan-18	18:00	Daily	Busbar maintenance work	GETCO	GETCO			NLDC to be informed
140	765	765/400kV ICT 1 (765kV Bay-14, 15 & 400kV Bay-01, 02 <small>last reason</small>	04-Jan-18	8:00	04-Jan-18	18:00	Continuous	Relay modification to be done for 2nd harmonic blocking in SEF.	SASAN	RELIANCE			
141	400	400 KV SUGEN BUS-2 FOR SUGEN UNOSUGEN LINE BUS- <small>ISOLATOR</small>	04-Jan-18	8:00	04-Jan-18	12:30	Daily	Sugen - UnoSugen line Bus-B Isolator Maintenance with Bay on <small>Transfer Due</small>	TPL-SUGEN	TPL-SUGEN	R		
142	400	Lambotti -Solapur	04-Jan-18	8:00	04-Jan-18	17:00	Daily	Replacement of Polymer Long rod Insulator String by Composite <small>Long rod Insulator strings</small>	MSETCL	MSETCL			
143	400	ICT-2 MAIN BAY-406 at Pirana	04-Jan-18	9:00	04-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II		PIRANA	
144	400	400KV Boisar Tie Bay 408 at Vapi	04-Jan-18	9:00	04-Jan-18	17:00	Daily	Bay AMP, CB & CT	POWERGRID	WRTS-II	R	VAPI	
145	220	220 kV Bus-2 at Mapusa	04-Jan-18	9:00	04-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bus	SLDC Goa to be informed / All other <small>line from Maharashtra / ED lines to</small>
146	400	Nagda#2 Tie Bay at Dehgam (Bay 411)	04-Jan-18	9:00	04-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGMAM	
147	220	Itarsi-Itarsi#2 Line (Bay-203) at Itarsi ( line remin in <small>particular</small>	04-Jan-18	9:00	04-Jan-18	18:00	Daily	For checking interlocks of newly commissioned equipments and <small>with Due Coupler b/w 2 Day AMM Works</small>	POWERGRID	WRTS-II	R	ITARSI	
148	400	125 MVAR B/R2 main bay at JBP	04-Jan-18	9:00	04-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	JABALPUR	
149	400	400KV BUS-II at Koradi-III SS	04-Jan-18	9:00	04-Jan-18	18:00	Daily	BUS Equipment Maintenance Activity	MEGPTCL	MEGPTCL			
150	400	400KV Bus Bar @ Lonikand 1	04-Jan-18	9:00	04-Jan-18	18:00	Daily	Online Testing of 400 KV Bus bar protection by keeping the <small>protection 20% of duration</small>	MSETCL	MSETCL			
151	765	765 KV ICT#2 MAIN BAY 706 at Wardha	04-Jan-18	9:00	04-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
152	765	765kV D'JAIGARH-RANCHI I	04-Jan-18	9:00	04-Jan-18	18:00	Daily	First time Switching scheme checking of (Non-switcheable) B - <small>between reactor units with Crossover unit</small>	WRTS-I	WRTS-I	R	Line	
153	400	400kV Bus Reactor2 Main Bay (443) at Raipur SS	04-Jan-18	9:30	04-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
154	400	400kV Chandrapur-1 & HVDC -2 Tie bay 405 at <small>Phadewar</small>	04-Jan-18	9:30	04-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
155	765	765 KV Main Bus Bar-2 at Bina	04-Jan-18	9:30	04-Jan-18	0:00	Daily	For tightining of all bus bar dropper connectors.	POWERGRID	WRTS-II	R	BINA	
156	400	400 KV BR MAIN BAY 415 at Raigarh ss	04-Jan-18	10:00	04-Jan-18	16:00	Daily	AMP 2017-18	WRTS-I	WRTS-I	R	BAY	
157	400	BAY 416( MAIN BAY BR-1) at Indore	04-Jan-18	10:00	04-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
158	400	Bay 401 (Indore-2 main bay) at Khandwa SS.	04-Jan-18	10:00	04-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
159	765	ICT4_765/400kv_TAMNAR PS	04-Jan-18	10:00	04-Jan-18	18:00	Daily	For commissioning of CSD relay of AT Bank # 04 through 765 KV <small>new CSD</small>	WRTS-I	WRTS-I	R	ICT	
160	400	400 KV Bus bar-II at Parli PG	04-Jan-18	10:00	04-Jan-18	18:00	Daily	For AMP works & Construction works	WRTS-I	WRTS-I	R	Bus	
161	400	400 KV SUGEN BUS-2 FOR SUGEN PIRANA BUS- B <small>ISOLATOR</small>	04-Jan-18	13:30	04-Jan-18	17:30	Daily	Sugen - Pirana line Bus-B Isolator Maintenance with Bay on <small>Transfer Due</small>	TPL-SUGEN	TPL-SUGEN	R		
162	765	765/400kV ICT 2 (765kV Bay-17, 18 & 400kV Bay-02, 03 <small>last reason</small>	04-Jan-18	8:00	04-Jan-18	18:00	Continuous	Relay modification to be done for 2nd harmonic blocking in SEF.	SASAN	RELIANCE			
163	400	Mouda Wardha line - 1	04-Jan-18	9:00	05-Jan-18	18:00	Continuous	Annual maintenance	NTPC	NTPC			
164	220	Bus Coupler at Itarsi	04-Jan-18	9:00	05-Jan-18	18:00	Continuous	For checking interlocks of newly commissioned equipments and <small>with Bus Coupler b/w 2 Day AMM Works</small>	POWERGRID	WRTS-II	R	ITARSI	
165	400	400kV KHANDWA2 MAIN_BAY_424 at Seoni	04-Jan-18	9:00	05-Jan-18	18:00	Continuous	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
166	400	400KV Bus 2 at bhachau	04-Jan-18	8:00	06-Jan-18	18:00	Daily	RTV Coating of Bus 2 Isolator	POWERGRID	WRTS-II	R	BHACHAU	
167	400	400/220/33kV,315MVA ICT-2 @ Girwali	04-Jan-18	9:00	09-Jan-18	18:00	Continuous	C & Tan Delta mesurement of Bushing & winding, Low voltage <small>protective &amp; protection trials, Low voltage measurement &amp; IV CT's &amp; P</small>	MSETCL	MSETCL			
168	400	J P NIGRIE-SATNA-2	04-Jan-18	6:00	04-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
169	400	402 Tie Bay Nigrie#1 765/400 KV ICT#1 at Satna SS	05-Jan-18	9:00	05-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	

170	400	400kV Nagda-Rajgarh-I	05-Jan-18	8:00	05-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R		
171	765	765KV D'JAIGARH- CHAMPA	05-Jan-18	9:00	05-Jan-18	17:30	Daily	Line isolator replacement at Champa PS	WRTS-I	WRTS-I	R	Line	NLDC consent required
172	400	400kV Bus-I at V-CHAL PS	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Bay extension work for 400kV D/C VindhyaChal PS-VindhyaChal	POWERGRID	WRTS-II	C	V-CHAL PS	NLDC consent required / on N-1 case Dihand connection will be out
173	400	400kV WARDHA-PARLI I and Keep A/r in N/a of Ckt II	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators in major reconnection line between Divar NH - S.H. Dalswadi Crossing	WRTS-I	WRTS-I	C	line	
174	400	400kV Bus-II at V-CHAL PS	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Bay extension work for 400kV D/C VindhyaChal PS-VindhyaChal	POWERGRID	WRTS-II	C	V-CHAL PS	NLDC consent required / on N-1 case Dihand connection will be out
175	400	400 kV Lonikand-II to Lonikand I interconnector ckt- II	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Routine Maintenance & Diagnostic testing work	MSETCL	MSETCL			
176	400	400 KV SUGEN BUS-2 FOR SUGEN JHANOR LINE BUS- B ISOLATOR	05-Jan-18	8:00	05-Jan-18	12:30	Daily	Sugen - Jhanor line Bus-B Isolator Maintenance with Bay on	TPL-SUGEN	TPL-SUGEN	R		
177	400	400kV Indore (PGCIL Hanuniya)-Pithampur-I	05-Jan-18	8:00	05-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R		
178	220	220 Kv Badod-Kota	05-Jan-18	8:00	05-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R		
179	400	400 KV Kansari-Kankroli	05-Jan-18	8:00	05-Jan-18	18:00	Daily	For Bay maint. work	GETCO	GETCO			NLDC consent required
180	400	TPGL-2 TIE BAY-414 at Pirana	05-Jan-18	9:00	05-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II		PIRANA	
181	400	400KV ICT-1 Main Bay 409 at Vapi	05-Jan-18	9:00	05-Jan-18	17:00	Daily	Bay AMP, CB & CT	POWERGRID	WRTS-II	R	VAPI	
182	220	220 KV Malanpur-Aouriya	05-Jan-18	9:00	05-Jan-18	17:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		NLDC consent required
183	220	220 kV Ponda ckt Main Bay(202) at Mapusa	05-Jan-18	9:00	05-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bay	Line to be inservice through TBC
184	400	Wanakbori Main Bay (Bay 412) at Dehgam	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGM	
185	400	406 Main Bay 400/220 KV ICT#2 at Satna SS	05-Jan-18	9:00	05-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
186	400	Bus Reactor @ Talandge	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Annual Maint.Work	MSETCL	MSETCL			
187	400	408 Tie bay of Akola-I line-1 and RPL line-1 at Akola-II SS	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL			
188	765	SWITCHABLE LR_765KV_RAICHUR 1_SOLAPUR	05-Jan-18	9:00	05-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	SLR	
189	400	400 KV Parli#1 Main bay 406 at Wardha	05-Jan-18	9:00	05-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
190	400	400kV Bus 2 at Tiroda SS	05-Jan-18	9:00	05-Jan-18	21:00	Daily	Bus & Bus Connected equipment maintenance	APML	APML			SPS to be inservcie
191	400	400 kV Sipat-3 Main Bay (415) at Raipur SS	05-Jan-18	9:30	05-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
192	400	400kV Raipur-3 Main Bay 413 bay at Bhadrawati	05-Jan-18	9:30	05-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
193	765	708,Satna-1 & Indore Tie bay at Bina	05-Jan-18	9:30	05-Jan-18	0:00	Daily	For CB ,CT tan? & tighting of equipment connectors.	POWERGRID	WRTS-II	R	BINA	
194	765	713 Bay (Main bay of satna#1 Line) at Gwalior	05-Jan-18	10:00	05-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT	POWERGRID	WRTS-II	R	GWALIOR	
195	220	220kV BUS#1 at Rajgarh	05-Jan-18	10:00	05-Jan-18	16:00	Daily	Annual Maintenance testing of Bus equipments	POWERGRID	WRTS-II	R	RAJGARH	
196	400	Buscoupler bay @Karad	05-Jan-18	10:00	05-Jan-18	17:00	Daily	Quarterly. Maint. Work	MSETCL	MSETCL			
197	400	400kV 'KOLHAPUR (MSETCL)-II & 400kV BR TIE BAY	05-Jan-18	10:00	05-Jan-18	18:00	Daily	For bay AMP works.	WRTS-I	WRTS-I	R	BAY	
198	400	417 BAY (TIE BAY FOR BR-1) at Indore	05-Jan-18	10:00	05-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
199	765	765KV ICT-3 Main Bay (706) at Tamnar PS	05-Jan-18	10:00	05-Jan-18	18:00	Daily	For AMP works of 706 Main Bay	WRTS-I	WRTS-I	R	BAY	
200	765	714 Bay (Satna#1 Tie Bay) at Gwalior	05-Jan-18	12:00	05-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT	POWERGRID	WRTS-II	R	GWALIOR	
201	400	400kv SUGEN BUS-2 FOR BUS COUPLER BAY BUS-B ISOLATOR	05-Jan-18	13:30	05-Jan-18	17:30	Daily	Maintenance of Bus coupler Bay Bus -2 isolator.	TPL-SUGEN	TPL-SUGEN	R		
202	400	400KV SUGEN BUS COUPLER BAY	05-Jan-18	13:30	05-Jan-18	17:30	Daily	Maintenance of Bus coupler Bay Bus -2 isolator.	TPL-SUGEN	TPL-SUGEN	R		
203	765	715 Bay (Bina#2 Line main Bay) AT GWALIOR	05-Jan-18	14:30	05-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT	POWERGRID	WRTS-II	R	GWALIOR	
204	765	716 Bay (main bay of Satna#2 Line) at gwalior	05-Jan-18	16:30	05-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT	POWERGRID	WRTS-II	R	GWALIOR	
205	400	400 KV KORADI-BHUSAVAL	05-Jan-18	8:00	06-Jan-18	18:00	Continuous	1)Restringing of conductor (being low clearance) between	MSETCL	MSETCL			Restringing work will be carried out between section no 111-112
206	765	765 Kv Bus-1 at Durg PS	05-Jan-18	8:00	06-Jan-18	18:00	Continuous	For Raj. Ckt -1 bus Extn. work	WRTS-I	WRTS-I	C	BUS	
207	400	400 kV DGEN GT-52 (BAY 407) with 400kV Transfer Bus	05-Jan-18	8:00	06-Jan-18	19:00	Continuous	Annual PM of 407 89 C and 407 89D isolators alongwith	TPL	TPL	R		
208	400	400 KV BUS-II AT 400 KV ISP S/S	05-Jan-18	9:00	06-Jan-18	17:00	Continuous	Conductor stringing for extension of main bus -I & II	NHDC	NHDC	R		
209	220	Jhanor - Haldarwa # 1	05-Jan-18	9:00	06-Jan-18	18:00	Daily	AMP of line and removing grading rings of all polymer insulator	POWERGRID	WRTS-II	R	RHQ	
210	765	715 Bay (Bina#2 Line main Bay) AT GWALIOR	05-Jan-18	10:00	06-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
211	400	Indore-Indore Ckt#I	05-Jan-18	10:00	06-Jan-18	18:00	Daily	Attending line defects	POWERGRID	WRTS-II	R	INDORE	
212	400	VindhyaChal Bus Section-4	05-Jan-18	7:30	06-Jan-18	19:00	Continuous	SF6 GAS PIPELINE MODIFICATION AND BAY MAINTENANCE	NTPC	NTPC			Other bus tripping would result in

213	765	SIPAT - 765KV ICT-1 MAIN BAY-1	05-Jan-18	7:30	06-Jan-18	19:00	Continuous	Only Main Bay S/D is required. Line S/D's are not required. Xmer	NTPC	NTPC				
214	400	400kV BR & Future Tie Bay (408) at Bhatapara	05-Jan-18	9:00	08-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay		
215	400	400 KV SUNDERGARH CKT-1 MAIN BAY 401 at Raigarh	05-Jan-18	10:00	08-Jan-18	16:00	Continuous	Overhauling of CGL make CB by CGL Engineer .	WRTS-I	WRTS-I	R	BAY		
216	400	400 KV Rourkela-Raigarh -I (Old configuration : RKL-RGH # CKT-II)	05-Jan-18	10:00	05-Jan-18	17:00	Daily	Connection of LILo point with Sundargarh Pooling station.If December dates are not finalized	ER-#(District/Canton)	ER-#(District/Canton)				
217	400	400 KV Rourkela-Raigarh -I (Old configuration : RKL-RGH # CKT-II)	05-Jan-18	10:00	05-Jan-18	17:00	Daily	Connection of LILo point with Sundargarh Pooling station	ER-#(District/Canton)	ER-#(District/Canton)				
218	400	J P NIGRIE-SATNA-1	05-Jan-18	6:00	05-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange	
219	400	400kV Nagda-Raigarh-II	06-Jan-18	8:00	06-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R			
220	400	400kV WARDHA-PARLI II and Keep A/r in N/a of Ckt I	06-Jan-18	9:00	06-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators in major sections like Power Buses NL C H D Busses	WRTS-I	WRTS-I	C	line		
221	765	709 Bay (765KV ICT-2 Main Bay) at Gwalior	06-Jan-18	10:00	06-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR		
222	400	Bay 406 (Rajgarh-Khandwa#2 Line MAIN BAY) AT	06-Jan-18	10:00	06-Jan-18	16:00	Daily	Annual Maintenance of CB & CT	POWERGRID	WRTS-II	R	RAJGARH		
223	765	710 Bay (Agra#2 Main bay) at gwalior	06-Jan-18	12:00	06-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR		
224	765	711 Bay (Agra#2 Tie bay) at gwalior	06-Jan-18	14:30	06-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR		
225	765	712 Bay (Main bay of Bina#1 Line) at gwalior	06-Jan-18	16:30	06-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR		
226	400	400 KV Chorania-Asoj-1 Line	06-Jan-18	8:00	06-Jan-18	18:00	Daily	For PG Iso. Overhauling work & conditioning monitoring work.	GETCO	GETCO				
227	220	Itarsi-Hoshangabad#2 Line (Bay-206) at Itarsi( line	06-Jan-18	9:00	06-Jan-18	18:00	Daily	For checking interlocks of newly commissioned equipments and with Due Coupling b/w 2 Bus AMP Works	POWERGRID	WRTS-II	R	ITARSI		
228	765	765KV JABALPUR -2 MAIN BAY(706) AT BHADANALAVAGADHUKORADIL	06-Jan-18	9:00	06-Jan-18	18:00	Daily	AMP WORKS OF BAY	WRTS-I	WRTS-I	R	BAY		
229	765	1500MVA ICT-1 at Vadodara	06-Jan-18	10:00	06-Jan-18	16:00	Daily	Changeover of Spare ICT as a R phase for AMP work & jumper modification work of Neutral side	POWERGRID	WRTS-II	R	VADODARA		
230	400	400KV KORADI-II -Koradi-III (TIDANGI CKT-1)LINE- MAIN DAY 400 & TIE DAY 400 + 200KV Koradi-II	06-Jan-18	10:00	06-Jan-18	18:00	Daily	TAN DELTA MEASUREMENT OF LINE CT409 & BUS CT 409	MSETCL	MSETCL			ALTERNATE SUPPLY FOR KORADI-III THROUGH 200KV KORADI-II KORADI	
231	765/400	3*500MVA ICT-1 @ Ektuni	06-Jan-18	10:00	06-Jan-18	20:00	Daily	Routine Maintain & Diagnostic Testing of CT & CB	MSETCL	Self				
232	765	765KV ICT-3 & Future Tie Bay (711) at Champa PS	06-Jan-18	9:00	07-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay		
233	400	Lambotri -Solapur	06-Jan-18	8:00	06-Jan-18	17:00	Daily	Replacement of Polymer Long rod Insulator String by Composite	MSETCL	MSETCL				
234	400	400kV Indore (PGCIL Hanunaya)-Pithampur-II	06-Jan-18	8:00	06-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R			
235	220	220kV Bhanpura-Modak	06-Jan-18	8:00	06-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R		NLDC consent required	
236	400	TPGL-2 MAIN BAY-415 at Pirana	06-Jan-18	9:00	06-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II		PIRANA		
237	400	Bay No-420 -Tie bay of 400kv Boisar-Magarwada-Future of Dolav	06-Jan-18	9:00	06-Jan-18	17:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR		
238	220	220 kV Amona ckt Main Bay (203) at Mapusa	06-Jan-18	9:00	06-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bay	Line to be inservice through TBC	
239	400	400 KV ICT#1 at Satna SS	06-Jan-18	9:00	06-Jan-18	18:00	Daily	For attending Oil leakage	POWERGRID	WRTS-II	R	SATNA		
240	400	400kV Bus-I at V-CHAL PS	06-Jan-18	9:00	06-Jan-18	18:00	Daily	Bay extension work for 400KV D/C VindhyaChal PS-VindhyaChal	POWERGRID	WRTS-II	C	V-CHAL PS	NLDC consent required / on N-1 case	
241	400	400 KV Jhabua Line -2 main 409 & Tie Bay 408	06-Jan-18	9:00	06-Jan-18	18:00	Daily	Maintenace of Main CB 409 & 408 & Line Maintenance	Jhabua Power	Jhabua Power			Jhabua not sell power in PX	
242	400	409 Main Bay of Akola-I Line-1 at Akola-II SS	06-Jan-18	9:00	06-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL				
243	400	400 KV ICT#2 MAIN BAY 407 at Wardha	06-Jan-18	9:00	06-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY		
244	400	400kV Rajpur-2 main bay 418 at Bhadravati	06-Jan-18	9:30	06-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay		
245	220	220kV BUS#2 at Rajgarh	06-Jan-18	10:00	06-Jan-18	16:00	Daily	Annual Maintenance testing of Bus equipments	POWERGRID	WRTS-II	R	RAJGARH		
246	400	420 BAY(TIE BAY FOR INDORE-ii) AT indore PG	06-Jan-18	10:00	06-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS		
247	400	Bay 402 (Indore-2 Tie bay) at Khandwa SS.	06-Jan-18	10:00	06-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA		
248	400	400KV ROURKELA-RAIGARH#2	06-Jan-18	9:00	06-Jan-18	18:00	Daily	Retrofitting & Commissioning of its Main CB A/R Relay.	ER-#(District/Canton)	ER-#(District/Canton)				
249	400	400kV Padghe Kalwa Ckt-2	06-Jan-18	0:00	07-Jan-18	24:00:00	Continuous	Replacement of B Bus Quadruple conductor in upper section	MSETCL	MSETCL				
250	400	J P NIGRIE-SATNA-1	06-Jan-18	6:00	06-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange	
251	400	400 KV Main Bus-1 Chornia	07-Jan-18	8:00	08-Jan-18	18:00	Continuous	For PG Iso. Overhauling work.	GETCO	GETCO				
252	400	400KV Bus-I at Boisar	07-Jan-18	9:00	07-Jan-18	18:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR		
253	400	Gandhar HAZIRA-2	07-Jan-18	8:00	08-Jan-18	18:00	Continuous	Annual bay maintenance and protection checking	NTPC	NTPC			Hazira cosent required. Hazira not to bid in Power Exchange	
254	400	417 Tie breaker at CGPL (Bhachau-3 and Bus Reactor	07-Jan-18	8:00	07-Jan-18	20:00	Daily	CT Testing	CGPL	CGPL				
255	765	765KV Bus-II at Pooling station,jabalpur	07-Jan-18	10:00	08-Jan-18	17:30	Daily	For VindhyaChal Bay Extension work at Pooling station,Jabalpur	POWERGRID	WRTS-II	C	JBP PS		

256	400	Lamboti - Parli	07-Jan-18	8:00	07-Jan-18	17:00	Daily	Replacement of Polymer Long rod Insulator String by Composite	MSETCL	MSETCL			
257	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	07-Jan-18	9:00	07-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRITS-I	WRITS-I	C	line	
258	765	765kV DURG PS -WARDHA_3 & 4	07-Jan-18	8:00	08-Jan-18	18:00	Continuous	Power line crossing of under Construction 765KV D/C Gadarwara- Wardha Tl	WRITS-I	WRITS-I	C	Line	
259	400	400 KV khadka-Aurangabad Ckt @ khadka ss	07-Jan-18	8:00	07-Jan-18	17:00	Daily	CB DCRM	MSETCL	MSETCL			
260	220	220KV Mehtaon-Auraiya	07-Jan-18	9:00	07-Jan-18	17:00	Daily	Shutdown for Post Mansoon & line maintenance	MPPTCL	MPPTCL	R		
261	400	400 KV BUS-II Satna SS	07-Jan-18	9:00	07-Jan-18	18:00	Daily	Bus Extension work through GIS	POWERGRID	WRITS-II	C	SATNA	
262	220	220kv Boisar-Boisar-I Line at Boisar	07-Jan-18	9:00	07-Jan-18	17:00	Daily	Line Equipment AMP	POWER GRID	WRITS-II	R	BOISAR	
263	765	765kV Bus 1 at Tiroda SS	07-Jan-18	9:00	07-Jan-18	21:00	Daily	Bus & Bus Connected equipment maintenance	APML	APML			SLDC Maharashtra consent required. Dadoba bus is also planned.
264	400	400 kV Akola- Bhusawal Line at 400 kV Akola SS	07-Jan-18	12:00	09-Jan-18	18:00	Daily	PID testing of insulator strings by Hot line Uint Akola. A/R shall be kept in non auto mode	MSETCL	MSETCL			400 KV Koradi- Bhusawal, 400 kV Akola Nanded segment @ 400 kV
265	400	J P NIGRIE-SATNA-2	07-Jan-18	6:00	07-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Purchase
266	400	400 KV Raita-Korba west feeder at 400 KV S/s Raita.	08-Jan-18	8:00	09-Jan-18	17:00	Continuous	For attending oil leakage in reactor and NGR.	CSPTCL	CSPTCL			
267	400	416 Bhachau-3 Main Breaker at CGPL	08-Jan-18	8:00	08-Jan-18	20:00	Daily	CT Testing	CGPL	CGPL			
268	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	08-Jan-18	9:00	08-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRITS-I	WRITS-I	C	line	
269	765	717 Bay (Satna#2 Tie bay)	08-Jan-18	10:00	08-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
270	765	718 Bay (main Bay of Bina#3 line)	08-Jan-18	12:00	08-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
271	400	404 Bay (400kV B/R-1 Mai Bay)	08-Jan-18	14:30	08-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
272	400	405 Bay (400kV ICT-1 Tie Bay)	08-Jan-18	16:30	08-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
273	400	Indore-Indore Ckt#II	08-Jan-18	10:00	09-Jan-18	18:00	Daily	For insulator washing due to bird pollution	POWERGRID	WRTS-II	R	INDORE	
274	400	B Bus @ Talandge	08-Jan-18	7:00	08-Jan-18	20:00	Daily	New Reactor Bus conductor jumping work	MSETCL	MSETCL			
275	400	400kv Dhule-SSNNL Ckt-I & II	08-Jan-18	8:00	08-Jan-18	17:00	Daily	On Line PID Testing	MSETCL	MSETCL			
276	400	400 KV Mundra Hadala Line	08-Jan-18	8:00	08-Jan-18	18:00	Daily	1st six monthly maint & Yearly testing	GETCO	GETCO			
277	220	Talandage - Chikodi	08-Jan-18	8:00	08-Jan-18	18:00	Daily	Quarterly Maintenance	MSETCL	MSETCL			
278	400	400kV BHADRAVATI-CHANDRAPUR III	08-Jan-18	8:00	08-Jan-18	18:00	Daily	and Tightning of Loose C C rings and other tower accessories at Bhadravati	WRTS-I	WRTS-I	R	LINE	
279	400	400kV Jindal-4 Main Bay (407) at Tamnar PS	08-Jan-18	8:00	08-Jan-18	20:00	Daily	For AMP works of 407 Main Bay	WRTS-I	WRTS-I	R	BAY	
280	400	TPGL-1 MAIN BAY-418 at Pirana	08-Jan-18	9:00	08-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II		PIRANA	
281	400	Chandrapur (Old GCR)-Girwali ckt-III @Girwali	08-Jan-18	9:00	08-Jan-18	17:00	Daily	For n/b tightening of hardware & e/w clamp at loc. No.911,908	MSETCL	MSETCL			
282	400	NSPCL TO RAIPUR LINE -1	08-Jan-18	9:00	08-Jan-18	17:00	Daily	Annual Maintenance	NSPCL	NSPCL			
283	400	Soja Main Bay (Bay 413) at Dehgam	08-Jan-18	9:00	08-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGAM	
284	400	414 Tie Bay Vind#1 and Bina#1 at Satna SS	08-Jan-18	9:00	08-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
285	400	400 KV GT main & tie bay 401 & 402	08-Jan-18	9:00	08-Jan-18	18:00	Daily	Maintenace of Generator Transformer	Jhabua Power Switchboard	Jhabua Power			
286	765	Tie Bay (702) of ICT-1 and Future Bay at Koradi III SS	08-Jan-18	9:00	08-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL			
287	765	765 KV BUS REACTOR-1 MAIN BAY 707 at Wardha	08-Jan-18	9:00	08-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
288	765	765KV JABALPUR -1 MAIN BAY(709) AT JABALPUR-JAWAHARLAL NEHRU	08-Jan-18	9:00	08-Jan-18	18:00	Daily	AMP WORKS OF BAY	WRTS-I	WRTS-I	R	BAY	
289	765	765kV D'JAIGARH- JHARSUGUDA I	08-Jan-18	9:00	08-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRTS-I	WRTS-I	R	Line	
290	400	220 KV Bhatapara Main bay (211) at Raipur SS	08-Jan-18	9:30	08-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
291	765	709, Indore main bay at Bina	08-Jan-18	9:30	08-Jan-18	0:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
292	400	410 Bay (400kV Side of 765/400kV ICT-1 main bay)	08-Jan-18	10:00	08-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
293	400	400kV LARA(NTPC)-KOTRA PS I	08-Jan-18	10:00	08-Jan-18	12:00	Daily	For Line AMP works, Other ckt shall be in Non-auto mode for this period	WRTS-I	WRTS-I	R	Line	
294	400	400kV LARA(NTPC)-KOTRA PS II	08-Jan-18	12:00	08-Jan-18	14:00	Daily	For Line AMP works, Other ckt shall be in Non-auto mode for this period	WRTS-I	WRTS-I	R	Line	
295	400	409 (Tie Bay of Wardha ckt 1 & Bhusawal ckt ) at 400 kV Akola SS	08-Jan-18	10:00	08-Jan-18	17:00	Daily	Routine Maintenance & testing work	MSETCL	MSETCL			
296	765	765kV ICT#1 at GWALIOR	08-Jan-18	10:00	08-Jan-18	18:00	Daily	Bus Duct Connection for GIS	POWERGRID	WRTS-II	C	GWALIOR	
297	400	BAY 424 (MAIN BAY FOR KHANDWA #1) at Indore	08-Jan-18	10:00	08-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
298	400	220 KV Vapi-Tarapur	08-Jan-18	0:00	08-Jan-18	0:00	Daily	Bay maint.work	GETCO	GETCO			

299	400	400 kV DGEN Navsari Line 2 (BAY 405) with 400kV	08-Jan-18	8:00	09-Jan-18	19:00	Daily	Annual PM of 405 89 C and 405 89D isolators alongwith Earth	TPL	TPL	R		
300	765	765kV ICT-3 Main Bay (712) at Champa PS	08-Jan-18	9:00	09-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
301	765	765kV ICT1_MAIN_BAY_712 at Seoni	08-Jan-18	9:00	09-Jan-18	18:00	Continuous	FAULTY INTERRUPTER REPLACEMENT WORK	WRTS-I	WRTS-I	R	BAY	
302	400	400kV Bus-1 at Aurangabad	08-Jan-18	9:00	08-Jan-18	18:00	Daily	for Statcom jumpering works and stability test	WRTS-I	WRTS-I	C	Bus	
303	220	400kV ICT#1 , 220kV side main bay (208) at Bhatapara	08-Jan-18	9:00	10-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
304	400	Korba - Mahan Line	08-Jan-18	7:30	10-Jan-18	19:00	Continuous	For Annual Testing & Maintenance	NTPC	NTPC			Mahan shall not bid on Power Euchanee
305	400	ICT # 2 at bhachau	08-Jan-18	8:00	11-Jan-18	18:00	Continuous	For replacement of Gasket.	POWERGRID	WRTS-II	R	BHACHAU	
306	220	220KV JHANOR HALDARWA 02	08-Jan-18	10:00	12-Jan-18	18:00	Continuous	04 Nos. of Isolator Replacement work at GETCO Haldarwa SS and	POWERGRID	WRTS-II	R	NAVSARI	
307	400	400kv Bhopal-1 Tie CB-Bay at 400KV S/s Bina	08-Jan-18	8:00	13-Jan-18	17:00	Continuous	Replacement of Tie Bay CB	MPPTCL	MPPTCL	R		
308	400	Pole-1 WA Z-11Q-3 400kv Breaker of Non Base Filter Z- A (OPAVAD) @Chandrapur	08-Jan-18	8:00	17-Jan-18	18:00	Continuous	For overhauling of Breaker Interrupeter & pole(R,Y & B Ph) due	MSETCL	MSETCL			The HVDC Link will be operated through normal Buses Mode with Hotline work will be done and Line will be service
309	400	400 KV Tiroda-Warora Line Ckt I & II (Auto reclosure disabled mode)	08-Jan-18	8:00	18-Jan-18	18:00	Daily	Puncture insulator Detector testing from Tno. 145 to 175	ATIL	ATIL			Hotline work will be done and Line will be service
310	400	400KV RAPP-Sujalpur line 1	08-Jan-18	10:00	12-Jan-18	17:00	Daily	AR-OFF : A/R on Non -auto mode for Hotline rectification work	RTCL	RTCL	R		
311	+/-800 HVDC	Pole-I HVDC Champa Kurukshetra Link	08-Jan-18	9:00	08-Jan-18	17:30	Daily	Software/Hardware modification works	POWERGRID	POWERGRID			1500MW Curtailment in WR-NR
312	400	J P NIGRIE-SATNA-1	08-Jan-18	6:00	08-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Euchanee
313	400	Indore # 2-Khandwa #1 Tie Bay at Itarsi	09-Jan-18	9:00	14-Jan-18	18:00	Continuous	For Retrofitting of BHEL breaker with CGL Breaker.	POWERGRID	WRTS-II	R	ITARSI	
314	765	765 KV BUS_I_KOTRA PS	09-Jan-18	9:00	09-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BUS	
315	400	400 KV Main Bus-2 Chornia	09-Jan-18	8:00	10-Jan-18	18:00	Continuous	For PG Iso. Overhauling work & conditioning monitoring work.	GETCO	GETCO			
316	400	428 Bhachau-1 Main breaker	09-Jan-18	8:00	09-Jan-18	20:00	Daily	CT Testing	GPL	GPL			
317	765	765 Kv ICT #1 main bay (703) at Durg PS	09-Jan-18	9:00	09-Jan-18	18:00	Daily	AMP of Bay	WRTS-I	WRTS-I	R	Bay	
318	765	765 KV BUS_I_KOTRA PS	09-Jan-18	9:00	09-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BUS	
319	765	765KV Bhopal Line alongwith Line Reactor	09-Jan-18	10:00	10-Jan-18	18:00	Daily	For VindhyaChal Bay Extension work at Pooling station,Jabalpur	POWERGRID	WRTS-II	C	JBP PS	
320	765	765 kV S/C Bilaspur-Seoni Ckt-2 line	09-Jan-18	8:00	09-Jan-18	20:00	Daily	Power line crossing of 765 kV S/C Sipat to Bilaspur line CKT 2 at	PGCIL	STL	C		
321	220	220 KV ICT-2 Main bay(204) 220kV side at Mapusa	09-Jan-18	9:00	09-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
322	400kV	400kV Bus-II at V-CHAL PS	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Bay extension work for 400kV D/C VindhyaChal PS-VindhyaChal	POWERGRID	WRTS-II	C	V-CHAL PS	
323	400	400KV Jabalpur-jabalpur#1 interconnecting Line at Pooling Station labulbar	09-Jan-18	10:00	09-Jan-18	14:00	Daily	AMP work	POWERGRID	WRTS-II	R	JBP PS	
324	400	400 KV Bus 1 Kansari	09-Jan-18	8:00	09-Jan-18	18:00	Daily	PMM work	GETCO	GETCO			NLDC to be informed
325	400	400kV Rajgarh-SSP-I	09-Jan-18	8:00	09-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R		
326	400	CB 10C01A AC FILTER 2 MAIN BAY at Mundra HVDC Terminal	09-Jan-18	8:00	09-Jan-18	18:00	Daily	CB 10C01A-Q0, CT 10C01A-T1(Annual Maintenance and DCRM Tension of CFC)	ATIL	ATIL	R		
327	400	400kV BHADRAVATI-CHANDRAPUR IV	09-Jan-18	8:00	09-Jan-18	18:00	Daily	Tighning of Loose C C rings and other tower accessories at Loc No.07 other site shall be in non Auto mode	WRTS-I	WRTS-I	R	LINE	
328	400	400kV JPL- 4 & ICT-1 Tie Bay (408) at Tamnar PS	09-Jan-18	8:00	09-Jan-18	20:00	Daily	For AMP works of 408 Tie Bay	WRTS-I	WRTS-I	R	BAY	
329	400	TPGL-1 TIE AY -417 at Pirana	09-Jan-18	9:00	09-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II		PIRANA	
330	400	400KV Pune GIS-3 Main bay (409) at Talegaon	09-Jan-18	9:00	09-Jan-18	17:30	Daily	For AMP works	WRTS-I	WRTS-I	R	Bay	
331	220	220 KV Thivim-1 Main Bay(206) at Mapusa	09-Jan-18	9:00	09-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
332	400	Soja Tie Bay (Bay 414) at Dehgam	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGM	
333	400	Satpura - Khandwa #2 Tie Bay at Itarsi	09-Jan-18	9:00	09-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
334	400	Warora Line 1 Main Bay at Tiroda SS	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Bay Equipment Maintenance	ATIL	ATIL			
335	400	406-Main Bay of Future Line at Akola-II SS	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL			
336	400	400 kV ACBIL & Future Tie bay (417) at Bilaspur	09-Jan-18	9:00	09-Jan-18	18:00	Daily	AMP works (CB Timings and CT tan delta meas)	WRTS-I	WRTS-I	R	Bay	
337	765	765 KV BUS REACTOR-2 MAIN BAY 712 at Wardha	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
338	400	400KV ICT 1 & Future TIE BAY(420) AT DHAAMALA VADU KORDA LEC	09-Jan-18	9:00	09-Jan-18	18:00	Daily	AMP WORKS OF BAY	WRTS-I	WRTS-I	R	BAY	
339	765	765kV D'JAIGARH- JHARSUGUDA II	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators in major receiver line Power NH C U Daulawar Crossing	WRTS-I	WRTS-I	R	Line	
340	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	09-Jan-18	9:00	09-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators in major receiver line Power NH C U Daulawar Crossing	WRTS-I	WRTS-I	C	line	
341	220	220 KV Raipur-Doma-I Main bay 212 Bay at Raipur SS	09-Jan-18	9:30	09-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	SLDC Chhattisgarh consent required.

342	400	400kv Emco-1 main bay 422 at Bhadrawati	09-Jan-18	9:30	09-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
343	765	709, Indore main bay at Bina	09-Jan-18	9:30	09-Jan-18	0:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
344	765	717,Gwalior-3 & JBP-2 tie bay at Bina	09-Jan-18	9:30	09-Jan-18	0:00	Daily	For CB Tan ? & tightening of equipment connectors.	POWERGRID	WRTS-II	R	BINA	
345	400	Bay 413F (FSC of Rajgarh-Kasor#1 Line) at Rajgarh <small>Cable testing</small>	09-Jan-18	10:00	09-Jan-18	16:00	Daily	Annual Maintenance testing of FSC equipments	POWERGRID	WRTS-II	R	RAJGARH	
346	220	220KV KAPP VAV 2	09-Jan-18	10:00	09-Jan-18	17:00	Daily	Attending Hot-spots and S/D nature Defects and AMP Works at <small>GETCO Vav</small>	POWERGRID	WRTS-II	R	NAVSARI	
347	400	BAY 426 (TIE BAY FOR KHANDWA #2) at Indore	09-Jan-18	10:00	09-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
348	400	Bay 405 (Indore-1 Tie bay) at Khandwa SS.	09-Jan-18	10:00	09-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
349	765	Vadodara-Indore Line	09-Jan-18	10:00	09-Jan-18	18:00	Daily	Modification of Quad jumpers of CVT to Twin jumper at <small>Vadodara</small>	POWERGRID	WRTS-II	R	VADODARA	
350	400	KORADI-II - WARDHA PGCIL LINE TIE BAY 411 @ 400KV <small>Koradi II</small>	09-Jan-18	10:00	09-Jan-18	18:00	Daily	DCRM,TIMING, IR OF CB 411-Q52	MSETCL	MSETCL		400KV KORADI-II -WARDHA PGCIL <small>LINE WILL REMAIN IN SERVICE</small>	
351	400	400KV Jabalpur-jabalpur#2 interconnecting Line at <small>Patna Chhapar</small>	09-Jan-18	14:30	09-Jan-18	18:30	Daily	AMP work	POWERGRID	WRTS-II	R	JPB PS	
352	400	220 KV Bhilad-Tarapur	09-Jan-18	0:00	09-Jan-18	0:00	Daily	PMM Work.	GETCO	GETCO			
353	765	702 Tie Bay ICT#1 and Bina#1 at Satna SS	09-Jan-18	9:00	10-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
354	400	400 KV Amreli-Jetpur 1	09-Jan-18	8:00	10-Jan-18	18:00	Daily	Condition monitoring + Line maintenance + Signature test	GETCO	GETCO			
355	400	400kV Bus#1 AT GWALIOR	09-Jan-18	10:00	11-Jan-18	18:00	Daily	Bus Duct Connection for GIS	POWERGRID	WRTS-II	C	GWALIOR	Proposed bay outage sby RTAMC are postponed
356	400	400 KV SUNDERGARH CKT-1 & ICT-1 TIE BAY 402 at <small>Dainchi</small>	09-Jan-18	10:00	12-Jan-18	18:00	Continuous	Overhauling of CGL make CB by CGL Engineer .	WRTS-I	WRTS-I	R	BAY	
357	400	400kv Dhule-SSNNL Ckt-I	09-Jan-18	8:00	13-Jan-18	17:00	Daily	STRING Work Replacement	MSETCL	MSETCL			
358	400	50MVAR RAPP-I Line Reactor at Shujalpur.	09-Jan-18	10:00	09-Jan-18	18:00	Daily	AMP works.	POWERGRID	WRTS-II	R	SHUJALPUR	
359	+/-800 MVA	Pole-II HVDC Champa Kurukshetra Link	09-Jan-18	9:00	09-Jan-18	17:30	Daily	Software/Hardware modification works	POWERGRID	POWERGRID			1500MW Curtailment in WR-NR
360	400	J P NIGRIE-SATNA-1	09-Jan-18	6:00	09-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
361	400	V-CHAL- JBP # 4 main bay at Jabalpur	10-Jan-18	9:00	10-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	JABALPUR	
362	400	Itarsi - Indore Ckt.1	10-Jan-18	8:00	12-Jan-18	18:00	Daily	Replacement of porcelain insulator strings with polymer in <small>Chhatarpur</small>	POWERGRID	WRTS-II	C	RHQ	
363	765	765kV D'AIAGARH-BILASPUR	10-Jan-18	9:00	13-Jan-18	18:00	Daily	Rectification of open spacer cum damper, fixing of missing	WRTS-I	WRTS-I	R	Line	
364	765	765kV Bus-I at V-CHAL PS	10-Jan-18	9:00	10-Jan-18	18:00	Daily	Bay extension work for 765kV S/C VindhyaPS- <small>(Chhatarpur - Vindhya PS)</small>	POWERGRID	WRTS-II	C	V-CHAL PS	
365	400	CB 10C01B AC FILTER 1&2 DIA BAY at Mundra HVDC <small>Terminal</small>	10-Jan-18	8:00	10-Jan-18	18:00	Daily	CB 10C01B-Q0, CT 10C01B-T11(Annual Maintenance and DCRM <small>Traction of Cn</small> )	ATIL	ATIL	R		
366	400	400 KV Kansari Varsana line	10-Jan-18	8:00	10-Jan-18	18:00	Daily	Bay maintenance at Kansari end.	GETCO	GETCO			
367	220	Kawas-Haldarwa Line#1	10-Jan-18	8:00	10-Jan-18	18:00	Continuous	CT,CVT & Protection Testing.	NTPC	NTPC			
368	400	400 kV DGEN REACTOR (BAY 401) with 400kV Bus A	10-Jan-18	8:00	10-Jan-18	19:00	Daily	Annual PM of 401 89A isolator with earth switch. Bus A outage <small>and reactor bay outage required</small>	TPL	TPL	R		
369	400	VADODARA - PIRANA # 2 407 MAIN BAY at Pirana	10-Jan-18	9:00	10-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
370	400	400KV ICT-2 Main Bay 412 at Vapi	10-Jan-18	9:00	10-Jan-18	17:00	Daily	Bay AMP, CB & CT	POWERGRID	WRTS-II	R	VAPI	
371	132	Mansar-Pench ckt	10-Jan-18	9:00	10-Jan-18	17:00	Daily	Routine Maintenance & Diagnostic testing work	MSETCL	MSETCL			
372	400	NSPCL TO RAIPUR LINE -2	10-Jan-18	9:00	10-Jan-18	17:00	Daily	Annual Maintenance	NSPCL	NSPCL			
373	220	220 kV Thivim-2 Main Bay (207) at Mapusa	10-Jan-18	9:00	10-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
374	400	Ranchodpur#1 Main Bay (Bay 415) at Dehgam	10-Jan-18	9:00	10-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGM	
375	400	Khandwa # 1 Main Bay at Itarsi	10-Jan-18	9:00	10-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
376	400	400 KV Jhabua Line -1 main 403 & Tie Bay 402	10-Jan-18	9:00	10-Jan-18	18:00	Daily	Maintenace of Main CB 403 & 402 & Line Maintenance	Jhabua Power <small>switched off</small>	Jhabua Power			
377	765	BUS REACTOR_765kV_240MVAR_SOLAPUR	10-Jan-18	9:00	10-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BR	
378	400	400 KV AKOLA #1 MAIN BAY 419 at Wardha	10-Jan-18	9:00	10-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
379	220	220kV SEONI2 Main_BAY (205L) at Seoni	10-Jan-18	9:00	10-Jan-18	18:00	Daily	FOR AMP WORK	MPPKVVCL	WRTS-I	R	Bay	
380	400	400KV ICT 2 & Future TIE BAY(423) AT <small>DHARAMSALA</small> KAURKHALI	10-Jan-18	9:00	10-Jan-18	18:00	Daily	AMP WORKS OF BAY	WRTS-I	WRTS-I	R	BAY	
381	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	10-Jan-18	9:00	10-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>in major reconnection like Power Divar, NH 84, Railways, Cessnock</small>	WRTS-I	WRTS-I	C	line	
382	400	400kV BR1 Main Bay (410) at Raipur SS	10-Jan-18	9:30	10-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
383	400	400kV Parli-2 main bay 424 at Bhadrawati	10-Jan-18	9:30	10-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
384	765	710,Bus reactor-1 main bay at Bina	10-Jan-18	9:30	10-Jan-18	0:00	Daily	For CB Timing & tightening of equipment connectors.	POWERGRID	WRTS-II	R	BINA	

385	220	203 Bay (Mahalaon#1 Line Bay)	10-Jan-18	10:00	10-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT SWALBAR	POWERGRID	WRTS-II	R	GWALIOR	
386	400	Bay 416F (FSC of Rajgarh-Kasor#2 Line) at Rajgarh Substation	10-Jan-18	10:00	10-Jan-18	16:00	Daily	Annual Maintenance testing of FSC equipments	POWERGRID	WRTS-II	R	RAJGARH	
387	220	220KV Kalmeshwar Pandhurna ckt	10-Jan-18	10:00	10-Jan-18	17:00	Daily	Routine Maintenance & Diagnostic testing work	MSETCL	MSETCL			
388	400	BAY 427 (MAIN BAY FOR KHANDWA #2) at Indore	10-Jan-18	10:00	10-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
389	765	765KV Jabalpur-Bina#2 Line at Pooling Station,Jabalpur	10-Jan-18	10:00	10-Jan-18	18:00	Daily	Commissioning of Bus#1 spare Reactor & swap with R-Ph Reactor	POWERGRID	WRTS-II	C	JBP PS	
390	400	Bay 406 (Indore-1 Main bay) at Khandwa SS.	10-Jan-18	10:00	10-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
391	765	ICT3_765/400kv_KOTRA PS	10-Jan-18	10:00	10-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	ICT	
392	400	400kV WARDHA-MAUDA I & II	10-Jan-18	8:00	11-Jan-18	18:00	Continuous	Power line crossing of under Construction 765KV D/C Gadarwara-Wardha TL	WRTS-I	WRTS-I	C	Line	NTPC consent required.Generation restriction
393	400	400kV Bus-2 at Aurangabad	10-Jan-18	9:00	10-Jan-18	18:00	Continuous	for Statcom jumping works and stability test	WRTS-I	WRTS-I	C	Bus	
394	220	220KV KAPP VAV 1	10-Jan-18	10:00	11-Jan-18	17:00	Daily	Attending Hot-spots and S/D nature Defects and AMP Works at KAPP VAV	POWERGRID	WRTS-II	R	NAVSARI	
395	220	220kV Bhatapara-1 Main bay (203) at Bhatapara	10-Jan-18	9:00	12-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
396	400	220KV 63 MVA Station Transformer # 6 Phase-3	10-Jan-18	9:30	12-Jan-18	19:00	Continuous	Annual Transformer & bay Maintenance	APL	APL	R		
397	400	ICT# 2 AT JABALPUR	10-Jan-18	8:00	17-Jan-18	20:00	Continuous	Overhauling work	POWERGRID	WRTS-II	R	JABALPUR	
398	400	315 MVA ICT 1 @ 400 KV Dhule	10-Jan-18	8:00	23-Jan-18	17:00	Continuous	Y PH Unit replacement by Spare	MSETCL	MSETCL			
399	400	50MVAR RAPP-II Line Reactor at Shujalpur.	10-Jan-18	10:00	10-Jan-18	18:00	Daily	AMP works.	POWERGRID	WRTS-II	R	SHUJALPUR	
400	400	400 KV S/C Bhatapara-Bhilai	10-Jan-18	8:00	11-Jan-18	18:00	Continuous	Overhead Stringing of U/C 765kV D/C Raipur-Sundergarh Line	PGCIL	OGPTL(Sterlite)	R		
401	765	765 KV D/C Jharsuguda- Dharamjaygarh Transmission Line Ckt 1 & II	10-Jan-18	8:00	12-Jan-18	17:00	Continuous	Swapping arrangement : Stringing work of 765KV Jharsuguda - Dharamjaygarh TL Ckt III & IV with Ckt 1 & II	ER-Wardha/Cum	ER-Wardha/Cum			
402	+/-800 MVA	BIPOLE HVDC Champa Kurukshetra Link	10-Jan-18	9:00	11-Jan-18	17:30	Daily	Bipole software/Hardware modification works	POWERGRID	POWERGRID			3000MW Curtailment in WR-NR
403	400	J P NIGRIE-SATNA-2	10-Jan-18	6:00	10-Jan-18	18:00	Daily	Fixing of additional Pilot insulator String in DD type Towers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
404	400	Parli PGCL ckt 1@ Girwali	11-Jan-18	9:00	11-Jan-18	18:00	Daily	Bay maintenance work	MSETCL	MSETCL			
405	400	400 kv Dabhol -Nagothane Ckt 1	11-Jan-18	8:00	17-Jan-18	18:00	Daily	String replacement and Earth wire replacement	MSETCL	MSETCL			
406	400	400 KV Mansar-Bhachau Line	11-Jan-18	8:00	11-Jan-18	18:00	Daily	Annual Testing,relay testing And Bay Equipments Maintenance	GETCO	GETCO			
407	400	400 KV BUS-I & B/C Hadala	11-Jan-18	8:00	11-Jan-18	18:00	Daily	Tan Delta Testing of CT's & CTV's And Breaker DCRM and Bay	GETCO	GETCO			
408	400	400KV Girwali-Solapur(Lambotri)-S/c line	11-Jan-18	8:00	12-Jan-18	18:00	Continuous	Construction of 400KV D/C Old Parli - New Parli TL	MSETCL	WRTS-I	C	Line	To be taken by Hot line method
409	400	400kV WARDHA-PARLI I & II	11-Jan-18	8:00	15-Jan-18	18:00	Continuous	LILO of 400KV D/C Wardha - Parli TL at Warora.Loop IN Loop Out connection to old Wardha - Parli TL	WRTS-I	WRTS-I	C	Line	Wardha-Akola shutdown would be done
410	400	400KV Wardha - Parli-I & II Existing bays at Wardha end	11-Jan-18	8:00	15-Jan-18	18:00	Continuous	LILO of 400KV D/C Wardha - Parli TL at Warora.Loop IN Loop Out connection to old Wardha - Parli TL	WRTS-I	WRTS-I	C	Bay	
411	400	400KV Wardha - Parli-I & II Existing bays at Parli end	11-Jan-18	8:00	15-Jan-18	18:00	Continuous	LILO of 400KV D/C Wardha - Parli TL at Warora.Loop IN Loop Out connection to old Wardha - Parli TL	WRTS-I	WRTS-I	C	Bay	
412	400	400 KV SUGEN BUS-2 FOR SUGEN VAPI LINE BUS- B	11-Jan-18	8:00	11-Jan-18	12:30	Daily	Sugen - Vapi line Bus-B Isolator Maintenance with Bay on Transfer bus	TPL-SUGEN	TPL-SUGEN	R		
413	400	400KV Sugen Main Bay 410 at Vapi	11-Jan-18	9:00	11-Jan-18	17:00	Daily	Bay AMP, CB & CT	POWERGRID	WRTS-II	R	VAPI	
414	400	400KV Pune GIS-2 & Pune GIS-3 Tie bay (408) at Talsarao	11-Jan-18	9:00	11-Jan-18	17:30	Daily	For AMR works	WRTS-I	WRTS-I	R	Bay	
415	400	Reactor-I of 400KV Aurangabad -Boisar #1 at Boisar	11-Jan-18	9:00	11-Jan-18	18:00	Daily	145KV CB Erection Work for implementation of NGR bypass system	POWER GRID	WRTS-II	C	BOISAR	
416	400	400Kv PUNE(GIS)-PUNE(TALEGOAN)_1	11-Jan-18	9:00	11-Jan-18	17:00	Daily	AMP works and AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
417	765	765KV Bus-II at V-CHAL PS	11-Jan-18	9:00	11-Jan-18	18:00	Daily	Bay extension work for 765KV S/C VindhyaChal PS-connection to old V-CHAL PS	POWERGRID	WRTS-II	C	V-CHAL PS	
418	400	Girawali-Solapur line@Girwali	11-Jan-18	10:00	11-Jan-18	18:00	Daily	Hardware tightening and fixing work at Loc No-162,175,193,220	MSETCL	MSETCL			
419	220	Bus Coupler at Itarsi	11-Jan-18	9:00	11-Jan-18	14:00	Continuous	For checking interlocks of newly commissioned equipments and with Bus Coupler bay	POWERGRID	WRTS-II	R	ITARSI	
420	400	jejuri-Koyna St-IV @ Jejuri	11-Jan-18	8:00	11-Jan-18	17:00	Daily	Routine Maintenance & Diagnostic testing work.	MSETCL	MSETCL			
421	400	CB 10C01C AC FILTER 1 MAIN BAY at Mundra HVDC	11-Jan-18	8:00	11-Jan-18	18:00	Daily	CB 10C01C-Q0, CT 10C01C-T1 (Annual Maintenance and DCRM Traction of gen)	ATIL	ATIL	R		
422	400	400 KV DGEN Waghodiya Line 2 (BAY 402) with 400kV Bus A	11-Jan-18	8:00	11-Jan-18	19:00	Daily	Annual PM of 402 89A isolator with earth switch. Bus A outage and 402 has been removed	TPL	TPL	R		
423	220	Itarsi-Itarsi#2 Line (Bay-203) at Itarsi	11-Jan-18	9:00	11-Jan-18	14:00	Daily	For checking interlocks of newly commissioned equipments and with Bus Coupler bay	POWERGRID	WRTS-II	R	ITARSI	
424	400	VADODARA - PIRANA # 2 408 TIE BAY at Pirana	11-Jan-18	9:00	11-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
425	220	220KV Khadoli-Sayali line	11-Jan-18	9:00	11-Jan-18	17:00	Daily	Line s/d for terminal equipment AMP at sayali end	POWERGRID	WRTS-II	R	VAPI	
426	400	Bay No-418- Main Bay of 400kv kala Line at Boisar	11-Jan-18	9:00	11-Jan-18	17:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR	
427	400	Bus Coupler @ BBLR	11-Jan-18	9:00	11-Jan-18	17:00	Daily	Quarterly Maintenance work & Servicing and alignment of PG	MSETCL	MSETCL			Bus will be separated

428	220	220KV Gwalior II - Gwalior(PGCL)-II	11-Jan-18	9:00	11-Jan-18	17:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
429	400	400KV Lonikhand & 400KV BR Tie bay (414) at Talegaon	11-Jan-18	9:00	11-Jan-18	17:30	Daily	For AMP works	WRTS-I	WRTS-I	R	Bay	
430	220	220 kV ICT-1 Main Bay(208) 220kV side at Mapusa	11-Jan-18	9:00	11-Jan-18	17:30	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
431	400	Khandwa #2 Main Bay at Itarsi	11-Jan-18	9:00	11-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
432	400	Bus Coupler @ Talandge	11-Jan-18	9:00	11-Jan-18	18:00	Daily	Annual Maint.Work	MSETCL	MSETCL			
433	765	765kV Bus Reactor Main bay (706) at Bilaspur PS	11-Jan-18	9:00	11-Jan-18	18:00	Daily	AMP works (CB Timings and CT tan delta meas)	WRTS-I	WRTS-I	R	Bay	
434	765	765 KV BUS_II_KOTRA PS	11-Jan-18	9:00	11-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BUS	
435	400	ICT1_400/220kv_SOLAPUR	11-Jan-18	9:00	11-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	ICT	
436	400	400 KV Akola#1 & ICT1 Tie bay 420 at Wardha	11-Jan-18	9:00	11-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
437	400	400kV FUTURE &^ICT2_TIE_BAY_405 at Seoni	11-Jan-18	9:00	11-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
438	765	ICT1_765/400kv_D'JAIGARH	11-Jan-18	9:00	11-Jan-18	18:00	Daily	To provide insulation on Tertiary Jumpers.	WRTS-I	WRTS-I	R	ICT	
439	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	11-Jan-18	9:00	11-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRTS-I	WRTS-I	C	line	
440	220	220 kv side ICT-2 bay(20552) at Raipur SS	11-Jan-18	9:30	11-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
441	400	250MVA ICT main bay 425 at Bhadrawati	11-Jan-18	9:30	11-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
442	765	711,Bus reactor-1 & Gwalior-1 tie bay at Bina	11-Jan-18	9:30	11-Jan-18	0:00	Daily	For CB Tan ? & tightening of equipment connectors.	POWERGRID	WRTS-II	R	BINA	
443	220	207 Bay (Mahalaon#2 Line Bay)	11-Jan-18	10:00	11-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
444	400	BAY 424 R ( KHANDWA #1 L/R BAY) at Indore	11-Jan-18	10:00	11-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
445	400	Bay 424 (Betul-1 Main bay) at Khandwa SS.	11-Jan-18	10:00	11-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
446	400	Lonikand-Talegaon Line @ Lonikand	11-Jan-18	9:00	11-Jan-18	17:00	Daily	Routine Maintenance & Diagnostic testing work	MSETCL	MSETCL			
447	400	400KV PARLI(PG)-PARLI(MSETCL) I & II	11-Jan-18	8:00	12-Jan-18	18:00	Continuous	Construction of 400KV D/C Old Parli - New Parli TL	WRTS-I	WRTS-I	C	Line	Hot line maintenance -SLDC Maharashtra
448	765	765KV ICT-4 Main Bay (717) at Champa PS	11-Jan-18	9:00	12-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
449	400	Bay 407 (Rajgarh-Nagda#1 Line MAIN BAY) AT Rajgarh	11-Jan-18	10:00	13-Jan-18	17:00	Continuous	For Operating Mechanism Overhauling of Circuit Breaker.	POWERGRID	WRTS-II	R	RAJGARH	
450	400	Bus 2 @Kalwa	11-Jan-18	8:00	14-Jan-18	18:00	Continuous	OH & Servicing of Pentagraph Isolators	MSETCL	MSETCL			
451	400	63 Bus Reactor-I Main bay (409) at Shujalpur	11-Jan-18	10:00	11-Jan-18	18:00	Daily	AMP works.	POWERGRID	WRTS-II	R	SHUJALPUR	
452	400	406 Bay (400KV ICT-1 Main bay)	12-Jan-18	10:00	12-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
453	400	407 Bay (400KV ICT-2 Mai Bay)	12-Jan-18	12:00	12-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
454	400	408 Bay (400KV ICT-2 Tie Bay)	12-Jan-18	14:30	12-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
455	400	409 Bay (400kVB/R-2 Main bay)	12-Jan-18	16:30	12-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
456	400	400KV SUGEN BUS-2 FOR TRANSFER BAY BUS- B ISOLATOR	12-Jan-18	13:30	12-Jan-18	17:30	Daily	Maintenance of Transfer Bay Bus -2 isolator .	TPL-SUGEN	TPL-SUGEN	R		
457	400	400KV SUGEN TRANSFER BAY	12-Jan-18	13:30	12-Jan-18	17:30	Daily	Maintenance of Transfer Bay Bus -2 isolator .	TPL-SUGEN	TPL-SUGEN	R		
458	400	Reactor-II of 400KV Aurangabad -Boisar #I at Boisar	12-Jan-18	9:00	12-Jan-18	18:00	Daily	145KV CB Erection Work for implementation of NGR bypass system	POWER GRID	WRTS-II	C	BOISAR	
459	400	VindhyaChal-satna Line-I with Bus-4	12-Jan-18	7:30	14-Jan-18	19:00	Continuous	HOT SPOT ATTEND AND BAY MAINTENANCE	NTPC	NTPC			
460	400	400kV PUNE(GIS)-PUNE(TALEGOAN)_2	12-Jan-18	9:00	12-Jan-18	17:00	Daily	AMP works, AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
461	400	Ranchodpura#2 Main Bay (Bay 416) at Dehgam	12-Jan-18	9:00	12-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGAM	
462	765	708 Tie Bay Sasan#2 and Bina#2 at Satna SS	12-Jan-18	9:00	13-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
463	400	400 KV Amreli-Chorania	12-Jan-18	8:00	13-Jan-18	18:00	Daily	Condition monitoring + Line maintenance + Signature test	GETCO	GETCO			
464	400	412 (Tie Bay of Wardha ckt 2 & Nandgaon ckt ) at 400	12-Jan-18	10:00	12-Jan-18	17:00	Daily	Routine Maintenance & testing work	MSETCL	MSETCL			
465	220	220KV Bus 1 with 202 bay, ICT 1 will be in TBC at bhachau	12-Jan-18	8:00	12-Jan-18	14:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
466	400	400KV Rajgarh-SSP-II	12-Jan-18	8:00	12-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance work	MPPTCL	MPPTCL	R		
467	400	400 KV BUS-II -Hadala	12-Jan-18	8:00	12-Jan-18	18:00	Daily	Tan Delta Testing of CT's & CVT's And Breaker DCRM and Bay Winding work	GETCO	GETCO			
468	400	400 kV DGEN Waghodia Line 1 (BAY 403) with 400kV	12-Jan-18	8:00	12-Jan-18	19:00	Daily	Annual PM of 403 89A isolator with earth switch. Bus A outage and 403 bay outage required	TPL	TPL	R		
469	400	VADODARA - PIRANA # 1 411 MAIN BAY at Pirana	12-Jan-18	9:00	12-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
470	220	220KV Vapi-Sayali line	12-Jan-18	9:00	12-Jan-18	17:00	Daily	Line s/d for terminal equipment AMP at Vapi	POWERGRID	WRTS-II	R	VAPI	

471	220	NSPCL TO BSP LINE-1	12-Jan-18	9:00	12-Jan-18	17:00	Daily	Annual Maintenance	NSPCL	NSPCL			
472	220	220 kV ICT-3 Main bay(209) at Mapusa	12-Jan-18	9:00	12-Jan-18	17:30	Daily	AMP	WRITS-I	WRITS-I	R	Bay	
473	400	Jabalpur #3 Main Bay at Itarsi	12-Jan-18	9:00	12-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRITS-II	R	ITARSI	
474	400	315 MVA ICT-II at Boisar	12-Jan-18	9:00	12-Jan-18	18:00	Daily	AMP	POWER GRID	WRITS-II	R	BOISAR	
475	400	400 KV ST main & tie bay 404 & 405	12-Jan-18	9:00	12-Jan-18	18:00	Daily	Maintenace of Station Transformer	Jhabua Power Switchboard	Jhabua Power			
476	765	Main Bay (712) of Akola Line-2 at Koradi III SS	12-Jan-18	9:00	12-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL			
477	220	Nasik -Navasri ckt 1 @ Nasik	12-Jan-18	9:00	12-Jan-18	18:00	Daily		MSETCL	MSETCL			
478	765	765 Kv Wardha #3 Main bay (721) at Durg PS	12-Jan-18	9:00	12-Jan-18	18:00	Daily	AMP of Bay	WRITS-I	WRITS-I	R	Bay	
479	765	765kV DURG_I MAIN BAY (718) AT KOTRA PS	12-Jan-18	9:00	12-Jan-18	18:00	Daily	AMP 2017 - 2018	WRITS-I	WRTS-I	R	BAY	
480	400	ICT2_400/220kv_SOLAPUR	12-Jan-18	9:00	12-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	ICT	
481	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	12-Jan-18	9:00	12-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRTS-I	WRTS-I	C	line	
482	220	220 kv Doma Main Bay(20852) at Raipur SS	12-Jan-18	9:30	12-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
483	765	712,Gwalior-1 main bay at Bina	12-Jan-18	9:30	12-Jan-18	0:00	Daily	For CB Tan ? & tighting of equipment connectors.	POWERGRID	WRTS-II	R	BINA	
484	765	240MVAr Bus Reactor at Vadodara	12-Jan-18	10:00	12-Jan-18	13:00	Daily	Changeover of Spare Reactor as a R phase for AMP work	POWERGRID	WRTS-II	R	VADODARA	
485	220	Shujalpur- Rajgarh Ckt-I Main Bay (203) at Shujalpur	12-Jan-18	10:00	12-Jan-18	14:00	Daily	AMP works.	POWERGRID	WRTS-II	R	SHUJALPUR	
486	400	BAY 427 R(KHANDWA#2 L/R BAY) at Indore	12-Jan-18	10:00	12-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
487	400	Bay 428 (Betul-2 Main bay) at Khandwa SS.	12-Jan-18	10:00	12-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
488	400	400KV STATION TRANSFORMER-I TIE BAY 423 @ 400KV	12-Jan-18	10:00	12-Jan-18	18:00	Daily	DCRM,TIMING, IR OF CB 423-Q52	MSETCL	MSETCL			400KV STATION TRANSFORMER-I WILL REMAIN IN SERVICE THOUGH
489	765/400	3*500MVA ICT-II @ Ektuni	12-Jan-18	10:00	12-Jan-18	20:00	Daily	Routine Maintain & Diagnostic Testing of CT & CB	MSETCL	Self			
490	220	220KV Bus 1 with 203 bay, ICT 2 will be in TBC at bhachau	12-Jan-18	14:30	12-Jan-18	18:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
491	400	400 KV Dehgam - Vadavi line No. 2	12-Jan-18	0:00	12-Jan-18	0:00	Daily	FOR PMM WORK	PGCIL	GETCO			
492	765	765kV FUTURE & WARDHA1_TIE_BAY_720 at Seoni	12-Jan-18	9:00	13-Jan-18	18:00	Continuous	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
493	220	220KV KAPP VAPI 1	12-Jan-18	10:00	13-Jan-18	17:00	Daily	Attending Hot-spots and S/D nature Defects	POWERGRID	WRTS-II	R	NAVSARI	
494	220	220kV TBC Bay(201) at Bhatapara	12-Jan-18	9:00	15-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
495	765	765 KV BUS_II_KOTRA PS	13-Jan-18	9:00	13-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BUS	
496	400	411 Bay( Tie bay of 400kv B/R-3)	13-Jan-18	12:00	13-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
497	400	412 Bay(Main bay of 400kv B/R-3)	13-Jan-18	14:30	13-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
498	400	413 Bay (400kv ICT-3 Main bay)	13-Jan-18	16:30	13-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
499	400	400KV SUGEN BUS-1 FOR UNIT 10 BAY BUS-A ISOLATOR	13-Jan-18	8:00	13-Jan-18	12:30	Daily	Maintenance of Unit 10 Bus 1 isolator .	TPL-SUGEN	TPL-SUGEN	R		
500	400	400KV Sugen Tie Bay 411 at Vapi	13-Jan-18	9:00	13-Jan-18	17:00	Daily	Bay AMP, CB & CT	POWERGRID	WRTS-II	R	VAPI	
501	400	414 Bay (Tie Bay of 400kV ICT-3)	13-Jan-18	10:00	13-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT GWALIOR	POWERGRID	WRTS-II	R	GWALIOR	
502	400	765kV PUNE(GIS)-SOLAPUR	13-Jan-18	9:00	13-Jan-18	17:00	Daily	Bay extension works for under construction line (TBCB).	WRTS-I	WRTS-I	C	Line	
503	400	Ranchodpura#2 Tie Bay (Bay 417) at Dehgam	13-Jan-18	9:00	13-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGM	
504	765	765 KV DURG#2 MAIN BAY 715 at Wardha	13-Jan-18	9:00	13-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
505	400	D/C BIRISINGHPUR-DAMOH LINES	13-Jan-18	6:00	13-Jan-18	18:00	Continuous	FOR LINE X-ING WORK OF 765kV D/C V-CHAL-JBP(PS)	MPPTCL	WRTS-II	C	JBP PS	SLDC MP consent required.
506	220	220KV Bus 1 with 206 bay, Lalpar Line will be in TBC at bhachau	13-Jan-18	8:00	13-Jan-18	14:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
507	400	400 KV DGEN GT-51 (Bay 404) with 400kV Bus A	13-Jan-18	8:00	13-Jan-18	19:00	Daily	Annual PM of 404 89A isolator with earth switch. Bus A outage and CT 51 bay outage required	TPL	TPL	R		
508	400	Bay No-419- Main Bay of 400kv Magarwada Line at Poisek	13-Jan-18	9:00	13-Jan-18	17:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR	
509	400	Jabalpur # 4 Main Bay at Itarsi	13-Jan-18	9:00	13-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
510	765	765kV Bus 1 at Koradi III SS	13-Jan-18	9:00	13-Jan-18	18:00	Daily	BUS Equipment Maintenance Activity	MEGPTCL	MEGPTCL			
511	765	765kV DURG_I MAIN BAY (718) AT KOTRA PS	13-Jan-18	9:00	13-Jan-18	18:00	Daily	AMP 2017 - 2018	WRITS-I	WRTS-I	R	BAY	
512	220	220KV SOLAPUR- KUMBHARI#1	13-Jan-18	9:00	13-Jan-18	18:00	Daily	for Line side AMP works	WRTS-I	WRTS-I	R	Line	
513	400	400 KV ICT#3 & Raipur1 TIE BAY 411 at Wardha	13-Jan-18	9:00	13-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	

514	400	400kV SARNI MAIN BAY at KORADI	13-Jan-18	9:00	13-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
515	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	13-Jan-18	9:00	13-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>In major reconnection line Power Divar NH 84 &amp; CR Railways Connection</small>	WRTS-I	WRTS-I	C	line	
516	220	Shujalpur- Rajgarh Ckt-II Main Bay (204) at Shujalpur	13-Jan-18	10:00	13-Jan-18	14:00	Daily	AMP works.	POWERGRID	WRTS-II	R	SHUJALPUR	
517	220	220KV Bus 1 with 207 bay, Charadova 2 Line will be in <small>TBC at later date</small>	13-Jan-18	14:30	13-Jan-18	18:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
518	400	Jaigad-Karad Ckt - 1 & 2	13-Jan-18	9:00	16-Jan-18	18:00	Daily	Online permit for Hotline Washing of insulator strings. A/R for <small>both circuits to be kept intact auto mode during Hotline</small>	JPTL	JPTL			
519	400	400 KV ICT-1 MAIN BAY 403 at Raigarh ss	13-Jan-18	10:00	16-Jan-18	18:00	Continuous	Overhauling of CGL make CB by CGL Engineer .	WRTS-I	WRTS-I	R	BAY	
520	400	400KV Bus-II at Boisar	14-Jan-18	9:00	14-Jan-18	18:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR	
521	765	765 kV Bus-II at Bilaspur PS	14-Jan-18	9:00	15-Jan-18	18:00	Daily	Stringing of Bus in construction bays	WRTS-I	WRTS-I	C	Bus	
522	400	400KV SUGEN BUS-1 FOR BUS-A CVT	14-Jan-18	13:30	14-Jan-18	17:30	Daily	Maintenance of Bus 1 CVT	TPL-SUGEN	TPL-SUGEN	R		
523	765	765kV D'JAIGARH-RANCHI I	14-Jan-18	8:00	16-Jan-18	18:00	Daily	Replacement of open quaud Line Spacer at more than 173 Span <small>With some ECONA &amp; JADN New Auto Mode</small>	WRTS-I	WRTS-I	R	Line	
524	400	400kV Bus# 2 at GWALIOR	14-Jan-18	10:00	16-Jan-18	18:00	Daily	Bus Duct Connection for GIS	POWERGRID	WRTS-II	C	GWALIOR	MP Consent required
525	400	400 KV D/C Seoni -Khandwa line ckt-1&2	14-Jan-18	7:00	14-Jan-18	18:00	Daily	For Stringing work of 765 D/C Gadarwara-Warora T/L ,part 1 at <small>power for four bays from line Power Divar NH 84 &amp; CR Railways Connection</small>	POWERGRID	WRTS-II	C	CHINDWARA	SLDC MP cosnet required.
526	220	220kv Boisar-Boisar-III Line at Boisar	14-Jan-18	9:00	14-Jan-18	17:00	Daily	Line Equipment AMP	POWER GRID	WRTS-II	R	BOISAR	
527	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	14-Jan-18	9:00	14-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>In major reconnection line Power Divar NH 84 &amp; CR Railways Connection</small>	WRTS-I	WRTS-I	C	line	
528	400	J P NIGRIE-SATNA-2	14-Jan-18	8:00	14-Jan-18	18:00	Daily	Fixing of missing Arcing Horns,Twin Spacers & Rigid Spacers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
529	400	400 KV Bay No-408, Marwa-Raita Feeder No.1 at 400KV <small>switched off Major</small>	14-Jan-18	8:30	15-Jan-18	17:30	Continuous	(1).Annual testing of Relays,CT,Circuit Breaker and CVT. <small>(2) Cleaning and Terminal Tightness of CT ID Dealer Max</small>	CSPTCL	CSPTCL			
530	400	400KV SUGEN BUS -2 FOR UNIT 10 BAY BUS-B ISOLATOR	15-Jan-18	8:00	15-Jan-18	15:00	Daily	Maintenance of Unit 10 Bus 2 isolator .	TPL-SUGEN	TPL-SUGEN	R		
531	400	400KV SUGEN BUS-2 FOR BUS-B CVT	15-Jan-18	13:30	15-Jan-18	17:30	Daily	Maintenance of Bus 2 CVT	TPL-SUGEN	TPL-SUGEN	R		
532	400	VindhyaChal - Satna Ckt.1&2	15-Jan-18	9:00	22-Jan-18	18:00	Continuous	Shifting / modification of 400IV D/C VindhyaChal - Satna Ckt.1&2 <small>power for four bays from line Power Divar NH 84 &amp; CR Railways Connection</small>	POWERGRID	WRTS-II	C	RHQ	
533	400	400 KV S/C Koradi-Satpura line,Ckt-1	15-Jan-18	7:00	15-Jan-18	18:00	Daily	For Stringing work of 765 D/C Gadarwara-Warora T/L ,part 2 at <small>power for four bays from line Power Divar NH 84 &amp; CR Railways Connection</small>	POWERGRID	WRTS-II	C	CHINDWARA	
534	220	220KV Bus 1 with 208 bay, Charadova 1 Line will be in <small>TBC at later date</small>	15-Jan-18	8:00	15-Jan-18	18:00	Daily	For AMP of CB & RTV coating of Bus Isolator	POWERGRID	WRTS-II	R	BHACHAU	
535	400	400KV ISP-Nagda	15-Jan-18	8:00	15-Jan-18	18:00	Daily	Replacement of static relay of bus bar protection panel	NHDC	NHDC	R		
536	400	400kV PUNE(GIS)-PUNE(TALEGOAN)_3	15-Jan-18	9:00	15-Jan-18	17:00	Daily	AMP works,AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
537	400	BR2 Main Bay (Bay 418) at Dehgam	15-Jan-18	9:00	15-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGAM	
538	400	Jabalpur #4 Tie Bay at Itarsi	15-Jan-18	9:00	15-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
539	765	765kV CHAMPA1 & DURG2 TIE BAY (714) AT KOTRA PS	15-Jan-18	9:00	15-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BAY	
540	220	220KV SOLAPUR-KUMBHARI#2	15-Jan-18	9:00	15-Jan-18	18:00	Daily	for Line side AMP works	WRTS-I	WRTS-I	R	Line	
541	400	400 KV RAIPUR#1 MAIN BAY 415 at Wardha	15-Jan-18	9:00	15-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
542	765	SWITCHABLE LR_765kV_PADGHE1_AURANGABAD	15-Jan-18	9:00	15-Jan-18	18:00	Daily	LR with Main & Tie Bays outage required for PLCC commissioning <small>and now line clearance mode</small>	WRTS-I	WRTS-I	C	SLR	
543	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	15-Jan-18	9:00	15-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>In major reconnection line Power Divar NH 84 &amp; CR Railways Connection</small>	WRTS-I	WRTS-I	C	line	
544	400	400kV BHADRAVATI-CHANDRAPUR II	15-Jan-18	9:30	15-Jan-18	18:00	Daily	Line side equipment AMP at Chandrapur (MSETCL)-SS end, other <small>not in non auto mode</small>	WRTS-I	WRTS-I	R	Line	
545	765	713,NHPTL main bay at Bina	15-Jan-18	9:30	15-Jan-18	0:00	Daily	For Timing & DCRM of CB.	NHPTL	WRTS-II	R	BINA	
546	400	400/220KV ICT#1 at Rajgarh Substation	15-Jan-18	10:00	15-Jan-18	16:00	Daily	Annual Maintenance testing of ICT and associated Bay	POWERGRID	WRTS-II	R	RAJGARH	MP Consent required
547	765	BAY 706 (TIE BAY FOR BINA LINE) at Indore	15-Jan-18	10:00	15-Jan-18	18:00	Daily	amp testing	POWERGRID	WRTS-II	R	INDORE PS	
548	400	Nagda-Dehgam Ckt-I at Nagda.	15-Jan-18	10:00	16-Jan-18	18:00	Daily	Retrofitting & testing of relay. ( LINE OUTAGE NOT REQUIRED, <small>ONLINE WORKS)</small>	POWERGRID	WRTS-II	R	SHUJALPUR	
549	400	400KV Vapi-Boisar at Boisar	15-Jan-18	14:00	15-Jan-18	17:00	Daily	code for Online Main-I relay replacement(Line will be in service <small>through M-2</small> )	POWER GRID	WRTS-II	R	BOISAR	
550	400	400 KV BUS-I AT 400 KV ISP S/S	15-Jan-18	8:00	16-Jan-18	18:00	Continuous	Replacement of static relay of bus bar protection panel	NHDC	NHDC	R		
551	400	Bus Reactor at CGPL	15-Jan-18	8:00	16-Jan-18	20:00	Continuous	Reactor testing	CGPL	CGPL			
552	765	712 Main Bay Gwalior#1 at Satna SS	15-Jan-18	9:00	16-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
553	765	ICT2_765/400kv_DURG PS	15-Jan-18	9:00	16-Jan-18	18:00	Daily	AMP of ICT	WRTS-I	WRTS-I	R	ICT	
554	400	400 KV Mauda-Betul # 01 Line along with 50 MVA <small>switchable Line Reactor of Betul</small>	15-Jan-18	8:00	17-Jan-18	20:00	Daily	To repeat all pre-commissioning tests of 50 MVA Line Reactor <small>along with terminal equipment of Bay 412 and 413 at Betul</small>	POWERGRID	WRTS-II	C	BETUL	
555	400	ICT-1 WITH 220KV BAY-4 & 400KV BAY-10 at NSPCL	15-Jan-18	9:00	17-Jan-18	17:00	Continuous	Annual Maintenance	NSPCL	NSPCL			
557	400	400 KV RAIPUR-RAIGARH II	15-Jan-18	9:30	17-Jan-18	17:30	Continuous	For replacement of Aircell in Raigarh-II Reactor. Reactor will be <small>in non auto mode</small>	WRTS-I	WRTS-I	R	Line	

558	220	220kV Suhela CKT#3 Main bay (202) at Bhatapara	15-Jan-18	10:00	17-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
559	765	765 KV SATNA 1 LINE REACTOR at V-CHAL PS	15-Jan-18	9:00	18-Jan-18	18:00	Daily	SPARE reactor timing setting & switching with Satna-I reactor.	POWERGRID	WRTS-II	C	V-CHAL PS	
560	400	400kV KOLHAPUR (GIS)-MAPUSA I	15-Jan-18	8:00	19-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>In major reconnection line between Divar N.H. &amp; C.H. Railway connection</small>	WRTS-I	WRTS-I	R	Line	
561	400	400kv Dhule-SSNNL Ckt-II	15-Jan-18	8:00	20-Jan-18	17:00	Daily	STRING Work Replacement	MSETCL	MSETCL			
562	400	315MVA X-mer-2 Main CB-Bay at 400KV S/s Bina	15-Jan-18	8:00	20-Jan-18	17:00	Continuous	Replacement of main Bay CB	MPPTCL	MPPTCL	R		
563	400	Gandhar ICT-1	15-Jan-18	8:00	20-Jan-18	18:00	Continuous	Annual bay maintenance and protection checking	NTPC	NTPC			
564	400	Bus 1 @Kalwa	15-Jan-18	8:00	19-Jan-18	18:00	Continuous	OH & Servicing of Pentagraph Isolators	MSETCL	MSETCL			Contingency arrangement to be given in P-3
565	765	765 KV D/C Angul - Jharsuguda Transmission line (Ckt-I & II)	15-Jan-18	8:00	21-Jan-18	17:00	Continuous	Swapping arrangement : Stringing work of 765KV Angul - Jharsuguda Ckt III & IV with Ckt 1 & II	ER- II/Orchha/Kanpur II/Orchha/Kundanpur	ER- II/Orchha/Kanpur II/Orchha/Kundanpur			
566	765	765KV BUS-1 at Seoni	16-Jan-18	9:00	16-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BUS	
567	765	765kV SEONI-BILASPUR I	16-Jan-18	9:00	21-Jan-18	18:00	Daily	A/R in Non auto mode for Tower Top patrolling by Bilaspur-TLM	WRTS-I	WRTS-I	R	Line-A/R	
568	400	400kv Chandrapur-3 & Parli-1 Tie bay 420 at Bhadravati	16-Jan-18	9:30	16-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	Bay	
569	400	Chandrapur(2) - Nanded Ckt-II	16-Jan-18	6:00	31-Jan-18	17:00	Daily	For PID Work, Shifting of auto reclose switch to non auto mode.	MSETCL	MSETCL			
570	400	GCR Chandrapur - Parli Ckt -III	16-Jan-18	6:00	31-Jan-18	17:00	Daily	For PID Work, Shifting of auto reclose switch to non auto mode.	MSETCL	MSETCL			
571	765	Satna-Gwalior Ckt-I	16-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work. A/R to be kept in non mode during the work	POWERGRID	WRTS-II	R	ULDC	
572	765	Indore 765-Bina 765	16-Jan-18	9:00	31-Jan-18	18:00	Daily	Online OPGW Stringing work	POWERGRID	WRTS-II	R	ULDC	
573	400	400Kv PARLI-PUNE(GIS)_1	16-Jan-18	9:00	16-Jan-18	17:00	Daily	AMP works and AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
574	400	400KV TRANSFER BUS FOR UNIT 10 TRANSFER BUS ISOLATOR	16-Jan-18	8:00	16-Jan-18	17:30	Daily	Maintenance of Unit 10 Transfer Bus and Line isolator .	TPL-SUGEN	TPL-SUGEN	R		
575	400	Chandrapur (Old GCR)-Parli ckt-III@Girwali	16-Jan-18	10:00	16-Jan-18	16:00	Daily	For n/b tightening of clamps,corona rings & e/w clamp at loc. <small>No. 802, 803</small>	MSETCL	MSETCL			
576	220	220KV Bus 2 with 202 bay, ICT 1 will be in TBC at Bhadravati	16-Jan-18	8:00	16-Jan-18	14:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
577	400	400KV ISP-Indore-I	16-Jan-18	8:00	16-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance	MPPTCL	MPPTCL	R		
578	400	400 kV DGEN ICT-3 (BAY 411) with 400kV Bus A	16-Jan-18	8:00	16-Jan-18	19:00	Daily	Annual PM of 411 89A isolator with earth switch. Bus A outage	TPL	TPL	R		
579	400	125 MVAR B/R MAIN BAY -412 at Pirana	16-Jan-18	9:00	16-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
580	400	400Kv PUNE(GIS)-PUNE(TALEGOAN)_4	16-Jan-18	9:00	16-Jan-18	17:00	Daily	AMP works,AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
581	765	765KV Bus-1 Sectionizer Bay (713) at Champa PS	16-Jan-18	9:00	16-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
582	400	Soja#2 Main Bay (Bay 430) at Dehgam	16-Jan-18	9:00	16-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGAM	
583	400	Bus Reactor #3 (125MVAR)Main Bay at Itarsi	16-Jan-18	9:00	16-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
584	400	400kV Seoni-Sarni	16-Jan-18	9:00	16-Jan-18	18:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
585	765	765kV DURG_II MAIN BAY (713) AT KOTRA PS	16-Jan-18	9:00	16-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BAY	
586	765	765KV RAICHUR#2 MAIN BAY 713 AT SOLAPUR	16-Jan-18	9:00	16-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
587	400	400 KV MAUDA#2 & Future TIE BAY 431 at Wardha	16-Jan-18	9:00	16-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
588	765	765kv ICT3_MAIN_BAY_718 at Seoni	16-Jan-18	9:00	16-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
589	765	SWITCHABLE LR_765KV_PADGHE2_AURANGABAD	16-Jan-18	9:00	16-Jan-18	18:00	Daily	LR with Main & Tie Bays outage required for PLCC commissioning	WRTS-I	WRTS-I	C	SLR	
590	400	400KV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	16-Jan-18	9:00	16-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>In major reconnection line between Divar N.H. &amp; C.H. Railway connection</small>	WRTS-I	WRTS-I	C	line	
591	400	400KV Navsari magarwada 2	16-Jan-18	10:00	16-Jan-18	13:00	Daily	Required simultaneously with Gandhar Navsari 2 to facilitate	POWERGRID	WRTS-II	R	NAVSARI	
592	400	400KV Gandhar Navsari 2	16-Jan-18	10:00	16-Jan-18	17:00	Daily	Attending Hot-spots and S/D nature Defects	POWERGRID	WRTS-II	R	NAVSARI	
593	400	Bay 429 (Betul2-Seoni2 tie bay) at Khandwa SS.	16-Jan-18	10:00	16-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
594	765	Vadodara-Dhule Line at Vadodara	16-Jan-18	10:00	16-Jan-18	18:00	Daily	Modification of Quad jumpers of CVT to Twin jumper	POWERGRID	WRTS-II	R	VADODARA	
595	220	220KV Bus 2 with 203 bay, ICT 2 will be in TBC at Bhadravati	16-Jan-18	14:30	16-Jan-18	18:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
596	400	Vadodara - Pirana Ckt.1	16-Jan-18	8:00	17-Jan-18	18:00	Daily	Replacement of all porcelain disc insulator strings with CLR <small>Porcelain insulator is complete line to avoid tripping due to</small>	POWERGRID	WRTS-II	C	RHQ	
597	500	500KV HVDC Chandrapur-Padghe	16-Jan-18	8:00	17-Jan-18	18:00	Continuous	Construction of 765KV D/C Warora-Parli TL	MSETCL	WRTS-I	C	Line	Hot line method suggested by Maharashtra
598	400	400KV Chandrapur-Parli-III	16-Jan-18	8:00	17-Jan-18	18:00	Continuous	Construction of 765KV D/C Warora-Parli TL	MSETCL	WRTS-I	C	Line	
599	765	ICT3_765/400kv_BILASPUR	16-Jan-18	9:00	17-Jan-18	18:00	Daily	Erection of BPI & For tertiary loading of ICT	WRTS-I	WRTS-I	C	ICT	
600	400	Station Transformer 3 at Tirola SS	16-Jan-18	9:00	17-Jan-18	21:00	Continuous	Transformer & Its Bay Equipment Maintenance, Relay testing	APML	APML			

601	765	BAY 711 (TIE BAY FOR BR-2) at Indore	16-Jan-18	10:00	17-Jan-18	18:00	Daily	AMP TESTING	POWERGRID	WRTS-II	R	INDORE PS	
602	400	400 KV Amreli-Jetpur 2	16-Jan-18	8:00	17-Jan-18	18:00	Daily	1st six monthly maint & Yearly testing	GETCO	GETCO			
603	400	Korba- Tie Transformer-1	16-Jan-18	7:30	18-Jan-18	19:00	Continuous	For Annual Testing & Maintenance	NTPC	NTPC			
604	400	400/220KV ICT#2 at Rajgarh Substation	16-Jan-18	9:00	26-Jan-18	17:00	Continuous	Overhauling of BHEL ICT to attend Oil Leakage from ICT.	POWERGRID	WRTS-II	R	RAJGARH	MP Consent required
605	220	Kawas - Navsari Ckt.1&2	16-Jan-18	9:00	30-Jan-18	18:00	Daily	Online PID testing of insulator strings. A/R of both Ckt.1 &2 to be done in non auto mode during the testing period	POWERGRID	WRTS-II	R	RHQ	
606	400	Padghe- Babhleshwar ckt 2	16-Jan-18	8:00	31-Jan-18	18:00	Daily	Routine maintenance activity of PID work of disc Insulator. A/R in Non Auto Mode	MSETCL	MSETCL			
607	400	400 KV Bay No-409, Marwa-Raita Feeder No.2 at 400KV	16-Jan-18	8:30	17-Jan-18	17:30	Continuous	(1) Annual testing of Relays,CT,Circuit Breaker and CVT. (2) Cleaning and Terminal Tightness of CT ID Breaker M	CSPTECL	CSPTECL			
608	765	765kV Bus-1 at Agra	16-Jan-18	9:30	16-Jan-18	18:00	Daily	AMP & BPI cleaning works.	POWERGRID	POWERGRID			
556	765	765kV D'JAIGARH-RANCHI II	17-Jan-18	9:00	19-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators in major crossings like Power River, N.H., S.H., Railway Crossings	WRTS-I	WRTS-I	R	Line	
609	400	400KV Girwali-Lonikhand(2) D/c line	17-Jan-18	8:00	18-Jan-18	18:00	Continuous	Construction of 400KV D/C Old Parli - New Parli TL	MSETCL	WRTS-I	C	Line	
610	400	400 KV D/C Seoni -Khandwa line ckt-1&2	17-Jan-18	7:00	17-Jan-18	18:00	Daily	For Stringing work of 765 D/C Gadarwara-Warora T/L ,part 1 at covering the crossing section	POWERGRID	WRTS-II	C	CHINDWARA	
611	765	765 KV Main Bus Bar-1 at Bina	17-Jan-18	9:30	17-Jan-18	0:00	Daily	For tightening of all bus bar dropper connectors.	POWERGRID	WRTS-II	R	BINA	
612	400	Girwali-Lonikand(2) CKT-I line@Girwali	17-Jan-18	10:00	17-Jan-18	18:00	Daily	Hardware tightening and fixing work at Loc No-58,59,63	MSETCL	MSETCL			
613	400	400kV PARLI-PUNE(GIS)_2	17-Jan-18	9:00	17-Jan-18	17:00	Daily	AMP works and AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
614	400	415 Bay (400kv side of 765/400kv ICT-2 Mai Bay)	17-Jan-18	12:00	17-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
615	220	201 Bay (220kv side of 400/220kv ICT1 bay) at Gwalior	17-Jan-18	14:30	17-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
616	220	202 Bay (Malanpur#1 Line Bay) at Gwalior	17-Jan-18	16:30	17-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
617	220	204 bay (ransfer Bus bay) at Gwalior	17-Jan-18	12:00	17-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
618	220	205 bay (220kv side of 400/220kv ICT-2 bay) at Gwalior	17-Jan-18	14:30	17-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
619	220	206 Bay (Malanpur#2 Line Bay) at Gwalior	17-Jan-18	16:30	17-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
620	220	208 Bay (Bus Coupler Bay) at Gwalior	17-Jan-18	12:00	17-Jan-18	13:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
621	220	209 bay (220kv side of 400/220kv ICT-3 Bay) Gwalior	17-Jan-18	14:30	17-Jan-18	16:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
622	220	210 bay (not charged ) at Gwalior PG at Gwalior	17-Jan-18	16:30	17-Jan-18	18:00	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
623	220	211 bay (Sithouli#2 line Bay) at Gwalior PG	17-Jan-18	10:00	17-Jan-18	11:30	Daily	Remote operation check from RTAMC/ NTAMC WORK AT Gwalior	POWERGRID	WRTS-II	R	GWALIOR	
624	400	410-Bay (Main Bay of 400KV Side of 765kV ICT-1) AT BHACHAU	17-Jan-18	10:00	17-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
625	220	220KV Bus 2 with 206 bay, Lalpar Line will be in TBC at Bhachau	17-Jan-18	8:00	17-Jan-18	14:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
626	400	400kV ISP-Indore-II	17-Jan-18	8:00	17-Jan-18	17:00	Daily	Tightening of jumper cone & arching horn & other maintenance work	MPPTCL	MPPTCL	R		
627	400	CB 10C02A AC FILTER -3 MAIN BAY at Mundra HVDC Terminal	17-Jan-18	8:00	17-Jan-18	18:00	Daily	CB 10C02A-Q0, CT 10C02A-T1(Annual Maintenance and DCRM Tension of CT)	ATIL	ATIL	R		
628	400	400 KV DGEN GT-53 (Bay 410) with 400kV Bus A	17-Jan-18	8:00	17-Jan-18	19:00	Daily	Annual PM of 410 89A isolator with earth switch. Bus A outage and CT FA have outage required	TPL	TPL	R		
629	220	ICT # 1 201 MAIN BAY at Pirana	17-Jan-18	9:00	17-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
630	400	400kV Vapi-Sugen line (410&411)	17-Jan-18	9:00	17-Jan-18	17:00	Daily	Isolator Arm replacement work at vapi end	POWERGRID	WRTS-II	R	VAPI	
631	220	220 KV Gwalior(PGCIL)-Mahalgaon-II	17-Jan-18	9:00	17-Jan-18	17:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
632	400	400kV AURANGABAD(MSETCL)-PUNE(GIS) I	17-Jan-18	9:00	17-Jan-18	17:00	Daily	AMP works,AR in Non Auto Mode for other ckt	WRTS-I	WRTS-I	R	Line	
633	765	765KV ICT-6 & Future Tie Bay (722) at Champa PS	17-Jan-18	9:00	17-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
634	400	Wanakbori#2 Main Bay (Bay 421) at Dehgam	17-Jan-18	9:00	17-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGAM	
635	765	712R Reactor Bay Gwalior#1 at Satna SS(SWITCHABLE)	17-Jan-18	9:00	17-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	SATNA	
636	765	Main Bay (709) of Akola Line-1 at Koradi III SS	17-Jan-18	9:00	17-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL			
637	765	765KV ICT-4 MAIN BAY (706) AT KOTRA PS	17-Jan-18	9:00	17-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BAY	
638	765	765KV RAICHUR#1 MAIN BAY 716 AT SOLAPUR	17-Jan-18	9:00	17-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
639	400	400 KV MAUDA#1 MAIN BAY 433 at Wardha	17-Jan-18	9:00	17-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
640	400	ICT3_400/220kv_PUNE	17-Jan-18	9:00	17-Jan-18	18:00	Daily	For AMP works	WRTS-I	WRTS-I	R	ICT	
641	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	17-Jan-18	9:00	17-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators in major crossings like Power River, N.H., S.H., Railway Crossings	WRTS-I	WRTS-I	C	line	
642	400	315MVA ICT##I & 400kV Katni line#, TIE Bay (405 Bay)	17-Jan-18	9:30	17-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	DAMOH	

643	765	Bus reactor-1 at Bina	17-Jan-18	9:30	17-Jan-18	0:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
644	400	400KV Gandhar Kosamba	17-Jan-18	10:00	17-Jan-18	17:00	Daily	Attending Hot-spots and S/D Nature Defects	POWERGRID	WRTS-II	R	NAVSARI	
645	765	713 Bay (Main bay of satna#1 Line) AT GWALIOR	17-Jan-18	10:00	17-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
646	400	Bay 430 (Seoni-2 Main bay) at Khandwa SS.	17-Jan-18	10:00	17-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
647	400	Nagda-Dehgam Ckt-II at Nagda.	17-Jan-18	10:00	18-Jan-18	18:00	Daily	Retrofitting & testing of relay. ( LINE OUTAGE NOT REQUIRED, <small>ONLINE WORKS</small> )	POWERGRID	WRTS-II	R	SHUJALPUR	
648	400	400 KV STERLITE CKT-1 MAIN BAY 416 at Raigarh ss	17-Jan-18	10:00	17-Jan-18	18:00	Daily	AMP 2017-18	WRTS-I	WRTS-I	R	BAY	
649	400	HACQ11 - AC Filter sub bank at Champa-HVDC	17-Jan-18	10:30	17-Jan-18	17:30	Continuous	Warranty tests & AMP Works, Power regulation not required.	WRTS-I	WRTS-I	R	Filter	
650	400	400KV Vapi-Boisar at Boisar	17-Jan-18	14:00	17-Jan-18	17:00	Daily	For tripping and A/R Trials of Main-I relay (Line will be in service through M-1)	POWER GRID	WRTS-II	R	BOISAR	
651	220	220KV Bus 2 with 207 bay, Charadova 2 Line will be in TBC at bhachau	17-Jan-18	14:30	17-Jan-18	18:00	Daily	For AMP of CB & RTV coating of Bus ISOLATOR	POWERGRID	WRTS-II	R	BHACHAU	
652	400	400 KV Reactor bay 405 & 406 at Jhabua	17-Jan-18	8:00	17-Jan-18	8:00	Daily	Maintenace reactor	Jhabua Power <small>Contractual</small>	Jhabua Power			
653	400	Mundra Jetpur-2 line reactor at CGPL	17-Jan-18	8:00	18-Jan-18	20:00	Continuous	Reactor testing	CGPL	CGPL			
654	400	Jaigad-Newkoyna Ckt- 1 & 2	17-Jan-18	9:00	19-Jan-18	18:00	Daily	Online permit for Hotline Washing of insulator strings. A/R for <small>Line 1 &amp; 2</small>	JPTL	JPTL			
655	220	220kV Bus Coupler Bay(204) at Bhatapara	17-Jan-18	11:00	19-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
656	765	SIPAT - 765/400 KV ICT-2	17-Jan-18	7:30	19-Jan-18	19:00	Continuous	AMP	NTPC	NTPC			
657	400	Girawali-Lonikand(2) CKT-II line@Girwali	17-Jan-18	10:00	17-Jan-18	18:00	Daily	Hardware tightening and fixing work at Loc No-83,151,157	MSETCL	MSETCL			
658	765	765 KV NRNC - DMG Ckt-2	17-Jan-18	9:00	20-Jan-18	18:00	Daily	Replacement of Insulators damaged by miscreants.	POWERGRID/E <sub>D-1</sub>	POWERGRID/ER <sub>-1</sub>			
659	765	765kV Bus-1 at Agra	17-Jan-18	9:30	17-Jan-18	18:00	Daily	AMP & BPI claeing works.	POWERGRID	POWERGRID			
660	765	765 Kv Bus - 2 at Durg PS	18-Jan-18	8:00	19-Jan-18	18:00	Continuous	For Rajnandgaon Ckt -1 bus Extn. work	WRTS-I	WRTS-I	C	BUS	
661	400	400KV BHADRAVATI-CHANDRAPUR I and Keep A/r in N/a of Ckt-II	18-Jan-18	8:30	19-Jan-18	18:00	Continuous	AMP and Replacement of CTs under R&M GCR Chandrapur End <small>AD in Non Auto Mode for other ckt</small>	WRTS-I	WRTS-I	R	Line	
662	400	400 kv New Koyna -Dabhol Ckt 2@new Koyna	18-Jan-18	8:00	20-Jan-18	18:00	Daily	Hill cutting and tree cutting	MSETCL	MSETCL			
663	400	Chandrapur(2) - Nanded Ckt-II	18-Jan-18	11:00	18-Jan-18	17:00	Daily	Maintenance of bays equipment	MSETCL	MSETCL			
664	400	Chandrapur(2) - Nanded Ckt-II	18-Jan-18	8:00	18-Jan-18	17:00	Daily	For Line Signature testing	MSETCL	MSETCL			
665	400	400 KV BUS-II AT 400 KV ISP S/S	18-Jan-18	8:00	19-Jan-18	18:00	Continuous	Replacement of static relay of bus bar protection panel	NHDC	NHDC	R		
666	400	400 KV Bus Coupler @ Khadka SS	18-Jan-18	8:00	18-Jan-18	17:00	Daily	CB DCRM Test	MSETCL	MSETCL			
667	400	400kV ISP-Sarni	18-Jan-18	8:00	18-Jan-18	17:00	Daily	Replacement of static relay of bus bar protection panel	NHDC	NHDC	R		
668	400	CB 10C02B Pole-1 & AC FILTER -3 DIA BAY at Mundra <small>HVDC Termination</small>	18-Jan-18	8:00	18-Jan-18	18:00	Daily	CB 10C02B-Q0, CT 10C02B-T11(Annual Maintenance and DCRM <small>Testing of CTs</small> )	ATIL	ATIL	R		
669	400	400 KV Choranja-Vadavi-2	18-Jan-18	8:00	18-Jan-18	18:00	Daily	For PG Iso. Overhauling work.	GETCO	GETCO			
670	400	400 KV DGEN ICT-2 (BAY 409) with 400kV Bus A	18-Jan-18	8:00	18-Jan-18	19:00	Daily	Annual PM of 409 89A isolator with earth switch. Bus A outage <small>and ICT-2 bay outage required</small>	TPL	TPL	R		
671	220	ICT # 2 203 MAIN BAY at Pirana	18-Jan-18	9:00	18-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
672	220	220KV Vapi-Bhilad-2 Main Bay-207 at vapi	18-Jan-18	9:00	18-Jan-18	17:00	Daily	AMP of CB, line taken on TBC	POWERGRID	WRTS-II	R	VAPI	
673	400	400Kv AURANGABAD(MSETCL)-PUNE(GIS) II	18-Jan-18	9:00	18-Jan-18	17:00	Daily	AMP works	WRTS-I	WRTS-I	R	SLR	
674	400	Samii#2 Tie Bay (Bay 422) at Dehgam	18-Jan-18	9:00	18-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGMAM	
675	765	715R ( GWALIOR # 2)For replacing R Phase Reactor with <small>Conventional</small>	18-Jan-18	9:00	18-Jan-18	18:00	Daily	To attend oil leakage in R Phase. Inspection window front side.	POWERGRID	WRTS-II	R	SATNA	
676	220	220KV Transfer Bus at Boisar	18-Jan-18	9:00	18-Jan-18	18:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR	
677	765	ICT2_765/400kv_BILASPUR	18-Jan-18	9:00	18-Jan-18	18:00	Daily	Erection of BPI & For tertiary loading of ICT	WRTS-I	WRTS-I	C	ICT	
678	765	765KV ICT-4 MAIN BAY (706) AT KOTRA PS	18-Jan-18	9:00	18-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BAY	
679	765	765KV RAICHUR#1 & BR TIE BAY 717 AT SOLAPUR	18-Jan-18	9:00	18-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
680	400	400KV RAIPUR-WARDHA I LINE REACTOR at Wardha <small>and</small>	18-Jan-18	9:00	18-Jan-18	18:00	Daily	Amp work related to REACTOR	WRTS-I	WRTS-I	R	LR	
681	220	220KV BUS_COUPLER_BAY_207 at Seoni	18-Jan-18	9:00	18-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
682	400	ICT2_400/200kv_AURANGABAD	18-Jan-18	9:00	18-Jan-18	18:00	Daily	for providing insulation sleeves on 33kV tertiary	WRTS-I	WRTS-I	R	ICT	
683	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	18-Jan-18	9:00	18-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>In major recessions like Damer Diver, NH 6, SH 6, Railway Crossings</small>	WRTS-I	WRTS-I	C	line	
684	220	220 kv Bhilai-3 Main Bay (20752) at Raipur SS	18-Jan-18	9:30	18-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
685	765	Satna-1 Line reactor at Bina(SWITCHABLE)	18-Jan-18	9:30	18-Jan-18	0:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	

686	400	400KV Navsari Magarwada 2	18-Jan-18	10:00	18-Jan-18	13:00	Daily	Required simultaneously with Gandhar Navsari 2 to facilitate	POWERGRID	WRTS-II	R	NAVSARI	
687	400	400KV Ukai Navsari	18-Jan-18	10:00	18-Jan-18	17:00	Daily	Attending Hot-spots and S/D nature Defects AND AMP Works at Navsari SS	POWERGRID	WRTS-II	R	NAVSARI	
688	400	400 Kv BUS-2 at Khandwa SS	18-Jan-18	10:00	18-Jan-18	18:00	Daily	AMP work (all lines will remain in service through 400KV Bus-I)	POWERGRID	WRTS-II	R	KHANDWA	
689	400	400 KV STERLITE CKT-1 & FUTURE TIE BAY 417 at Pimpri	18-Jan-18	10:00	18-Jan-18	18:00	Daily	AMP 2017-18	WRTS-I	WRTS-I	R	BAY	
690	400	220 KV Ichhapore-Kawas Line No.1	18-Jan-18	0:00	18-Jan-18	0:00	Daily	Bay maint.work	GETCO	GETCO			
691	765	707 Main Bay 765kV Agra#1 Line AT GWALIOR	18-Jan-18	10:00	19-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
692	765	BAY 714 (TIE BAY FOR VADODARA LINE) at Indore	18-Jan-18	10:00	19-Jan-18	18:00	Daily	AMP TESTING	POWERGRID	WRTS-II	R	INDORE PS	
693	400	400 KV Mauda-Betul # 02 Line along with 50 MVAr	18-Jan-18	8:00	20-Jan-18	20:00	Daily	To repeat all pre-commissioning tests of 50 MVAr Line Reactor along with terminal requirement of Bay 400 and 1000 at Betul.	POWERGRID	WRTS-II	C	BETUL	
694	220	STATION TRANSFORMER-1 WITH 220kV BAY-5 at NSPCL	18-Jan-18	9:00	20-Jan-18	17:00	Continuous	Annual Maintenance	NSPCL	NSPCL			
695	400	400KV Itarsi - Indore #2	18-Jan-18	9:00	20-Jan-18	18:00	Daily	Replacement of defective earthwire at various spans of line	POWERGRID	WRTS-II	R	RHQ	
696	400	Vadodara - Pirana Ckt.2	18-Jan-18	8:00	21-Jan-18	18:00	Daily	Replacement of all porcelain disc insulator strings with CLR	POWERGRID	WRTS-II	C	RHQ	
697	400	Jejuri-Lonikand @ Jejuri	19-Jan-18	8:00	19-Jan-18	17:00	Daily	Routine Maintenance & Diagnostic testing work .	MSETCL	MSETCL			
698	400	B Bus and Bus coupler @ Chakan	19-Jan-18	8:00	19-Jan-18	18:00	Daily	Annual Maintenance of bays equipment	MEGPTCL	MEGPTCL			
699	400	KHANDWA-INDORE D/C	19-Jan-18	7:00	25-Jan-18	18:00	Continuous	Shifting of tower for laying of Railway line for NTPC Khargone plant	POWERGRID	WRTS-II	C	RHQ	
700	400	400 KV BBLR-1 at Padghe	19-Jan-18	8:30	19-Jan-18	17:30	Daily	Annual Maintenance of bays equipment	MSETCL	MSETCL			
701	400	400KV Ranchordpura 1 (Main & Tie Bay) at bhachau	19-Jan-18	8:00	19-Jan-18	18:00	Daily	RTV Coating of T point	POWERGRID	WRTS-II	R	BHACHAU	
702	400	10C02C Pole-1 MAIN BAY at Mundra HVDC Terminal	19-Jan-18	8:00	19-Jan-18	18:00	Daily	CB 10C02C-Q0, CT 10C02C-T11(Annual Maintenance and DCRM Testing of C.P.)	ATIL	ATIL	R		
703	400	400 KV Chorania-Hadala Line	19-Jan-18	8:00	19-Jan-18	18:00	Daily	For line maint. Wrk.	GETCO	GETCO			
704	400	Aurangabad Ckt II with Bay 406 & 407 at 400 kV Akola	19-Jan-18	8:00	19-Jan-18	18:00	Daily	Routine Maintenance & testing work	MSETCL	MSETCL			
705	400	400 KV KORADI 2-IEPL CKT	19-Jan-18	8:00	19-Jan-18	18:00	Daily	1)Restricting of conductor between loc. 09-10 to increase the round clearance of conductor	MSETCL	MSETCL		Restricting work will be carried out by out source & only be carried out	
706	220	Nalasopara -Boiser PG	19-Jan-18	8:00	19-Jan-18	18:00	Daily	Quarterly Maintenance work	MSETCL	MSETCL			
707	400	400 kV DGEN GT-52 (BAY 407) with 400kV Bus A	19-Jan-18	8:00	19-Jan-18	19:00	Daily	Annual PM of 407 89A isolator with earth switch. Bus A outage	TPL	TPL	R		
708	765	701 Main Bay ICT#1 at Satna SS	19-Jan-18	9:00	19-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
709	220	BHAT-1 204 Bay at Pirana	19-Jan-18	9:00	19-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
710	220	220KV Vapi-Bhilad-3 Main Bay-208 at vapi	19-Jan-18	9:00	19-Jan-18	17:00	Daily	AMP of CB, line taken on TBC	POWERGRID	WRTS-II	R	VAPI	
711	400	Babhaleshwar-Padghe-Ckt-1 @BBLR	19-Jan-18	9:00	19-Jan-18	17:00	Daily	Quarterly Maintenance work & Servicing and alignment of PG	MSETCL	MSETCL		400kV Babhaleshwar-Padghe-Ckt-2 will be in service	
712	400	Pirana#1 Main Bay (Bay 427) at Dehgam	19-Jan-18	9:00	19-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGM	
713	400	Satpura - Koradi Line	19-Jan-18	9:00	19-Jan-18	18:00	Daily	For Terminal Equipments AMP works at MPPTCL end	POWERGRID	WRTS-II	R	ITARSI	
714	400	400 KV Satna-Bina 4 Line	19-Jan-18	9:00	19-Jan-18	18:00	Daily	For Taking out the line reactor for attending leakage	POWERGRID	WRTS-II	R	SATNA	
715	765	Main Bay (701) of ICT-1 at Koradi III SS	19-Jan-18	9:00	19-Jan-18	18:00	Daily	Bay Equipments Maintenance Activity	MEGPTCL	MEGPTCL			
716	220	Nasik -Navasri ckt 2 @ Nasik	19-Jan-18	9:00	19-Jan-18	18:00	Daily	Quarterly Maintenance work	MSETCL	MSETCL			
717	765	ICT1_765/400kv_BILASPUR	19-Jan-18	9:00	19-Jan-18	18:00	Daily	Erection of BPI & For tertiary loading of ICT	WRTS-I	WRTS-I	C	ICT	
718	765	766 Kv Champa #2 & Wardha-3 Tie bay (720) at Durg PS	19-Jan-18	9:00	19-Jan-18	18:00	Daily	AMP of bay	WRTS-I	WRTS-I	R	Bay	
719	765	765KV BUS REACTOR MAIN BAY 718 AT SOLAPUR	19-Jan-18	9:00	19-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
720	765	ICT3_765/400kv_WARDHA	19-Jan-18	9:00	19-Jan-18	18:00	Daily	Amp work related to ICT	WRTS-I	WRTS-I	R	ICT	
721	765	ICT1_765/400kv_AURANGABAD	19-Jan-18	9:00	19-Jan-18	18:00	Daily	for providing insulation sleeves on 33kV tertiary	WRTS-I	WRTS-I	R	ICT	
722	400	400kv WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	19-Jan-18	9:00	19-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators to make reactors live during N.H. & H. Railway Clearance	WRTS-I	WRTS-I	C	line	
723	220	220 kv Bus Coupler at Raipur SS	19-Jan-18	9:30	19-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
724	400	315 MVA ICT#II Main Bay ( 406 Bay ) at Damoh S/S.	19-Jan-18	9:30	19-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	DAMOH	
725	400	412, Shujalpur-2 Reactor bay (Switchable reactor ) at Pies	19-Jan-18	9:30	19-Jan-18	0:00	Daily	For AMP of CB.	POWERGRID	WRTS-II	R	BINA	
726	400	Asoj-Indore-I AT ASOJ END	19-Jan-18	10:00	19-Jan-18	17:00	Daily	Commissioning of Nitrogen injection system FFS for Line reactor	POWERGRID	WRTS-II	C	VADODARA	
727	220	Bay 206 ( Omkareshwar main bay) at Khandwa SS.	19-Jan-18	10:00	19-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
728	400	Nagda-Shujalpur Ckt-I at Nagda.	19-Jan-18	10:00	19-Jan-18	18:00	Daily	Retrofitting & testing of relay. ( LINE OUTAGE NOT REQUIRED, ONLINE WORKS)	POWERGRID	WRTS-II	R	SHUJALPUR	

729	400	400KV KORADI-II - IEPL LINE - TIE BAY 417 @ 400KV	19-Jan-18	10:00	19-Jan-18	18:00	Daily	DCRM,TIMING, IR OF CB 417-Q52	MSETCL	MSETCL			400KV KORADI-II - IEPL LINE WILL REMAIN IN SERVICE THROUGHOUT THE MAINTENANCE
730	400	HACQ12- AC Filter sub bank at Champa-HVDC	19-Jan-18	10:30	19-Jan-18	17:30	Continuous	Warranty tests & AMP Works, Power regulation not required.	WRTS-I	WRTS-I	R	Filter	
731	765	703 Main Bay Bina#1 at Satna SS	19-Jan-18	11:00	19-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
732	765	704 Main Bay ICT#2 at Satna SS	19-Jan-18	14:00	19-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
733	765	705 ICT#2 and Sasan#1 Tie Bay at Satna SS	19-Jan-18	16:00	19-Jan-18	18:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
734	400	220 KV Ichhapore-Kawas Line No.2	19-Jan-18	0:00	19-Jan-18	0:00	Daily	Bay maint.work	GETCO	GETCO			
735	220	220KV KAPP HALDARWA 01	19-Jan-18	8:00	20-Jan-18	18:00	Daily	Attending Hot-spots and S/D nature Defects	POWERGRID	WRTS-II	R	NAVSARI	
736	400	Mundra Jetpur-1 line reactor at CGPL	19-Jan-18	8:00	20-Jan-18	20:00	Continuous	Reactor testing	CGPL	CGPL			
737	765	765KV Kotra1 Main Bay (718) at Champa PS	19-Jan-18	9:00	20-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
738	765	765kV FUTURE & WARDHA2_TIE_BAY_723 at Seoni	19-Jan-18	9:00	20-Jan-18	18:00	Continuous	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
739	220	220KV Malanpur-PGCIL-I Ckt	19-Jan-18	10:00	21-Jan-18	17:00	Daily	Shutdown for 220 KV Isolator Replacement work under PSDF	MPPTCL	MPPTCL	R		
740	220	220kV Suhela CKT#1 Main bay(206) at Bhatapara	19-Jan-18	9:00	22-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
741	400	400 KV ROURKELA1 MAIN BAY 404 at Raigarh	19-Jan-18	10:00	22-Jan-18	16:00	Continuous	Overhauling of CGL make CB by CGL Engineer .	WRTS-I	WRTS-I	R	BAY	
742	400	400kV AURANGABAD(PG)-AURANGABAD(MSETCL) I	19-Jan-18	9:00	19-Jan-18	18:00	Daily	CT drop jumper replacement at Msetcl, waluj S/s	WRTS-I	WRTS-I	R	Line	
743	400	400kV Dhule(BDTCL)-Dhule(MSETCL)- ckt 1	19-Jan-18	9:00	19-Jan-18	17:00	Daily	AMP works of the Line	BDTCL	BDTCL	R		
744	400	B Bus at 400kV Lonikand II Substation	20-Jan-18	9:00	20-Jan-18	18:00	Daily	Routine Maintenance work	MSETCL	MSETCL			all line and ICT will be charged through A Bus over CD at 400kV
745	765	765kV Bus-1 at Aurangabad	20-Jan-18	8:00	21-Jan-18	18:00	Daily	For 765kV Padghe line commissioning/Bus extension works	WRTS-I	WRTS-I	C	Bus	
746	400	765kV D/C, Kotra -Tannar Ckt 1 & 2	20-Jan-18	8:00	22-Jan-18	18:00	Continuous	Overhead Stringing of U/C 765kV D/C Raipur-Sundergarh Line	PGCIL	OGPTL(Sterlite)	R		Generation restriction at IPP's connected
747	400	400 KV BBLR-2 at Padghe	20-Jan-18	8:30	20-Jan-18	17:30	Daily	Annual Maintenance of bays equipment	MSETCL	MSETCL			
748	400	400 KV S/C Seoni-Satpura line(MPPTCL)	20-Jan-18	7:00	20-Jan-18	18:00	Daily	For Stringing work of 765 D/C Gadarwara-Warora T/L ,part 1 at power line crossing section	MPPTCL	WRTS-II	C	CHINDWARA	
749	220	220 KV PGCIL( DEOLI) - BHUGAON LINE	20-Jan-18	8:00	20-Jan-18	17:00	Daily	FIXING OF VIBRATION DAMPER	MSETCL	MSETCL			
750	400	400 KV Main Bus-2 @ Khadka SS	20-Jan-18	8:00	20-Jan-18	17:00	Daily	CVT C&Tan delta Test	MSETCL	MSETCL			
751	220	220KV Bus 2 with 208 bay, Charadova 1 Line will be in	20-Jan-18	8:00	20-Jan-18	18:00	Daily	For AMP of CB & RTV coating of Bus Isolator	POWERGRID	WRTS-II	R	BHACHAU	
752	400	400 KV DGEN ICT-1 (BAY 408) with 400KV Bus A	20-Jan-18	8:00	20-Jan-18	19:00	Daily	Annual PM of 408 89A isolator with earth switch. Bus A outage and ICT 1 hour outage required	TPL	TPL	R		
753	765	706 Main Bay Sasan#1 at Satna SS	20-Jan-18	9:00	20-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
754	220	BARAJADI # 2 208 BAY at Pirana	20-Jan-18	9:00	20-Jan-18	17:00	Daily	AMP WORK	POWERGRID	WRTS-II	R	PIRANA	
755	400	ICT #1 main bay 421 AT JBP	20-Jan-18	9:00	20-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	JABALPUR	
756	765	765 KV Champa #2 Main bay 719 at Durg PS	20-Jan-18	9:00	20-Jan-18	18:00	Continuous	For Adani Ckt - 1 Extn work	WRTS-I	WRTS-I	C	Bay	
757	765	765KV PUNE MAIN BAY 712 AT SOLAPUR	20-Jan-18	9:00	20-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
758	400	400 KV RAIPUR#2 MAIN BAY 412 at Wardha	20-Jan-18	9:00	20-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
759	400	400 KV KORADI-BHILLAI LINE REACTOR	20-Jan-18	9:00	20-Jan-18	18:00	Daily	Amp work related to REACTOR. <small>Note : Line will be energized without I/O during this period</small>	WRTS-I	WRTS-I	R	LR	
760	765	ICT2_765/400kv_AURANGABAD	20-Jan-18	9:00	20-Jan-18	18:00	Daily	for providing insulation sleeves on 33kV tertiary	WRTS-I	WRTS-I	R	ICT	
761	400	400kV WARDHA- II Main Bay (404) at Parli	20-Jan-18	9:00	20-Jan-18	18:00	Daily	For AMP works at Parli	WRTS-I	WRTS-I	R	Bay	
762	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	20-Jan-18	9:00	20-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRTS-I	WRTS-I	C	line	
763	400	63MVAr B/R-I & Birsinghpur line #II, TIE bay ( 411 Bay ) <small>at Damoh c/c</small>	20-Jan-18	9:30	20-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	DAMOH	
764	400	Nagda-Shujalpur Ckt-I at Nagda.	20-Jan-18	10:00	20-Jan-18	18:00	Daily	Retrofitting & testing of relay. ( LINE OUTAGE REQUIRED, <small>OFFLINE WORKS</small> )	POWERGRID	WRTS-II	R	SHUJALPUR	
765	765	707 Main Bay Sasan#2 at Satna SS	20-Jan-18	11:00	20-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
766	765	710 Main Bay BR#1 at Satna SS	20-Jan-18	14:00	20-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
767	765	711 Tie Bay BR#1 and Gwalior#1 at Satna SS	20-Jan-18	16:00	20-Jan-18	18:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
768	400	400KV Warora-Wardha-I & <small>400KV Wardha-II (Koradi) Warora-II</small>	20-Jan-18	8:00	21-Jan-18	18:00	Continuous	Construction of 765kV D/C Warora-Parli TL	MSETCL	WRTS-I	C	Line	
769	765	765kV Satna Gwalior 1	20-Jan-18	9:00	21-Jan-18	16:00	Daily	LILO of Satna - Gwalior Ckt.1 at 765kV Orai line.	POWERGRID	WRTS-II	C	JHANSI	
770	400	400kV KOLHAPUR (GIS)-MAPUSA II	20-Jan-18	8:00	24-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>in major crossings like Power River, NH, SH, Railway Crossings</small>	WRTS-I	WRTS-I	R	Line	
771	400	Jaigad-Karad Ckt - 1 & 2	20-Jan-18	9:00	24-Jan-18	18:00	Daily	Online permit for Hotline Washing of insulator strings. A/R for	JPTL	JPTL			

772	400	400kV Dhule(BDTCL)-Dhule(MSETCL)- ckt 2	20-Jan-18	9:00	20-Jan-18	17:00	Daily	AMP works of the Line	BDTCL	BDTCL	R		
773	400	400 KV B BUS Outage at Padghe	20-Jan-18	0:00	28-Jan-18	24:00:00	Continuous	Replacement of B Bus Quadruple conductor in upper section <small>(L1/L2/C side)</small>	MSETCL	MSETCL			Detail Outage schedule will be submitted 7 days in advance. All
774	400	Padghe- Babbleshwar ckt 2	20-Jan-18	0:00	21-Jan-18	24:00:00	Continuous	Replacement of B Bus Quadruple conductor in upper section <small>(L1/L2/C side)</small>	MSETCL	MSETCL			
775	400	400 kv Dabhol -Nagothane Ckt 2	21-Jan-18	8:00	28-Jan-18	18:00	Daily	String replacement and Earth wire replacement	MSETCL	MSETCL			
776	765	764 Kv Wardha #2 & Champa-1 Tie bay 717 at Durg PS	21-Jan-18	8:00	21-Jan-18	18:00	Daily	AMP of Bay	WRITS-I	WRITS-I	R	Bay	
777	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	21-Jan-18	9:00	21-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>to make connection line Power Divar NH 64, Bhusawal Connection</small>	WRITS-I	WRITS-I	C	line	
778	765	765kV Bus 2 at Tiroda SS	21-Jan-18	9:00	21-Jan-18	21:00	Daily	Bus & Bus Connected equipment maintenance	MEGPTCL	MEGPTCL			
779	400	J P NIGRIE-SATNA-1	21-Jan-18	8:00	21-Jan-18	18:00	Daily	Fixing of missing Arcing Horns,Twin Spacers & Rigid Spacers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
780	220	220KV KAPP HALDARWA 02	21-Jan-18	8:00	22-Jan-18	18:00	Daily	Attending Hot-spots and S/D nature Defects	POWERGRID	WRITS-II	R	PIRANA	
781	400	(3*105) MVA ICT-II & It's Bay @400KV S/S Chandrapur	21-Jan-18	8:00	29-Jan-18	18:00	Continuous	Replacement of B- ph ICT-II By repaired 105 MVA Spare ICT.	MSETCL	MSETCL			The 315MVA ICT-I will be in service.
782	400	Koradi- Bhusawal Line at 400 KV Akola SS	21-Jan-18	12:00	23-Jan-18	18:00	Daily	PID testing of insulator strings by Hot line Untt Akola. A/R shall	MSETCL	MSETCL			400 kV Akola- Bhusawal, 400 kV
783	400	401 Main Bay Nigrie#1 at Satna	21-Jan-18	9:00	21-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
784	765	765kV Bus-2 at Aurangabad	22-Jan-18	8:00	23-Jan-18	18:00	Daily	For 765kV Padghe line commissioning/Bus extension works	WRITS-I	WRITS-I	C	Bus	
785	400	400Kv Boisar-Padghe at Boisar	22-Jan-18	9:00	22-Jan-18	13:00	Daily	code for Online Main-I relay replacement(Line will be in service through M-1)	POWER GRID	WRTS-II	R	BOISAR	
786	220	220 KV PGCIL( DEOLI) - BHUGAON LINE	22-Jan-18	8:00	22-Jan-18	17:00	Daily	FIXING OF VIBRATION DAMPER	MSETCL	MSETCL			
787	400	400KV Essar 1 Main & Tie Bay at bhachau	22-Jan-18	8:00	22-Jan-18	18:00	Daily	RTV Coating of T point	POWERGRID	WRTS-II	R	BHACHAU	
788	400	400 KV Amreli Hadala Line	22-Jan-18	8:00	22-Jan-18	18:00	Daily	Tan Delta Testing of CT's & CVT's And Breaker DCRM and Bay	PGCIL	GETCO			
789	220	Mudshingi -Chikodi	22-Jan-18	8:00	22-Jan-18	18:00	Daily	Quarterly Maintenance	MSETCL	MSETCL			
790	765	764 Kv Kotra #1 Main bay 712 at Durg PS	22-Jan-18	8:00	22-Jan-18	18:00	Daily	AMP of Bay	WRTS-I	WRTS-I	R	Bay	
791	400	400 kV DGEN Navsari Line 2 (BAY 405) with 400kV Bus A	22-Jan-18	8:00	22-Jan-18	19:00	Daily	Annual PM of 405 89A isolator with earth switch. Bus A outage and Navsari Line 2 outage required	TPL	TPL	R		
792	220	220kV Bus coupler Main bay (206) at Talegaon	22-Jan-18	9:00	22-Jan-18	16:00	Daily	For AMP works	WRTS-I	WRTS-I	R	Bay	
793	220	220KV Vapi-Bhilad-2 line	22-Jan-18	9:00	22-Jan-18	17:00	Daily	Line s/d for terminal equipmnet AMP vapi end	POWERGRID	WRTS-II	R	VAPI	
794	220	NSPCL TO BSP LINE-2	22-Jan-18	9:00	22-Jan-18	17:00	Daily	Annual Maintenance	NSPCL	NSPCL			
795	400	Nicol Main Bay (Bay 426) at Dehgam	22-Jan-18	9:00	22-Jan-18	18:00	Daily	Bay AMP works	POWERGRID	WRTS-II	R	DEHGAM	
796	400	Satpura- Itarsi Line	22-Jan-18	9:00	22-Jan-18	18:00	Daily	For Terminal Equipments AMP works at MPPTCL end	POWERGRID	WRTS-II	R	ITARSI	
797	765	765kV Bus-I at V-CHAL PS	22-Jan-18	9:00	22-Jan-18	18:00	Daily	Bay extension work for 765kV D/C VindhyaPS- <small>laboratory function for 765kV Bus-I</small>	POWERGRID	WRTS-II	C	V-CHAL PS	
798	400	ICT #2 main bay 424 AT JABALPUR	22-Jan-18	9:00	22-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	JABALPUR	
799	400	Parli (Girwali) - Nanded Ckt-I@Girwali	22-Jan-18	9:00	22-Jan-18	18:00	Daily	C & Tan Delta measurement of Bushing & Winding of	MSETCL	MSETCL			
800	765	765kV TAMNAR I_MAIN BAY (707) AT KOTRA PS	22-Jan-18	9:00	22-Jan-18	18:00	Daily	AMP 2017 - 2018	WRITS-I	WRTS-I	R	BAY	
801	765	765KV ICT#2 MAIN BAY 706 AT SOLAPUR	22-Jan-18	9:00	22-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
802	400	400kV RAIPUR-WARDHA II LINE REACTOR at Wardha	22-Jan-18	9:00	22-Jan-18	18:00	Daily	Amp work related to REACTOR	WRTS-I	WRTS-I	R	LR	
803	765	765kV WARDHA1_MAIN_BAY_721 at Seoni	22-Jan-18	9:00	22-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
804	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	22-Jan-18	9:00	22-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>to make connection line Power Divar NH 64, Bhusawal Connection</small>	WRTS-I	WRTS-I	C	line	
805	400	400 kv ICT-2 Main bay (416) at Raipur SS	22-Jan-18	9:30	22-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
806	400	500kV ICT#III Main Bay ( 415Bay ) at Damoh S/S.	22-Jan-18	9:30	22-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	DAMOH	
807	400	902,Bina-3 Tie bay at 400 KV MPPTCL Bina	22-Jan-18	9:30	22-Jan-18	0:00	Daily	For AMP.	POWERGRID	WRTS-II	R	BINA	
808	765	765 KV Gwalior-Satna#2 Line AT GWALIOR	22-Jan-18	10:00	22-Jan-18	18:00	Daily	Interconnection of Line Terminal equipment with IPS Tube.	POWERGRID	WRTS-II	C	GWALIOR	
809	765	BAY 715 (MAIN BAY VADODARA LINE) at Indore	22-Jan-18	10:00	22-Jan-18	18:00	Daily	AMP TESTING	POWERGRID	WRTS-II	R	INDORE PS	
810	400	400kV Bus Reactor-1 Main Bay (413) at Parli	22-Jan-18	10:00	22-Jan-18	18:00	Daily	For AMP works at Parli	WRTS-I	WRTS-I	R	Bay	
811	400	400kV Boisar-Padghe at Boisar	22-Jan-18	14:00	22-Jan-18	17:00	Daily	For tripping and A/R Trials of Main-I relay(Line will be in service through M-1)	POWER GRID	WRTS-II	R	BOISAR	
812	400	Vadodara - Pirana Ckt.2	22-Jan-18	8:00	23-Jan-18	18:00	Daily	Replacement of all porcelain disc insulator strings with CLR	POWERGRID	WRTS-II	C	RHQ	
813	400	Mundra Bhachau-4 line reactor at CGPL	22-Jan-18	8:00	23-Jan-18	20:00	Continuous	Reactor testing	CGPL	CGPL			
814	765	765kV BILASPUR-SIPAT I	22-Jan-18	9:00	23-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators <small>to make connection line Power Divar NH 64, Bhusawal Connection</small>	WRTS-I	WRTS-I	R	Line	

815	400	Station Transformer 5 at Tiroda SS	22-Jan-18	9:00	23-Jan-18	21:00	Continuous	Transformer & Its Bay Equipment Maintenance, Relay testing	APML	APML			
816	400	SIPAT - 400KV ICT-2 MAIN BAY-24	22-Jan-18	7:30	23-Jan-18	19:00	Continuous	Only Main Bay S/D is required. Line S/D's are not required. LINE will come down through TIE bay.	NTPC	NTPC			
817	220	220kV ICT-2 Main Bay(210) at Bhatapara	22-Jan-18	9:00	24-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
818	400	400KV Indore-ISP-II Bus-I	22-Jan-18	10:00	24-Jan-18	18:00	Continuous	for replacement of pantograph isolator	MPPTCL	MPPTCL	R		
819	765	765 KV Akola-Aurangabad Line CKT II (Auto reclosure tie line)	22-Jan-18	8:00	25-Jan-18	18:00	Daily	OPGW stringing work in hotline from T. no 8 to 10	MEGPTCL	MEGPTCL	Hotline work will		Hotline work will be done and Line will be energized
820	400/220	ICT-1 at Padgne	22-Jan-18	0:00	23-Jan-18	24:00:00	Continuous	Replacement of B Bus Quadruple conductor in upper section HVDC side	MSETCL	MSETCL			
821	400	VindhyaChal-Mahan Line	23-Jan-18	7:30	24-Jan-18	19:00	Continuous	HOT SPOT ATTEND	NTPC	NTPC			Mahan shall not bid on Power Exchange
822	765	400KV CHAMPA - LARA(NTPC) I	23-Jan-18	9:00	23-Jan-18	17:30	Daily	For rline maintenance work and AR in Non Auto Mode for other side	WRTS-I	WRTS-I	R	Line	
823	400	400 KV D/C Lara-Champa T/L	23-Jan-18	8:00	23-Jan-18	20:00	Daily	Power line crossing of 400 KV D/C Lara-Champa T/L at Tower No. 557 & 558 between LVC & C Raigarh Champa T/L at loc	PGCIL	CWRTL	C		
824	765	713 Main Bay VindhyaChal#1 at Satna PG	23-Jan-18	9:00	23-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
825	765	709 Main Bay Bina#2 at Satna	23-Jan-18	11:00	23-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
826	765	716 Main Bay VindhyaChal#2 at Satna	23-Jan-18	14:00	23-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
827	765	714 Tie Gwalior#2 and VindhyaChal#1 at Satna	23-Jan-18	16:00	23-Jan-18	18:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
828	765	765kV Bus-I at V-CHAL PS	23-Jan-18	9:00	23-Jan-18	18:00	Daily	Bay extension work for 765kV S/C VindhyaChal PS-Sasan(Stability part of 765kV Bus-I)	POWERGRID	WRTS-II	C	V-CHAL PS	
829	400	400 KV Essar 2 Main & Tie Bay at bhachau	23-Jan-18	8:00	23-Jan-18	18:00	Daily	RTV Coating of T point	POWERGRID	WRTS-II	R	BHACHAU	
830	400	400 KV DGEN Navsari Line 1 (BAY 406) with 400kV Bus A	23-Jan-18	8:00	23-Jan-18	19:00	Daily	Annual PM of 406 89A isolator with earth switch. Bus A outage and Navsari Line 1 outage required	TPL	TPL	R		
831	765	715 Main Bay Gwalior#2 at Satna	23-Jan-18	9:00	23-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
832	220	220KV Vapi-Bhilad-3 line	23-Jan-18	9:00	23-Jan-18	17:00	Daily	Line s/d for terminal equipment AMP at Vapi end.	POWERGRID	WRTS-II	R	VAPI	
833	220	Dehgam-Ranasan#2 Line	23-Jan-18	9:00	23-Jan-18	18:00	Daily	AMP of Terminal equipments at Dehgam	GETCO	WRTS-II	R	DEHGAM	
834	765	765kV TAMNAR I_MAIN BAY (707) AT KOTRA PS	23-Jan-18	9:00	23-Jan-18	18:00	Daily	AMP 2017 - 2018	WRTS-I	WRTS-I	R	BAY	
835	400	400KV SOLAPUR-ALKUD LINE	23-Jan-18	9:00	23-Jan-18	18:00	Daily	Foe line side AMP works at Solapur end.	WRTS-I	WRTS-I	R	Line	
836	400	400kV WARDHA-AKOLA I and Keep A/r in N/a of Ckt II	23-Jan-18	9:00	23-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators	WRTS-I	WRTS-I	C	line	
837	400	400 KV R'garh-1 & Future Tie bay (406) at Raipur SS	23-Jan-18	9:30	23-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
838	220	220kV side ICT#1 Bay ( 201 Bay ) at Damoh S/S.	23-Jan-18	9:30	23-Jan-18	18:00	Daily	AMP	POWERGRID	WRTS-II	R	DAMOH	
839	400	Asoj-Indore-II AT ASOJ END.	23-Jan-18	10:00	23-Jan-18	17:00	Daily	Commissioning of Nitrogen injection system FFS for Line reactor	POWERGRID	WRTS-II	C	VADODARA	
840	400	BUS REACTOR_125MVAR_AT_KOLHAPUR(GIS)	23-Jan-18	10:00	23-Jan-18	18:00	Daily	For Reactor AMP works	WRTS-I	WRTS-I	R	BR	
841	765	718 Bay (main Bay of Bina#3 line) AT GWALIOR	23-Jan-18	10:00	23-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
842	400	BAY 419(MAIN BAY ICT-1) at Indore	23-Jan-18	10:00	23-Jan-18	18:00	Daily	AMP TESTING	POWERGRID	WRTS-II	R	INDORE PS	
843	220	Bay 208 ( ICT-2 incomer bay) at Khandwa SS.	23-Jan-18	10:00	23-Jan-18	18:00	Daily	Bay AMP work	POWERGRID	WRTS-II	R	KHANDWA	
844	400	400KV Solapur-2 Main Bay (412) at Parli	23-Jan-18	10:00	23-Jan-18	18:00	Daily	For AMP works at Parli	WRTS-I	WRTS-I	R	Bay	
845	400	HACQ13- AC Filter sub bank at Champa-HVDC	23-Jan-18	10:30	23-Jan-18	17:30	Continuous	Warranty tests & AMP Works, Power regulation not required.	WRTS-I	WRTS-I	R	Filter	
846	765	717 Tie Bay VindhyaChal#2 and BR#2 at Satna	23-Jan-18	11:00	23-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
847	765	718 Main Bay BR#2 at Satna	23-Jan-18	14:00	23-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
848	765	765KV ICT-5 Main Bay (720) at Champa PS	23-Jan-18	9:00	24-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
849	765	765kV BINA1_LINE.REACTOR_BAY_727R at Seoni	23-Jan-18	9:00	24-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	LR	
850	765	765KV Bus-I AT DHARAMJAYGARH(KORBA) SS	23-Jan-18	9:00	24-Jan-18	18:00	Continuous	Bus Extension for under construction Champa #2 Bay at Korba PS	WRTS-I	WRTS-I	C	BUS	
851	400	Korba - Bhatapara (MOU) line	23-Jan-18	7:30	25-Jan-18	19:00	Continuous	For Annual Testing & Maintenance by NTPC	NTPC	NTPC			
852	400	400 KV ROURKELA1 & BR TIE BAY 405 at Raigarh	23-Jan-18	10:00	26-Jan-18	16:00	Continuous	Overhauling of CGL make CB by CGL Engineer .	WRTS-I	WRTS-I	R	BAY	
853	765	765kV AURANGABAD(PG)-SOLAPUR I & II	24-Jan-18	8:00	25-Jan-18	18:00	Continuous	Construction of 765kV D/C Parli - Solapur TL	WRTS-I	WRTS-I	C	Line	
854	765	765kV Bus-II at V-CHAL PS	24-Jan-18	9:00	25-Jan-18	18:00	Daily	Bay extension work for 765kV D/C VindhyaChal PS	POWERGRID	WRTS-II	C	V-CHAL PS	
855	220	220 KV PGCIL(DEOLI) - PUSAD LINE	24-Jan-18	8:00	24-Jan-18	17:00	Daily	FIXING OF VIBRATION DAMPER	MSETCL	MSETCL			
856	400	400 KV Choranai-Kosamba-1 Line	24-Jan-18	8:00	25-Jan-18	18:00	Daily	For line maint. Wrok.	GETCO	GETCO			
857	400	400 KV DGEN REACTOR (BAY 401) with 400kV Bus B	24-Jan-18	8:00	24-Jan-18	19:00	Daily	Annual PM of 401 89B isolator. Bus B outage and reactor bay	TPL	TPL	R		

858	220	NSPCL TO BSP LINE-3	24-Jan-18	9:00	24-Jan-18	17:00	Daily	Annual Maintenance	NSPCL	NSPCL			
859	220	Dehgam-Khanpur#1 Line	24-Jan-18	9:00	24-Jan-18	18:00	Daily	AMP of Terminal equipments at Dehgam	GETCO	WRTS-II	R	DEHGAM	
860	765	708 (Satna-2 & ICT-3 Tie Bay) at V-CHAL PS	24-Jan-18	9:00	24-Jan-18	18:00	Daily	AMP of 708 bay	POWERGRID	WRTS-II	R	V-CHAL PS	
861	400	400 Kv Raipur #1 main bay 418 at Durg PS	24-Jan-18	9:00	24-Jan-18	18:00	Daily	AMP of Bay	WRTS-I	WRTS-I	R	Bay	
862	400	400KV BUS REACTOR MAIN BAY 401 AT SOLAPUR	24-Jan-18	9:00	24-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
863	765	765 KV DURG#4 NON SWITCHABLE LINE REACTOR	24-Jan-18	9:00	24-Jan-18	18:00	Daily	Amp work related to REACTOR	WRTS-I	WRTS-I	R	LR	
864	400	400kV WARDHA-AKOLA II and Keep A/r in N/a of Ckt I	24-Jan-18	9:00	24-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators to minor crossing line Power, River, NH, SH, Railway Crossing	WRTS-I	WRTS-I	C	line	
865	400	400 KV Bhatapara Main Bay at Bhilai SS	24-Jan-18	9:30	24-Jan-18	17:30	Daily	AMP at Bhilai SS	WRTS-I	WRTS-I	R	Bay	
866	400	Satna-2 Line reactor at Bina(SWITCHABLE)	24-Jan-18	9:30	24-Jan-18	0:00	Daily	For AMP and tighting of connectors.	POWERGRID	WRTS-II	R	BINA	
867	220	Mudshingi-Belewadi @ Mudshingi	24-Jan-18	10:00	24-Jan-18	14:00	Daily	Routine Quarterly Maintenance work	MSETCL	MSETCL			
868	220	220kv Annupur-Kotmiakala-I	24-Jan-18	10:00	24-Jan-18	17:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
869	765	704 Line Reactor Bay (SWITCHABLE L/R JAIPUR # 1) AT SOLAPUR	24-Jan-18	10:00	24-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
870	400	BAY 421(MAIN BAY INDORE-2) at Indore	24-Jan-18	10:00	24-Jan-18	18:00	Daily	AMP TESTING	POWERGRID	WRTS-II	R	INDORE PS	
871	400	400KV Solapur-1 Main Bay (409) at Parli	24-Jan-18	10:00	24-Jan-18	18:00	Daily	For AMP works at Parli	WRTS-I	WRTS-I	R	Bay	
872	400	403 Main Bay 765/400 KV ICT#1 at Satna	24-Jan-18	11:00	24-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
873	400	Gandhar GPEC	24-Jan-18	8:00	25-Jan-18	18:00	Daily	Earth switch maintenance	NTPC	NTPC			
874	400	Mundra Bhachau-3 line reactor at CGPL	24-Jan-18	8:00	25-Jan-18	20:00	Continuous	Reactor testing	CGPL	CGPL			
875	765	765kV BILASPUR-SIPAT II	24-Jan-18	9:00	25-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators to minor crossing line Power, River, NH, SH, Railway Crossing	WRTS-I	WRTS-I	R	Line	
876	400	SIPAT - 400KV ICT-2 TIE BAY-23	24-Jan-18	7:30	25-Jan-18	19:00	Continuous	Only TIE Bay S/D is required. Line S/D's are not required.Xmer will remain open through MAIN bay	NTPC	NTPC			
877	220	220kV Suhela CKT#2 Main bay (207) at Bhatapara	24-Jan-18	9:00	27-Jan-18	17:00	Daily	CB pneumatic drive Overhauling works	WRTS-I	WRTS-I	R	Bay	
878	220	220kV Damoh-Damoh line#III at Damoh S/S.	24-Jan-18	9:30	24-Jan-18	18:00	Daily	For replacement of Y-ph CVT	MPPTCL	WRTS-II	C	DAMOH	
879	400	VindhyaChal Bus Section-3	25-Jan-18	7:30	26-Jan-18	19:00	Continuous	SF6 GAS PIPELINE MODIFICATION AND BAY MAINTENANCE	NTPC	NTPC			Other bus tripping would result in down time for NTPC IE
880	400	400kV WARDHA-PARLI I and Keep A/r in N/a of Ckt II	25-Jan-18	9:00	26-Jan-18	18:00	Daily	Replacement of Conventional Insulators with Polymer insulators to minor crossing line Power, River, NH, SH, Railway Crossing	WRTS-I	WRTS-I	C	line	
881	220	220KV Talegaon (MSETCL)- 2 Main bay (207) at Talegaon	25-Jan-18	9:00	25-Jan-18	16:00	Daily	For AMP works	WRTS-I	WRTS-I	R	Bay	25/12 as per sldc maharashtra
882	400	400 KV DGEN Waghodiya Line 2 (BAY 402) with 400kV bus	25-Jan-18	8:00	25-Jan-18	19:00	Daily	Annual PM of 402 89B isolator. Bus B outage and 402 bay outage	TPL	TPL	R		
883	765	765kV D/C Raipur-Wardha line CKT-I &II	25-Jan-18	8:00	25-Jan-18	20:00	Daily	Power line crossing of 765kV D/C Raipur-Wardha line CKT-I &II at Towers No. C12 & C13 b/w 765kV D/C Raipur-Wardha line at	PGCIL	RRWTL	C		
884	400	422 Main Bay 63 MVAR	25-Jan-18	9:00	25-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
885	765	709( ICT- 3 Main Bay) at V-CHAL PS	25-Jan-18	9:00	25-Jan-18	18:00	Daily	AMP of 709 bay	POWERGRID	WRTS-II	R	V-CHAL PS	
886	400	400KV BUS#1 AT SOLAPUR	25-Jan-18	9:00	25-Jan-18	18:00	Daily	STACOM BAY COMMISSIONING WORKS	WRTS-I	WRTS-I	C	BUS	
887	765	765 KV A'BAD#3 MAIN BAY 719 at Wardha	25-Jan-18	9:00	25-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
888	400	400kV BR1 & KHANDWA2_TIE_BAY_423 at Seoni	25-Jan-18	9:00	25-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
889	400	400 KV Raipur Bhadrawati 3 Line Reactor at Raipur SS	25-Jan-18	9:30	25-Jan-18	17:30	Daily	For completion of NGR bypass works, reactor outage shall be	WRTS-I	WRTS-I	C	LR	
890	765	1500MVA ICT-I at Vadodara	25-Jan-18	10:00	25-Jan-18	13:00	Daily	Changeover of Spare ICT as a Y phase for AMP work	POWERGRID	WRTS-II	R	VADDARA	
891	400	411 Bay( Tie bay of 400kV B-R-3) AT GWALIOR	25-Jan-18	10:00	25-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
892	400	400 KV Wardha-1 & Pune1 Tie Bay (402) at Parli	25-Jan-18	10:00	25-Jan-18	18:00	Daily	For AMP works at Parli	WRTS-I	WRTS-I	R	Bay	
893	400	423 Tie Bay 63 MVAR and ICT#2	25-Jan-18	11:00	25-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
894	400	424 Main Bay ICT#2 at Satna	25-Jan-18	14:00	25-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
895	400	400 kV Bus-1 at Mapusa	25-Jan-18	8:00	28-Jan-18	18:00	Daily	Replacement of support insulators of all bus-1 isolators	WRTS-I	WRTS-I	R	Bus	
896	400	KHANDWA-RAJGARH D/C	25-Jan-18	7:00	31-Jan-18	18:00	Continuous	Shifting of tower for for laying of Railway line for NTPC Khargone plant	POWERGRID	WRTS-II	C	RHQ	
897	765	SWITCHABLE LR_765kV_D'GARH_BILASPUR	25-Jan-18	9:00	31-Jan-18	18:00	Daily	Fire wall construction work of rajnandaon LR	WRTS-I	WRTS-I	C	SLR	
898	400	Chandrapur(2) - Nanded Ckt-I	26-Jan-18	8:00	26-Jan-18	18:00	Daily	Damaged conductor replacement work	MSETCL	MSETCL			
899	400	Chandrapur(2) - Nanded Ckt-I	26-Jan-18	11:00	26-Jan-18	17:00	Daily	Maintenance of bays equipment	MSETCL	MSETCL			
900	400	Chandrapur(2) - Nanded Ckt-I	26-Jan-18	8:00	26-Jan-18	17:00	Daily	For Line Signature testing	MSETCL	MSETCL			

901	400	400 KV D/C Mauda -Betul line ckt-1&2	26-Jan-18	7:00	27-Jan-18	18:00	Daily	For Stringing work of 765 D/C Gadarwara-Warora T/L ,part 2 at	POWERGRID	WRITS-II	C	CHINDWARA	Generation restriction at Mouda
902	400	400KV RAIPUR-WARDHA I & II	26-Jan-18	8:00	27-Jan-18	18:00	Continuous	Power line crossing of under Construction 765KV D/C Gadarwara- Wardha TL	WRITS-I	WRITS-I	C	Line	
903	400	400KV Parli-Solapur-I & II	26-Jan-18	8:00	27-Jan-18	18:00	Continuous	Construction of 765KV D/C Warora-Parli TL & 765KV D/C Parli - Solapur TL & 400KV D/C Deoli-Daaji TL	RELIANCE	WRITS-I	C	Line	
904	220	220 KV Bina(PGCIL)-Shivpuri	26-Jan-18	9:00	26-Jan-18	17:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
905	400	412 Bay(Main bay of 400kv B/R-3) AT GWALIOR	26-Jan-18	10:00	26-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRITS-II	R	GWALIOR	
906	220	220kv Boisar-Nalasapura Line at Boisar	26-Jan-18	9:00	26-Jan-18	17:00	Daily	Line Equipment AMP	POWER GRID	WRITS-II	R	BOISAR	
907	400	400KV AURANGABAD(PG)-AURANGABAD(MSETCL) II	26-Jan-18	9:00	26-Jan-18	18:00	Daily	CT drop jumper replacement at Msetcl, waluj S/s	WRITS-I	WRITS-I	R	Line	
908	400	D/C V-CHAL - JBP 1& 2 LINES	27-Jan-18	6:00	28-Jan-18	18:00	Continuous	FOR LINE X-ING WORK OF 765KV D/C V-CHAL-JBP(PS)	POWERGRID	WRITS-II	C	JBPS	
909	400	Parli (Girwali) - Nanded Ckt-II@Girwali	27-Jan-18	9:00	27-Jan-18	17:00	Daily	For n/b tightening of hardware & e/w clamps at loc. No.007.000.011	MSETCL	MSETCL			
910	220	220 KV PGCIL( DEOLI) - PUSAD LINE	27-Jan-18	8:00	27-Jan-18	17:00	Daily	FIXING OF VIBRATION DAMPER	MSETCL	MSETCL			
911	400	400 KV DGEN Waghodiya Line 1 (BAY 403) with 400kV bus	27-Jan-18	8:00	27-Jan-18	19:00	Daily	Annual PM of 403 89B isolator. Bus B outage and 403 bay outage	TPL	TPL	R		
912	400	425 Future Bay at Satna	27-Jan-18	9:00	27-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
913	765	765KV BUS#1 AT SOLAPUR	27-Jan-18	9:00	27-Jan-18	18:00	Daily	PARLI BAYS COMMISSIONING WORKS	WRITS-I	WRITS-I	C	BUS	
914	400	400KV ICT3_MAIN_BAY_428 at Seoni	27-Jan-18	9:00	27-Jan-18	18:00	Daily	FOR AMP WORK	WRITS-I	WRITS-I	R	BAY	
915	400	Shujalpur-1 Line reactor at Bina(SWITCHABLE)	27-Jan-18	9:30	27-Jan-18	0:00	Daily	For AMP & Bushing variable frequency.	POWERGRID	WRITS-II	R	BINA	
916	400	426 Tie Bay Future Bay and ICT#3 at Satna	27-Jan-18	11:00	27-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
917	400	427 Main Bay ICT#3 at Satna	27-Jan-18	14:00	27-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
918	400	400 KV BR MAIN BAY 406 at Raigarh ss	27-Jan-18	10:00	30-Jan-18	16:00	Continuous	Overhauling of CGL make CB by CGL Engineer .	WRITS-I	WRITS-I	R	BAY	
919	220	ICT2 at Dehgam	27-Jan-18	9:00	31-Jan-18	18:00	Continuous	ICT O/H	POWERGRID	WRITS-II	R	DEHGAM	
920	765	765KV SEONI-BILASPUR II	27-Jan-18	9:00	31-Jan-18	18:00	Daily	A/R in Non auto mode for Tower Top patrolling by Bilaspur-TLM	WRITS-I	WRITS-I	R	Line-A/R	
921	400	400KV BUS#2 AT SOLAPUR	28-Jan-18	9:00	28-Jan-18	18:00	Daily	STACOM BAY COMMISSIONING WORKS	WRITS-I	WRITS-I	C	BUS	
922	400	765KV S/C , Kotra-Champa line	28-Jan-18	8:00	30-Jan-18	18:00	Continuous	Overhead Stringing of U/C 765KV D/C Raipur-Sundergarh Line	PGCIL	OGLPTL(Sterile)	R		
923	400	210 Main Bay ICT#3 at Satna	28-Jan-18	9:00	28-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
924	400	211 Tie Bay ICT#3 and MPEB Line 1 at Satna	28-Jan-18	11:00	28-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
925	400	212 Main Bay MPEB Line 1 at Satna	28-Jan-18	14:00	28-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
926	220	220 KV Navsari - Dastan 1	28-Jan-18	8:00	28-Jan-18	18:00	Daily	Bay maint.work	GETCO	GETCO			
927	400	J P NIGRIE-SATNA-2	28-Jan-18	8:00	28-Jan-18	18:00	Daily	Fixing of missing Arcing Horns,Twin Spacers & Rigid Spacers	JP NIGRIE	JP NIGRIE			JP Nigrie shall not bid in Power Exchange
928	400	400 kv New Koyna -Dabhol Ckt 1@new Koyna	29-Jan-18	8:00	30-Jan-18	18:00	Daily	Hill cutting and tree cutting	MSETCL	MSETCL			
929	220	220KV Bus-I at Boisar	29-Jan-18	9:00	30-Jan-18	18:00	Daily	AMP	POWER GRID	WRITS-II	R	BOISAR	
930	220	220KV Boisar-Tarapur Line at Boisar	29-Jan-18	9:00	29-Jan-18	17:00	Daily	Line Equipment AMP	POWER GRID	WRITS-II	R	BOISAR	
931	400	400 KV BUS-1 at Satna SS	29-Jan-18	9:00	29-Jan-18	18:00	Daily	Bus Stability work	POWERGRID	WRITS-II	R	SATNA	
932	400	400 KV A Bus with Bus coupler @ Nagothane	29-Jan-18	8:00	29-Jan-18	18:00	Daily	Routine Maintenance work and PG iso overhauling	MSETCL	MSETCL			
933	400	400KV KOLHAPUR GIS SUBSTATION: MAPUSA-I MAIN	29-Jan-18	10:00	29-Jan-18	18:00	Daily	For bay AMP works	WRITS-I	WRITS-I	R	BAY	
934	400	400KV MAIN BUS-2 (bay no 404,405,407,412,413,414,420,421)	29-Jan-18	8:00	29-Jan-18	17:00	Daily	Rotuine bay maintenance .	MSETCL	MSETCL			400KV MAIN BUS-1 WILL BE IN SERVICE
935	400	400KV Jetpur - Mundra 1 Bay at Jetpur end ( line remain in service)	29-Jan-18	8:00	29-Jan-18	18:00	Daily	For AMP of CB & CT	POWERGRID	WRITS-II	R	BHACHAU	
936	400	400 KV Bus-1 at Sami substion	29-Jan-18	8:00	29-Jan-18	18:00	Daily	Annual Maintenance of Bus-1 equipments & Relay testing	ATIL	ATIL	R		
937	400	400 KV Choraniya Hadala Line	29-Jan-18	8:00	29-Jan-18	18:00	Daily	Tan Delta Testing of CT's & CVT's And Breaker DCRM and Bay	GETCO	GETCO			
938	400	400 KV DGEN GT-51 (BAY 404) with 400kV Bus B	29-Jan-18	8:00	29-Jan-18	19:00	Daily	Annual PM of 404 89B isolator. Bus B outage and GT-51 bay	TPL	TPL	R		
939	400	213 Future Bay at Satna	29-Jan-18	9:00	29-Jan-18	11:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRITS-II	R	SATNA	
940	400	Bhopal - Damoh #2 Main Bay at MPPTCL end	29-Jan-18	9:00	29-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRITS-II	R	ITARSI	
941	765	710 (Bus Reactor Main Bay) at V-CHAL PS	29-Jan-18	9:00	29-Jan-18	18:00	Daily	AMP of 710 bay	POWERGRID	WRITS-II	R	V-CHAL PS	
942	400	400kv BHATAPARA-KORBA	29-Jan-18	9:00	29-Jan-18	18:00	Daily	For AMP work	WRITS-I	WRITS-I	R	Line	
943	400	400 Kv Raipur #1 & Future Tie bay (417) at Durg PS	29-Jan-18	9:00	29-Jan-18	18:00	Daily	AMP of Bay	WRITS-I	WRITS-I	R	Bay	

944	400	400KV LAMBOTI MAIN BAY 409 AT SOLAPUR	29-Jan-18	9:00	29-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
945	220	220 KV BADNERA MAIN BAY -208 at Wardha	29-Jan-18	9:00	29-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
946	765	765kV BR & ICT2_TIE_BAY_714 at Seoni	29-Jan-18	9:00	29-Jan-18	18:00	Daily	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
947	400	400 KV Raigarh 2 & Future Tie Bay 403) at Raipur SS	29-Jan-18	9:30	29-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
948	220	204, Bina main bay at Bina	29-Jan-18	9:30	29-Jan-18	17:30	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
949	765	240MVAr Bus Reactor at Vadodara	29-Jan-18	10:00	29-Jan-18	13:00	Daily	Changeover of Spare Reactor as a B phase for AMP work	POWERGRID	WRTS-II	R	VADODARA	
950	765	716 Bay (main bay of Satna#2 Line) AT GWALIOR	29-Jan-18	10:00	29-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
951	400	214 Tie Bay Future and MPEB Line 2 at Satna	29-Jan-18	11:00	29-Jan-18	13:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
952	400	215 Main Bay MPEB Line 2 at Satna	29-Jan-18	14:00	29-Jan-18	16:00	Daily	FOR NTAMC WORK AT SATNA	POWERGRID	WRTS-II	R	SATNA	
953	400	40kv Tarapur-Boisar-II at Boisar	29-Jan-18	14:00	29-Jan-18	17:00	Daily	For tripping and A/R Trials of Main-I relay(Line will be in service through Mar)	POWERGRID	WRTS-II	R	BOISAR	
954	220	220 KV Navsari - Dastan 2	29-Jan-18	8:00	29-Jan-18	18:00	Daily	Bay maint.work	GETCO	GETCO			
955	400	315MVA ICT-3 at Vapi	29-Jan-18	9:00	30-Jan-18	17:00	Continuous	Oil filtration work	POWERGRID	WRTS-II	R	VAPI	
956	765	765KV ICT-6 Main Bay (720) at Champa PS	29-Jan-18	9:00	30-Jan-18	17:30	Daily	AMP/Warranty Tests	WRTS-I	WRTS-I	R	Bay	
957	765	765KV Bus -II AT DHARAMJAYGARH(KORBA) SS	29-Jan-18	9:00	30-Jan-18	18:00	Continuous	Bus Extension for under construction Champa #2 Bay at Korba PS (through Mar)	WRTS-I	WRTS-I	C	BUS	
958	400	Station Transformer 4 at Tirola SS	29-Jan-18	10:00	30-Jan-18	22:00	Continuous	Transformer & Its Bay Equipment Maintenance, Relay testing	APML	APML			
959	765	SIPAT - 765KV ICT-2 MAIN BAY-6	29-Jan-18	7:30	30-Jan-18	19:00	Continuous	Only Main Bay S/D is required. Line S/D's are not required. LINE will complete change through TIE b/w	NTPC	NTPC			
960	400	Gandhar Dehgam-2	29-Jan-18	8:00	31-Jan-18	18:00	Continuous	Annual bay maintenance and protection checking	NTPC	NTPC			
961	400	ICT-2 WITH 220KV BAY-1 & 400KV BAY-8 at NSPCL	29-Jan-18	9:00	31-Jan-18	17:00	Continuous	Annual Maintenance	NSPCL	NSPCL			
962	220	220KV Malanpur-PGCIL-II Ckt	29-Jan-18	10:00	31-Jan-18	17:00	Daily	Shutdown for 220 KV Isolator Replacement work under PSDF (change)	MPPTCL	MPPTCL	R		
963	400	400KV Indore-ISP-II Bus-II	29-Jan-18	10:00	31-Jan-18	18:00	Continuous	for replacement of pantagraph isolator	MPPTCL	MPPTCL	R		
964	400	VindhyaChal Bus Coupler-I with Bus-1	29-Jan-18	7:30	31-Jan-18	19:00	Continuous	HOT SPOT ATTEND AND BAY MAINTENANCE	NTPC	NTPC			Other bus tripping would result in NTPC-16
965	400	400 kV Bus-2 at Mapusa	29-Jan-18	8:00	01-Feb-18	18:00	Daily	Replacement of support insulators of all bus-2 isolators	WRTS-I	WRTS-I	R	Bus	
966	400	Tarapur-Boisar-I at Boisar	30-Jan-18	9:00	30-Jan-18	13:00	Daily	code for Online Main-I relay replacement(Line will be in service through Mar)	POWER GRID	WRTS-II	R	BOISAR	
967	400	400 kV B Bus with Bus coupler @ Nagothane	30-Jan-18	8:00	30-Jan-18	18:00	Daily	Routine Maintenance work and PG iso overhauling	MSETCL	MSETCL			
968	400	400KV Jetpur - Mundra 2 Bay at Jetpur end ( line remain in service)	30-Jan-18	8:00	30-Jan-18	18:00	Daily	For AMP of CB & CT	POWERGRID	WRTS-II	R	BHACHAU	
969	400	400 KV Bus-2 at Sami substation	30-Jan-18	8:00	30-Jan-18	18:00	Daily	Annual Maintenance of Bus-2 equipments & Relay testing	ATIL	ATIL	R		
970	400	400 kV DGEN Navsari Line 2 (BAY 405) with 400kV Bus B	30-Jan-18	8:00	30-Jan-18	19:00	Daily	Annual PM of 405 89B isolator. Bus B outage and Navsari Line 2 (auto required)	TPL	TPL	R		
971	765	765kV D/C Raipur-Wardha line CKT-III &IV	30-Jan-18	8:00	30-Jan-18	20:00	Daily	Power line crossing of 765kV D/C Raipur-Wardha line CKT-III &IV at Tower Loc No F07 P 009 in 765kV D/C Raipur-Wardha line	PGCIL	RRWTL	C		
972	400	Bhopal - Damoh #1 Main Bay at MPPTCL end	30-Jan-18	9:00	30-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
973	765	711(Bus Reactor Tie Bay) at V-CHAL PS	30-Jan-18	9:00	30-Jan-18	18:00	Daily	AMP of 711 bay	POWERGRID	WRTS-II	R	V-CHAL PS	
974	400	400kV Seoni-Bhilai	30-Jan-18	9:00	30-Jan-18	18:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
975	400	ICT1_400/220kv_BAHATAPARA	30-Jan-18	9:00	30-Jan-18	18:00	Daily	AMP work	WRTS-I	WRTS-I	R	ICT	
976	400	400KV ICT#2 & LAMBOTI TIE BAY 408 AT SOLAPUR	30-Jan-18	9:00	30-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
977	220	220 KV WARDHA MAIN BAY 206 at Wardha	30-Jan-18	9:00	30-Jan-18	18:00	Daily	Amp work related to bay	WRTS-I	WRTS-I	R	BAY	
978	400	400 KV Wardha-2 & Future Tie Bay (428) at Raipur SS	30-Jan-18	9:30	30-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
979	220	205 Bus coupler bay at Bina	30-Jan-18	9:30	30-Jan-18	18:00:00	Daily	For AMP work.	POWERGRID	WRTS-II	R	BINA	
980	220	220kV Annupur-Kotmkala-II	30-Jan-18	10:00	30-Jan-18	17:00	Daily	Line maintenance work	MPPTCL	MPPTCL	R		
981	400	400kV BR1_MAIN_BAY_422 at Seoni	30-Jan-18	9:00	31-Jan-18	18:00	Continuous	FOR AMP WORK	WRTS-I	WRTS-I	R	BAY	
982	765	712 Bay (Main bay of Bina#1 Line) AT GWALIOR	30-Jan-18	10:00	31-Jan-18	18:00	Daily	AMP WORKS	POWERGRID	WRTS-II	R	GWALIOR	
983	400	Tarapur-Boisar-I at Boisar	31-Jan-18	14:00	31-Jan-18	17:00	Daily	For tripping and A/R Trials of Main-I relay(Line will be in service through Mar)	POWER GRID	WRTS-II	R	BOISAR	
984	220	220KV Bus-II at Boisar	31-Jan-18	9:00	31-Jan-18	18:00	Daily	AMP	POWER GRID	WRTS-II	R	BOISAR	28/12 as per SLDC Maharashtra
985	400	C Bus @ Nagothane	31-Jan-18	8:00	31-Jan-18	18:00	Daily	Routine Maintenance work and PG iso overhauling	MSETCL	MSETCL			
986	400	400 kV DGEN Navsari Line 1 (BAY 406) with 400kV Bus B	31-Jan-18	8:00	31-Jan-18	19:00	Daily	Annual PM of 406 89B isolator. Bus B outage and Navsari Line 1 (auto required)	TPL	TPL	R		

987	400	Sami - Mundra 400 KV Line 1	31-Jan-18	8:00	31-Jan-18	20:00	Daily	Annual Maintenance of Line bay equipments, FSC Isolators, Relay	ATIL	ATIL	R		
988	400	Bhopal-Damoh #1 - Bhoapl -Damoh #2 Tie Bay at MDPL and	31-Jan-18	9:00	31-Jan-18	18:00	Daily	For Bay AMP Works	POWERGRID	WRTS-II	R	ITARSI	
989	400	400kV BHILAI-BHATAPARA	31-Jan-18	9:00	31-Jan-18	18:00	Daily	For AMP work	WRTS-I	WRTS-I	R	Line	
990	400	400 Kv GMR #2 Main bay (422) at Durg PS	31-Jan-18	9:00	31-Jan-18	18:00	Daily	AMP of Bay	WRTS-I	WRTS-I	R	Bay	
991	400	400KV KARAD MAIN BAY 412 AT SOLAPUR	31-Jan-18	9:00	31-Jan-18	18:00	Daily	AMP	WRTS-I	WRTS-I	R	BAY	
992	765	BUS REACTOR_765KV_330MVAR_WARDHA	31-Jan-18	9:00	31-Jan-18	18:00	Daily	Amp work related to REACTOR	WRTS-I	WRTS-I	R	BR	
993	400	400 kv ICT-2 & ICT3 Tie bay (417) at Raipur SS	31-Jan-18	9:30	31-Jan-18	17:30	Daily	AMP at Raipur SS	WRTS-I	WRTS-I	R	Bay	
994	400	500MVA ICT-II at Vadodara	31-Jan-18	10:00	31-Jan-18	16:00	Daily	CSD Commissioning work	POWERGRID	WRTS-II	C	VADODARA	
995	400	400 KV FUTURE Main bay (418) at Raigarh	31-Jan-18	10:00	31-Jan-18	16:00	Daily	AMP 2016-17	WRTS-I	WRTS-I	R	BAY	
996	765	701,Seoni main bay at Bina	31-Jan-18	9:30	10-Feb-18	18:00	Continuous	For replacement of main CB MB.	POWERGRID	WRTS-II	R	BINA	

अनुलग्नक 3.3

दिसम्बर 2017 और दिसम्बर 2017 माह के लिये अपेक्षित मांग एवं ऊर्जा की आवश्यकता

ANTICIPATED DEMAND AND ENERGY REQUIREMENT FOR DECEMBER 2017 AND JANUARY 2018

राज्य	State	मांग		ऊर्जा की आवश्यकता	
		DEMAND मेगावाट (MW)		ENERGY REQUIREMENT मिलियन युनिट्स (MUs)	
		दिसम्बर 2017 DECEMBER 2017	दिसम्बर 2017 JANUARY 2018	दिसम्बर 2017 DECEMBER 2017	दिसम्बर 2017 JANUARY 2018
<b>1 गुजरात</b>	<b><u>GUJARAT</u></b>				
सीमित	RESTRICTED	14725	14000	8990	8840
असीमित	UNRESTRICTED	14750	14025	9000	8850
<b>2 मध्य प्रदेश</b>	<b><u>MADHYA PRADESH</u></b>				
सीमित	RESTRICTED	11370	12035	7200	7800
असीमित	UNRESTRICTED	11370	12035	7200	7800
<b>3 छत्तीसगढ़</b>	<b><u>CHHATISGARH</u></b>				
सीमित	RESTRICTED	3525	3595	1942	2032
असीमित	UNRESTRICTED	3525	3595	1942	2032
<b>4 महाराष्ट्र</b>	<b><u>MAHARASHTRA</u></b>				
सीमित	RESTRICTED	21100	20500	12650	12200
असीमित	UNRESTRICTED	21150	20550	12700	12250
<b>5 गोवा</b>	<b><u>GOA</u></b>				
सीमित	RESTRICTED	560	555	350	355
असीमित	UNRESTRICTED	565	555	350	355
<b>6 दमन दीव</b>	<b><u>DD</u></b>				
सीमित	RESTRICTED	320	325	210	205
असीमित	UNRESTRICTED	320	325	212	210
<b>7 डी एन एच</b>	<b><u>DNH</u></b>				
सीमित	RESTRICTED	770	780	485	480
असीमित	UNRESTRICTED	775	785	485	480
<b>8 पश्चिम क्षेत्र</b>	<b><u>WESTERN REGION</u></b>				
सीमित	RESTRICTED	51800	52000	32240	32350
असीमित	UNRESTRICTED	51900	52100	32400	32600

માહ નવ્યબર 2017 કી યોજનાવદ્ધ બનામ વાસ્તવિક ઉત્પાદન એવં ઉપલબ્ધતા  
ACTUAL GENERATION & AVAILABILITY FOR NOVEMBER 2017

ક્રમાંક Sr. No.	સ્ટેશન કા નામ Station Name	Schedule યોજના		Actual વાસ્તવિક		Auxiliary Consumption (Gwh)		
		ક્ર્યાઝ Energy (Gwh)	ચરમ Peak (Mw)	ક્ર્યાઝ Energy (Gwh)	ચરમ Peak (Mw)			
<b>ક (A) ગુજરાત GUJARAT</b>								
<b>જલીય HYDRO</b>								
1. ઉકાઈ Ukai - 1				11.55	75			
ઉકાઈ Ukai - 2				0.03	75			
ઉકાઈ Ukai - 3				0.93	75			
ઉકાઈ Ukai - 4				20.32	75			
<b>ઉકાઈ Ukai (Total)</b>		<b>42</b>	<b>150</b>	<b>32.83</b>	<b>227</b>	<b>0.000</b>		
2. ઉકાઈ એલ બી સી એસ Ukai LBCH - 1				0.41	1			
ઉકાઈ એલ બી સી એસ Ukai LBCH - 2				1.41	2			
<b>ઉકાઈ એલ બી સી એસ Ukai LBCH (Total)</b>		<b>2</b>	<b>3</b>	<b>1.82</b>	<b>4</b>	<b>0.000</b>		
3. કડાના Kadana - 1				11.47	61	0.000		
કડાના Kadana - 2				4.67	61	0.000		
કડાના Kadana - 3				0.00	0			
કડાના Kadana - 4				0.63	61	0.088		
<b>કડાના Kadana (Total)</b>		<b>16</b>	<b>120</b>	<b>16.77</b>	<b>60</b>	<b>0.088</b>		
4. પનમ PANAM & Madhuban Dam 1 & 2		0	0	5.25	9	0.020		
<b>6. કુલ જલીય TOTAL(H)</b>		<b>60</b>	<b>273</b>	<b>56.67</b>	<b>225</b>	<b>0.336</b>		
<b>તાપીય THERMAL</b>								
1 ટોરેન્ટ પાવર લિમિટેડ યુનિટ સી		42	60	0.00	0	0.064		
2 ટોરેન્ટ પાવર લિમિટેડ યુનિટ ડી		85	120	60.32	124	5.601		
3 ટોરેન્ટ પાવર લિમિટેડ યુનિટ ઈ		0	0	76.55	123	6.582		
4 ટોરેન્ટ પાવર લિમિટેડ યુનિટ એફ		74	121	17.69	124	1.830		
5 ટોરેન્ટ પાવર લિમિટેડ યુનિટ જી ટી 1				0.00	0			
6 ટોરેન્ટ પાવર લિમિટેડ યુનિટ જી ટી 2		0	0	0.00	0			
7 ટોરેન્ટ પાવર લિમિટેડ યુનિટ એસ ટી જી				0.00	0			
8 ધુવરન તાપીય Dhuvaran - 5		0	0	0.00	0	0.000		
9 ધુવરન તાપીય Dhuvaran - 6		0	0	0.00	0	2.610		
10 ધુવરન તાપીય Dhuvaran - GT 1				0.00	0	1.376		
11 ધુવરન તાપીય Dhuvaran - GT 2		0	0	0.00	0	1.434		
12 ધુવરન તાપીય Dhuvaran - STG				53.60	98			
13 ઉકાઈ યુનિટ 1 Ukai - 1		70	100	0.00	0	0.000		
14 ઉકાઈ યુનિટ 2 Ukai - 2		70	100	0.00	0	0.000		
15 ઉકાઈ યુનિટ 3 Ukai - 3		36	200	123.61	202	11.743		
16 ઉકાઈ યુનિટ 4 Ukai - 4		140	200	131.29	202	11.991		
17 ઉકાઈ યુનિટ 5 Ukai - 5		19	50	132.65	213	12.148		
18 ઉકાઈ યુનિટ 6 Ukai - 6				344.41	511	19.452		
19 ગાંધીનગર 1 Gandhinagar - 1		70	100	0.00	0	0.000		
20 ગાંધીનગર 2 Gandhinagar - 2		70	100	0.00	0	0.000		
21 ગાંધીનગર 3 Gandhinagar - 3		136	210	123.63	215	12.672		
22 ગાંધીનગર 4 Gandhinagar - 4		145	210	114.98	214	12.207		
23 ગાંધીનગર 5 Gandhinagar - 5		37	210	138.87	215	13.663		
24 વાણકવોરી 1 Wanakbori - 1		0	0	136.42	215	0.000		
25 વાણકવોરી 2 Wanakbori - 2		145	210	134.29	215			
26 વાણકવોરી 3 Wanakbori - 3		145	210	0.00	0			
27 વાણકવોરી 4 Wanakbori - 4		89	150	139.84	214			
28 વાણકવોરી 5 Wanakbori - 5		145	210	134.28	214			
29 વાણકવોરી 6 Wanakbori - 6		145	210	141.04	219			
30 વાણકવોરી 7 Wanakbori - 7		145	210	143.74	215			
31 ઉત્તરન Utran GT 1		0	0	0.00	0	0.000		
32 ઉત્તરન Utran GT 2		0	0	0.00	0	0.000		
33 ઉત્તરન UTRAN - GT- 3		0	0	0.00	0	0.000		
34 ઉત્તરન UTRAN - GT-4		0	0	14.07	229	1.346		
35 ઉત્તરન UTRAN - STG-I		0	0	0.00	0	0.000		
36 ઉત્તરન UTRAN - STG-II		0	0	9.38	144	0.000		

ક્રમાંક Sr. No.	સ્ટેશન કા નામ Station Name	Schedule યોજના		Actual વાસ્તવિક		Auxiliary Consumption (Gwh)
		ક્ર્યાઝ Energy (Gwh)	ચરમ Peak (Mw)	ક્ર્યાઝ Energy (Gwh)	ચરમ Peak (Mw)	
37 સિક્કા Sikka - 1		70	110	0.00	0	0.020
38 સિક્કા Sikka - 2		70	110	273.51	476	25.034
39 કાછ લિમાનાઇટ Kutch Lignite - 1		45	70	31.60	70	10.062
40 કાછ લિમાનાઇટ Kutch Lignite - 2		45	70	20.51	68	
41 કાછ લિમાનાઇટ Kutch Lignite - 3		47	75	26.23	77	
42 કાછ લિમાનાઇટ Kutch Lignite - 4		0	0	0.00	0	0.518
43 સૂરત લિમાનાઇટ Surat Lignite - 1		173	240	68.27	124	7.098
44 સૂરત લિમાનાઇટ Surat Lignite - 2				75.71	124	8.126

45	સૂરત લિનાઇટ Surat Lignite - 3			75.75	128	7.940
46	સૂરત લિનાઇટ Surat Lignite - 4			76.79	125	8.538
47	એક્રિમોટા લિનાઇટ Akrimota Lignite - 1	60	100	57.16	114	10.062
48	એક્રિમોટા લિનાઇટ Akrimota Lignite - 2			0.00	0	
49	જી આઈ પી સી ઎લ GIPCL GT - 1			21.07	33	0.000
50	જી આઈ પી સી ઎લ GIPCL GT - 2	95	140	3.78	33	
51	જી આઈ પી સી ઎લ GIPCL GT - 3			22.42	35	
52	જી આઈ પી સી ઎લ GIPCL ST - 1			22.81	48	
53	જી આઈ પી સી ઎લ GIPCL GT - 4	95	140	8.37	89	0.000
54	જી આઈ પી સી ઎લ GIPCL ST - 2			3.70	46	
55	ઇ એસ એ આર ESSAR GT - 1			0.00	217	0.000
56	ઇ એસ એ આર ESSAR GT - 2	350	480	0.00	1343	
57	ઇ એસ એ આર ESSAR GT - 3			0.00	0	
58	ઇ એસ એ આર ESSAR STG			0.00	0	
59	જી પી ઇ સી GPEC GT - 1			8.56	149	0.067
60	જી પી ઇ સી GPEC GT - 2	430	600	17.44	152	0.364
61	જી પી ઇ સી GPEC GT - 3			4.69	148	0.394
62	જી પી ઇ સી GPEC STG			7.68	150	
63	જી એસ ઇ જી GSEG GT - 1			0.00	0	0.000
64	જી એસ ઇ જી GSEG GT - 2	90	150	0.00	0	
65	જી એસ ઇ જી GSEG STG			27.84	352	
66	Sugen (GT 1 + GT 2)	0	0	201.83	391	9.623
67	સીપીઓ મે આવત Imp from CPP+MUNDRA	50	100	2707.42	3760	
કુલ તાપીય Total (T)		5277	7992	<b>6244.78</b>	<b>11285</b>	453.390
કુલ જરીયા+તાપીય Total (H+T)		6130	9359	<b>6301.45</b>	<b>13478</b>	453.726
વિન્ડ વિન્ડ Wind Energy				<b>685.49</b>		
કુલ જરીયા+તાપીય+હવા Total (H+T+Wind)				<b>6986.94</b>	<b>14533</b>	
વિનિમય Exchanges			(+)	<b>2682.36</b>		
સીમિત ઊર્જા માંગ Restricted Energy Req.		8990		<b>9669.30</b>		
<b>જ (B)</b>	<b>MADHYA PRADESH મધ્ય પ્રદેશ</b>					
<b>જલીય HYDRO</b>						
1	ચમ્બલ પરિ Chambal Pr.(50%share)	50	114	72.31	176	
1.1	ગાંધી સાગર Gandhi Sagar			33.43	84	0.070
1.2	ગાંધી પ્રતાપ સાગર R.P.Sagar			67.33	172	0.040
1.3	જાહાર સાગર Jawahar Sagar			43.86	96	0.020
2	પેંચh Panch	40	75	10.82	160	0.040
3	બાર્ગી Bargi	50	90	10.31	91	0.040
4	બાર્ગી Bargi (LBCH)			0.00	0	
5	બનસાગર ટોન્સ Bansagar-1 (Tons)	130	315	33.18	216	0.220
6	બનસાગર Bansagar-2 (Deolondh)	0	0	0.00	0	
7	બનસાગર Bansagar-3 (Silpara)	30	60	4.27	16	0.060
8	બનસાગર Bansagar-4 (Zinaha)	0	0	8.04	21	0.030
9	મેડિકેડા Medikhaleda	30	60	5.73	57	
10	વિરસિયાળુર Birsingpur	15	20	0.00	0	0.000
11	તાવા Tawa	0	0	0.00	0	
12	રાજ્ઘાત Rajghat	20	30	7.69	15	0.060
13	Omkareshwar	210	360	23.04	315	0.286
14	ઇન્ડીરા સાગર Indira Sagar	610	990	55.92	480	0.452
કુલ જલીય TOTAL(H) MPPGCL		1185	2114	220.50	1279	0.911

ક્રમાંક Sr. No.	સ્ટેશન કા નામ Station Name	Schedule યોજના		Actual વાસ્તવિક		Auxillary Consumption (Gwh)
		કુર્જા Energy (Gwh)	ચર્ગ Peak (Mw)	કુર્જા Energy (Gwh)	ચર્ગ Peak (Mw)	
<b>તાપીય THERMAL</b>						
1	અમારકંક II AMK II Unit -1	61	82	0.00	0	13.710
2	અમારકંક II AMK II Unit -2			0.00	0	
3	અમારકંક III AMK III Unit -5	0	0	143.21	219	0
4	સતપુરા I Satpura-I(60% Share)	50	67	0.00	0	0.000
5	સતપુરા II Satpura-II Unit 6			0.00	0	0.700
6	સતપુરા II Satpura-II Unit 7	128	163	0.00	0	
7	સતપુરા II Satpura-II Unit 8			0.00	0	11.410
8	સતપુરા II Satpura-II Unit 9	122	163	0.00	0	
9	સતપુરા III Satpura-III Unit 10			134.38	260	27.390
10	સતપુરા III Satpura-III Unit 11			89.06	194	18.180
11	એસજીટીપીએસ 1 SGTPS Unit - 1	142	191	89.06	194	18.180
12	એસજીટીપીએસ 2 SGTPS Unit - 2			105.65	177	
13	એસજીટીપીએસ 3 SGTPS Unit - 3	144	194	107.43	177	19.940
14	એસજીટીપીએસ 4 SGTPS Unit - 4			74.39	176	
15	એસજીટીપીએસ 5 SGTPS Unit - 5	291	390	323.07	507	
16	SSTPS			257.64	912	18.150
	કુલ તાપીય Total (T)	1057	1409	1615.79	2440	127.250
	કુલ જરીયા+તાપીય Total (H+T)	2572	4036	2675.21	3907	128.161
	Injection from WIND			317.90	0	

ए (C)	कुल जलीय+तापीय + विंड Total (H+T+WIND)		2993.11	3907	
	विनियम Exchanges	(+)	4865.72		
	सीमित ऊर्जा मांग Rest. En. Req.	7300	7858.83		
	<b>CHHATTISGARH छत्तीसगढ़</b>				
<b>जलीय HYDRO</b>					
1	हसदेव बांगो Hasdeo Bango	55	120	15.00	120
2	Gangrel	6	19	1.00	10
3	Mini Micro KWB			0.40	7
	कुल जलीय TOTAL(H) CSEB	61	139	16.40	137
<b>तापीय THERMAL</b>					
1	कोरबा (पृ) Korba (E) Unit-1	30	50	27.64	0
2	कोरबा (पृ) Korba (E) Unit-2	30	50	27.64	0
3	कोरबा (पृ) Korba (E) Unit-3	30	50	27.64	42
4	कोरबा (पृ) Korba (E) Unit-4	30	50	27.84	36
5	कोरबा (पृ) Korba (E) Unit -5	71	120	36.85	120
6	कोरबा (पृ) Korba (E) Unit -6	71	120	66.82	120
7	कोरबा (पृ) Korba (W) Unit -1	125	210	116.93	210
8	कोरबा (पृ) Korba (W) Unit -2	125	210	116.93	210
9	कोरबा (पृ) Korba (W) Unit -3	125	210	116.93	210
10	कोरबा (पृ) Korba (W) Unit -4	125	210	116.93	210
11	KORBA(EB) Extn - 1 (DSPM 1)	0	250	176.35	254
12	KORBA(EB) Extn - 2 (DSPM 2)	149	250	168.25	253
	कुल तापीय Total (T)			1591.34	2210
13	बालको से आयात BALCO Import			0.00	0
14	जिन्दल से आयात JINDAL Import			0.00	0
	कुल तापीय Total (T+IPP)	911	1780	1591.34	2210
	कुल जलीय+तापीय Total (H+T)	966	1900	1607.74	2347
	विनियम Exchanges		(+)	336.39	0
	सीमित ऊर्जा मांग Rest. En. Req.	1942		1944.13	2347
ए (D)	<b>MAHARASHTRA महाराष्ट्र</b>				
<b>जलीय HYDRO</b>					
1	कोयना 1 और 2 Koyna 1 & 2	74	300	96.26	505
2	कोयना III Koyna III	49	150	36.54	240
3	कोयना IV Koyna IV	165	600	69.72	932
4	कोयना डीपीएच Koyna DPH	10	20	8.93	36
5	टाटा जलीय TATA Hydro	120	444	115.40	459
6	वैतर्णा Vaitarna	3	60	0.41	59
7	एलदारी Eldari	5	10	0.00	0
8	भटगर और वीर Bhatgar & Vir	3	5	0.00	0
9	पैथान Paithan	0	0	0.00	0
10	तिलारी Tillari	0	0	9.11	63
11	भीरा टेल रेस Bhira Tail Race	9	80	7.03	80
12	घटघर Ghatghar	37	250	13.98	125
13	अन्य छोटे जलीय Small Hydro (others)	32	47	-8.07	0
	कुल जलीय TOTAL(H)	506	1966	394.10	459
					4.486

क्रमांक Sr. No.	स्थगन का नाम Station Name	Schedule योजना		Actual वार्ताविक		Auxillary Consumption (Gwh)
		ऊर्जा Energy (Gwh)	चरम Peak (Mw)	ऊर्जा Energy (Gwh)	चरम Peak (Mw)	
<b>तापीय THERMAL</b>						
3	नासिक 3 Nasik Unit -3	105	140	53.73	200	
4	नासिक 4 Nasik Unit -4	85	115	124.90	202	
5	नासिक 5 Nasik Unit -5	133	180	62.90	197	
6	द्रावे 4 Trombay Unit -4	0	0	0.00	0	
7	द्रावे 5 Trombay Unit -5	250	500	282.96	491	
8	द्रावे 6 Trombay Unit -6	130	500	0.00	0	
9	द्रावे 8 Trombay Unit -8	0	0	93.45	249	
10	द्रावे 7A गैस Trombay -7A (Gas)	0	0	79.60	121	3.397
11	द्रावे 7B Trombay -7B (WHR)	0	0	47.00	69	
12	कोराडी 5 Koradi Unit -5	65	85	0.00	0	
13	कोराडी 6 Koradi Unit -6	75	100	0.00	0	
14	कोराडी 7 Koradi Unit -7	75	100	325.21	670	
15	भुसावल 2 Bhusawal Unit -2	110	150	0.00	0	
16	भुसावल 3 Bhusawal Unit -3	100	135	4.02	180	
17	भुसावल 4 Bhusawal Unit -4	250	335	262.36	505	
18	भुसावल 4 Bhusawal Unit -5	0	0	264.81	510	
19	पार्ली 3 Parli Unit -3	0	0	0.00	0	
20	पार्ली 4 Parli Unit -4	0	0	0.00	0	
21	पार्ली 5 Parli Unit -5	0	0	0.00	0	
22	पार्ली 6 Parli Unit -6	155	210	82.55	250	
23	पार्ली 7 Parli Unit -7	40	55	109.67	202	
24	खापरखेड़ा 1 Khaperkheda Unit -1	80	110	64.88	170	
25	खापरखेड़ा 2 Khaperkheda Unit -2	100	135	76.65	196	
26	खापरखेड़ा 3 Khaperkheda Unit -3	350	470	0.00	0	

27	खापरखेड़ा 4 Khaperkheda Unit -4		91.69	197	
28	खापरखेड़ा 5 Khaperkheda Unit -5	135	180	260.98	500
30	पारस Paras-3	135	180	149.72	254
31	पारस Paras-4	200	430	151.96	256
32	उरन Uran (Gas)	200	430	302.99	465
33	उरन Uran (WHR)	100	220	0.00	0
34	चंदपुर 1 Chandrapur Unit -1	100	135	0.00	0
35	चंदपुर 2 Chandrapur Unit -2	100	135	0.00	192
36	चंदपुर 3 Chandrapur Unit -3	90	120	16.09	194
37	चंदपुर 4 Chandrapur Unit - 4	70	95	16.98	459
38	चंदपुर 5 Chandrapur Unit -5	80	110	222.90	500
39	चंदपुर 6 Chandrapur Unit -6	190	255	246.96	499
40	चंदपुर 7 Chandrapur Unit -7	150	200	267.78	0
41	डहाणू 1 Dahanu Unit-1	372	500	158.20	250
42	डहाणू 2 Dahanu Unit-2			153.80	250
43	CPP	0.00	0.00	3197.41	4440.85
44	RGPPL Share	200	300	0.00	0
	कुल तापीय Total (T)	6290	9090	7830.12	10585
	MAH. Wind + Solar Generation			292.04	0
	कुल जलीय+तापीय Total (H+T+Wind)	6966	9960	8516.26	11531
TOT.	विनियम Exchanges		(+)	4257.61	339.411
	सीमित ऊर्जा मांग Rest. En. Req.	12200		12773.87	
व (E)	<b>गोवा GOA</b>				
	आई पी पी रिलायंस IPP Reliance			15.52	27
	विनियम Exchanges			327.58	
	सीमित ऊर्जा मांग Rest. En. Req.	350	560	346.85	498
छ (F)	दमन और दीवा DAMAN & DIU			220.62	348
ज (G)	दावरा नगर हवेली DNH			519.74	792
	कुल DD & DNH (T)	133	242	740.36	1140

क्रमांक Sr. No.	स्टेशन का नाम Station Name	Schedule योजना		Actual वास्तविक		Auxillary Consumption (Gwh)		
		ऊर्जा Energy (Gwh)	चरम Peak (Mw)	ऊर्जा Energy (Gwh)	चरम Peak (Mw)			
<b>(H) केंद्रीय क्षेत्र Central Sector</b>								
<b>1. एन एसी एस N.P.C.</b>								
1.1	तागागुर 1 TAPS Unit -1	80	160	0.00	0	4.822		
1.2	तागागुर 2 TAPS Unit -2	80	160	114.95	160			
1.3	तागागुर 3 TAPS Unit -3	300	480	390.53	546	62.350		
1.4	तागागुर 4 TAPS Unit -4	300	480	257.60	548			
1.5	काकागपर 1 KAPS Unit -1	125	200	0.00	546	3.084		
1.6	काकागपर 2 KAPS Unit -2	125	200	0.00	548			
	कुल एन पी सी NPC Total	1010	1680	763.08	2348			
<b>2. एन ई पी सी N.T.P.C.</b>								
2.1	कोरवा एसटीपीएस 1 KSTPS Unit-1			117.96	213			
2.2	कोरवा एसटीपीएस 2 KSTPS Unit-2			129.71	214			
2.3	कोरवा एसटीपीएस 3 KSTPS Unit-3			130.18	213			
2.4	कोरवा एसटीपीएस 4 KSTPS Unit-4			308.36	512			
2.5	कोरवा एसटीपीएस 5 KSTPS Unit-5			190.50	514			
2.6	कोरवा एसटीपीएस 6 KSTPS Unit-6			309.13	513			
2.7	कोरवा एसटीपीएस 7 KSTPS Unit-7			326.96	515			
	कुल कोरवा KSTPS Total	1510	2600	1512.80	2693	100.588		
2.7	विन्ध्य एसटीपीएस 1 VSTPS Unit-1			147.14	210			
2.8	विन्ध्य एसटीपीएस 2 VSTPS Unit-2			150.77	213			
2.9	विन्ध्य एसटीपीएस 3 VSTPS Unit-3			152.14	212			
2.10	विन्ध्य एसटीपीएस 4 VSTPS Unit-4			146.01	213			
2.11	विन्ध्य एसटीपीएस 5 VSTPS Unit-5			142.43	215			
2.12	विन्ध्य एसटीपीएस 6 VSTPS Unit-6			152.28	214			
2.13	विन्ध्य एसटीपीएस 7 VSTPS Unit-7			326.61	513			
2.14	विन्ध्य एसटीपीएस 8 VSTPS Unit-8			353.39	515			
2.15	विन्ध्य एसटीपीएस 9 VSTPS Unit-9			352.90	516			
2.16	विन्ध्य एसटीपीएस 10 VSTPS Unit-10			359.73	515			
2.17	विन्ध्य एसटीपीएस 11 VSTPS Unit-11			359.77	513			
	कुल विन्ध्याचाल VSTPS Total	2294	4260	3352.72	#REF!	202.64		
3.1	सीपत -1 -SIPAT-1			440.85	668.00			
3.2	सीपत -2 -SIPAT-2			456.97	667.00			
3.3	सीपत -3 -SIPAT-3			0.00	0.00			
3.4	सीपत -4 -SIPAT-4			358.78	514.00			
3.5	सीपत -5 SIPAT-5			355.76	516.00			
	कुल सीपत -SIPAT TOTAL			1612.36	3036.00	89.46		
4.1	कवास गैस 1ए Kawas GT-1A			21.38	106			
4.2	कवास गैस 1बी Kawas GT-1B			40.95	106			
4.3	कवास एसटी 1भी Kawas ST-1C			35.42	116			
4.4	कवास गैस 2ए Kawas GT-2A			26.74	105			
4.5	कवास गैस 2बी Kawas GT-2B			47.90	106			
4.6	कवास एसटी 2भी Kawas ST-2C			45.32	116			

	कुल क्षमास KGPS Total	193	630	217.71	656	6.501
5.1	गंधार गैस 1 Gandhar GT-1			47.04	144	
5.2	गंधार गैस 2 Gandhar GT-2			38.61	144	
5.3	गंधार गैस 3 Gandhar GT-3			57.80	144	
5.4	गंधार एसटी 4 Gandhar ST-4			78.81	218	
	कुल गंधार GGPS Total	80	630	222.26	637	6.196
6.1	मौदा 1 Mauda -1			154.35	450	0.000
6.2	मौदा 2 Mauda -2			0.00	0	0.000
	कुल मौदा MAUDA Total	186	500	154.35	450	12.277
6.1	RGPPL Block I			0.00	0	
6.2	RGPPL Block II			3.31	160	
6.3	RGPPL Block III			371.07	560	
	<b>RGPPL TOTAL</b>	540	750	374.38	560	10.483
7.1	एस एस पी SSP RBPH - 1			0.00	0	
7.2	एस एस पी SSP RBPH - 2			0.00	0	
7.3	एस एस पी SSP RBPH - 3			0.00	0	
7.4	एस एस पी SSP RBPH - 4			0.00	0	
7.5	एस एस पी SSP RBPH - 5			0.00	0	
7.6	एस एस पी SSP RBPH - 6			0.00	0	
7.7	एस एस पी SSP CPHH - 1			20.66	50	
7.8	एस एस पी SSP CPHH - 2			15.38	50	
7.9	एस एस पी SSP CPHH - 3			19.27	50	
7.10	एस एस पी SSP CPHH - 4			25.86	51	
7.11	एस एस पी SSP CPHH - 5			21.51	50	
	कुल एस एस पी SSP Total	580	900	102.69	251	1.027
8.1	कुल पेंच Pench Total	40	75	10.82	160	0.040
8.2	Jindal Injection			0.00	0	
8.3	Amarkantak Lanco			0.00	0	
<b>(I) प्रशिक्षणी क्षेत्र WESTERN REGION</b>						
	गोप्य उत्पादन Gross generation			28087.07		
<b>(J) उपलब्धता Availability</b>						
	नेट बिनियम Net Exchanges		(+)	#REF!		
	उपलब्ध कुर्जी Energy Availability	32240		-4648.47		
				#REF!		

माह नवम्बर 2017 के दौरान चरण मांग - योजनावधार बनाम वास्तविक  
PEAK DEMAND - SCHEDULE VS ACTUAL FOR NOVEMBER 2017

अनुलग्नक 4.2  
ANNEX-4.2

राज्य	State	Anticipated अपेक्षित (MW)	वास्तविक Actual (MW)					दिनांक Date	समय Time	आवृत्ति Frequency			
			आपूर्ति Catered										
				UN SCH LS	FC	SCH LS	कुल Total						
गुजरात पंजीकृत सीमित असीमित न्यूनतम पंजीकृत मांग	<u>GUJARAT</u> Registered Restricted Unrestricted Min. Registered Demand	14725 14750 15232 10543	15232	-	-	-	15232	10.11.2017	14:00	49.98			
			11989	-	-	-	11989	30.11.2017	09:15	49.91			
			11370	0	32.37	0	12021	30.11.2017	09:15	49.91			
			11370	11989 7865			7865	24.11.2017	21:45				
मध्य प्रदेश पंजीकृत सीमित असीमित न्यूनतम पंजीकृत मांग	<u>MADHYA PRADESH</u> Registered Restricted Unrestricted Min. Registered Demand	3525 3525 3406 21466	3406	-	-	-	3406	01.11.2017	1800	49.96			
			21466	-	-	-	21466	09.11.2017	12:00:00	49.95			
			19600	0	37.57	0	21504	09.11.2017	12:00:00	49.95			
			19650				14157	26.11.2017	2400	50.05			
छत्तीसगढ़ पंजीकृत सीमित असीमित न्यूनतम पंजीकृत मांग	<u>CHHATTISGARH</u> Registered Restricted Unrestricted Min. Registered Demand	3525 3525 3395 2166	0	19.01	0	3414 2166	02.11.2017 07.11.2017	1800 07:45	49.84 49.95				
			3395										
			2166										
महाराष्ट्र पंजीकृत सीमित असीमित न्यूनतम पंजीकृत मांग	<u>MAHARASHTRA</u> Registered Restricted Unrestricted Min. Registered Demand	21466 19600 19650 14157	-	-	-	-	21466	09.11.2017	12:00:00	49.95			
			19600	0	37.57	0	21504	09.11.2017	12:00:00	49.95			
			19650				14157	26.11.2017	2400	50.05			
			14157										
गोवा पंजीकृत असीमित न्यूनतम पंजीकृत मांग	<u>*GOA</u> Registered Unrestricted Min. Registered Demand	560 560	498	-	-	-	498	21.11.2017	20:00	49.98			
			560	25	0.00	-	519	21.11.2017	16:00	50.00			
			560	494									
एस्सर <sup>1</sup> पंजीकृत असीमित न्यूनतम पंजीकृत मांग	<u>ESSAR(ESIL)</u> Registered Unrestricted Min. Registered Demand	812 812	812	-	-	-	812	13.11.2017	0700	49.85			
			812	0	0	-	812	13.11.2017	0700	49.85			
			812										
दमन एवं दीव पंजीकृत असीमित न्यूनतम पंजीकृत मांग	<u>DD</u> Registered Unrestricted Min. Registered Demand	333 333	333	-	-	-	333	08.11.2017	18:00	49.91			
			333	0	0	-	333	08.11.2017	18:00	49.91			
			333										
दादर व न हवेली पंजीकृत असीमित न्यूनतम पंजीकृत मांग	<u>DNH</u> Registered Unrestricted Min. Registered Demand	776 776	776	-	-	-	776	09.11.2017	19:00	49.97			
			776	0	-	-	776	09.11.2017	19:00	49.97			
			776										
पश्चिम क्षेत्र पंजीकृत सीमित असीमित न्यूनतम पंजीकृत मांग	<u>WESTERN REGION</u> Registered Restricted Unrestricted Min. Registered Demand	51222 51800 51900 37892	51222	-	-	-	51222	09.11.2017	14:00	50.01			
			51800	0	143	0	51337	09.11.2017	15:00	49.92			
			51900	51194			37892	27.11.2017	0200				
			37892										

NOTE: LS = Load Shedding  
 PC/RM = Power Cuts/Regulatory Measures  
 FC = Frequency Correction  
 Registered = Actual Demand Met  
 Restricted = Registered + LS + FC  
 Unrestricted = Registered + LS + FC + PC + Holiday Staggering + Recess Staggering.

### List of Inter-state/Inter-Regional Tie Lines \_ Parallel Operation

अनु०.	त्रीग पञ्चान्त	PARALLEL / RADIAL OPERATION	TOTAL OPERATING HOURS
<b>HVDC Lines</b>			
1	एचवीडीसी बैंक ट बैंक लिंक विंध्याचल पोल 1	HVDC back-to back link Vindhyaachal-Pole 1	717:19:00
2	एचवीडीसी बैंक ट बैंक लिंक विंध्याचल पोल 2	HVDC back-to back link Vindhyaachal-Pole 2	638:55:00
3	1	HVDC Mundra-Mahendergarh Pole 1	708:54:00
4	2	HVDC Mundra-Mahendergarh Pole 2	720:00:00
5	एचवीडीसी चांपा ट करुक्षेत्र पोल 1	HVDC Champa-Kurukshtetra Pole-1	678:23:00
6	एचवीडीसी चांपा ट करुक्षेत्र पोल 2	HVDC Champa-Kurukshtetra Pole-2	673:25:00
7	एचवीडीसी बैंक ट बैंक लिंक	HVDC back-to back link(WR-SR)	720:00:00
<b>Inter-Regional Lines</b>			
8	765 I	765kV solapur to Raichur I	720:00:00
9	765 II	765kV solapur to Raichur II	720:00:00
10	765 केवी वर्धा से निजामाबाद-I	765kV Wardha to Nizamabad I	720:00:00
11	765 केवी वर्धा से निजामाबाद-II	765kV Wardha to Nizamabad II	720:00:00
12	765 केवी ग्वालियर से फागी-I	765kV Gwalior to Phagi I	718:07:00
13	765 केवी ग्वालियर से फागी-II	765kV Gwalior to Phagi II	720:00:00
14	765 केवी ग्वालियर से आगरा-I	765kV Gwalior to Agra I	700:59:00
15	765 केवी ग्वालियर से आगरा-II	765kV Gwalior to Agra II	711:04:00
16	765 केवी धरमजयगढ़ से न्यू रांची-I	765kV D'garh to New Ranchi I	720:00:00
17	765 केवी धरमजयगढ़ से न्यू रांची-II	765kV D'garh to New Ranchi II	720:00:00
18	765 I	765kV D'garh to Jharsuguda I	720:00:00
19	765 II	765kV D'garh to Jharsuguda II	720:00:00
20	400 केवी कोल्हापुर से नरेंद्र I	400kV Kolhapur-Narendra I	720:00:00
21	400 केवी कोल्हापुर से नरेंद्र II	400kV Kolhapur-Narendra II	720:00:00
22	400 केवी कंसारी से भिन्नमल	400kV Kansari- Bhinmal	720:00:00
23	400 केवी कंसारी से कंकोली	400kV Kansari- Kankroli	720:00:00
24	400 -I	400 kV RAPP-Sujalur I	720:00:00
25	400 -II	400kV RAPP-Sujalur II	720:00:00
26	400 केवी सिपत से रांची I	400kV Sipat-Ranchi I	715:53:00
27	400 केवी सिपत से रांची II	400kV Sipat-Ranchi II	703:04:00
28	400	400kV Raigarh to Rouerkela I	629:31:00
29	400 केवी रायगढ़ से स्टरलाइट	400kV Raigarh to Sterlight	629:00:00
30	400 I	400kV Raigarh to Jharsuguda I	720:00:00
31	400 II	400kV Raigarh to Jharsuguda II	720:00:00
32	400 केवी रायगढ़ से बृद्धिपदर	220kV Raigarh-Budhipadar	712:43:00
33	220 केवी कोरबा पर्व से बृद्धिपादर-I	220kV K(E) to Budhipadar-II	720:00:00
34	220 केवी कोरबा पर्व से बृद्धिपादर-II	220kV K(E) to Budhipadar-III	627:30:00
35	220	220kV Badod to Sakatpur	720:00:00
36	220	220kV Bhanpur to Modak	720:00:00
37	220 पश्चिम कोरिय मार्ग प्रेषण केंद्र, मुंबई WRLDC, Mumbai	220kV Mehgaon to Auraiya	718:37:00

**Inter-State Lines**

37	765 केवी सिवनी से वर्धा-I	765kV Seoni to Wardha-I	696:06:00
38	765 केवी सिवनी से वर्धा-II	765kV Seoni to Wardha-II	699:00:00
39	765 केवी दर्ग से वर्धा -I	765kV Durg to Wardha I	376:58:00
40	765 केवी दर्ग से वर्धा -II	765kV Durg to Wardha II	487:33:00
41	765 केवी दर्ग से वर्धा -III	765kV Durg to Wardha III	552:36:00
42	765 केवी दर्ग से वर्धा -IV	765kV Durg to Wardha IV	407:00:00
43	765 -I	765kV Dhule to Vadodara I	697:30:00
44	765 -I	765kV Indore(PG) to Vadodara I	719:29:00
45	765 -I	765kV D'garh to Jabalpur I	351:31:00
46	765 -II	765kV D'garh to Jabalpur II	571:22:00
47	765 -III	765kV D'garh to Jabalpur III	657:52:00
48	765 -IV	765kV D'garh to Jabalpur IV	657:52:00
49	765 केवी सिवनी से बिलासपुर-I	765kV Seoni to Bilaspur-I	720:00:00
50	765 केवी सिवनी से बिलासपुर-II	765kV Seoni to Bilaspur-II	720:00:00
51	400 केवी भिलाई से कोराडी	400kV Bhilai to Koradi	720:00:00
52	400 केवी भिलाई से भद्रावती	400kV Bhilai to Bhadravati	720:00:00
53	400 केवी भिलाई से सियोने	400kV Bhilai to Seoni	706:56:00
54	400 केवी रायपुर से भद्रावती -I	400kV Raipur to Bhadravati-I	720:00:00
55	400 केवी रायपुर से भद्रावती -II	400kV Raipur to Bhadravati-II	720:00:00
56	400 केवी रायपुर से भद्रावती -III	400kV Raipur to Bhadravati-III	714:35:00
57	400 केवी रायपुर से वर्धा-I	400kV Raipur to Wardha-I	720:00:00
58	400 केवी रायपुर से वर्धा-I	400kV Raipur to Wardha-II	720:00:00
59	400	400kV Satpura to Koradi	711:24:00
60	400 केवी कोल्हापुर(GIS) -I	400kV Kolhapur(GIS)-Mapusa-I	514:26:00
61	400 केवी कोल्हापुर(GIS) -II	400kV Kolhapur(GIS)-Mapusa-II	493:29:00
62	400 -I	400kV Khandwa-Dhule-I	720:00:00
63	400 -II	400kV Khandwa-Dhule-II	720:00:00
64	400 -I	400kV SSP-Dhule-I	345:55:00
65	400 -II	400kV SSP-Dhule-II	537:26:00
66	400	400kV Vapi-Boisar	719:00:00
67	400 -I	400kV SSP- Rajgarh -I	688:18:00
68	400 -II	400kV SSP- Rajgarh -II	596:36:00
69	400 -I	400kV Kasor- Rajgarh -I	704:19:00
70	400 -II	400kV Kasore- Rajgarh -II	648:23:00
71	400 -I	400kV Indore to Asoj-I	720:00:00
72	400 -II	400kV Indore to Asoj-II	720:00:00
73	400 केवी कोरबा से बीरसिंगपुर I	400kV Korba-Birsigpur I	720:00:00
74	400 केवी कोरबा से बीरसिंगपुर I	400kV Korba-Birsigpur II	720:00:00
75	400 केवी कोरबा से एस्सार महान	400kV Korba-Essar Mahan	711:29:00
76	400 केवी कोरबा से विंध्याचल	400kV Korba-Vindhyaachal	720:00:00
77	400 -I	400kV Nagda to Dehgam I पश्चिम झेजिंग आप पश्चिम झेजिंग WPLDC, Mumbai	431:10:00
78	400 -II	400kV Nagda to Dehgam II	606:16:00

माह नवम्बर 2017 के अंत में पश्चिम क्षेत्र के मुख्य जलाशयों के स्तर

**LEVEL OF MAJOR RESERVOIRS IN WESTERN REGION AT THE END OF MONTH OF NOVEMBER 2017**

क्रमांक Sl. No.	विवरण Particulars	गु उ वि नि लि GUVNL	मप्रविउकं लि MPPGCL	एन एच डी सी NHDC	मराविउकं लि MSEGCL
		उकाई Ukai	गांधीसागर Gandhisagar	इंदिरा सागर Indira Sagar	कोयना Koyna
1	Levels in Mtrs. स्तर मीटर में				
1.1	माह के अंत में At the end of the month	97.65	395.27	253.21	657.61
1.2	पिछले वर्ष इस माह के अनुरूप आंकड़े Corresponding Figure of the month Last Year	102.92	399.50	260.76	655.50

**ANNEXURE - 5**

S.No	Region	Name of Elements	Owner/A gency	Outage		Revival		Outage Duration Time	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
				Date	Time	Date	Time						
1	WR	Tripping of 1. 144 MW Gandhar GT-2 2.144 MW Gandhar GT-3 3.224 MW Gandhar ST	NTPC	09/11/2017	17:37	09/11/2017	19:38	2:01	Gas supply line problem led to flame failure and tripping of generating units	410	Nil	GI-1	Nil
2	WR	Tripping of 1.800 kV HVDC Champa-Kurukshetra Pole 1 2.800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	10/11/2017	3:25	10/11/2017	4:58	1:33	Line Winding Under Voltage protection operation resulted in tripping of HVDC Bi-pole	Nil	Nil	GI-2	Nil
3	WR	Tripping of 1.220 kV Belwandi-A''Nagar 1 2.220/132 kV 100 MVA Belwandi ICT 1 3.220 kV Belwandi Bus Coupler 4.132 kV Belwandi-Kukadi	MSETCL	10/11/2017	13:03	10/11/2017	17:11	4:08	LBB operation resulted in tripping of 220 kV Bus 1 which is due to the non clearance of fault at 132 kV side of Kukadi line.	Nil	Nil	GI-1	Nil
4	WR	Tripping of 1.220 kV Wardha(MS)-Dhamangaon 2.220 kV Wardha(MS)-Wardha(PG) 3.220 kV Wardha(MS)-Bhugaon 4.220 kV Wardha(MS)-Bhutibori 5.220 kV Wardha(MS)-Railway 1 6.220 kV Wardha(MS)-Abheej D/C 7.220 kV Wardha(MS)-Warora 8.220 kV Wardha(MS)-Yevatmal 9.220 kV Badnera-Dhamangaon	MSETCL	10/11/2017	22:01	10/11/2017	22:25	0:24	R phase CT of 220 kV Wardha-Dhamagaon burst and caught fire resulted in Bus bar protection operation and tripping of all the lines connected to 220 kV system of Wardha(MS)	Nil	14	GD-1	0.0056
5	WR	Tripping of 1.400 kV Amreli-Jetpur D/C 2.400 kV Amreli-Hadala 3.400 kV Amreli-Chorania 4.400/220 kV 315 MVA Amreli ICT 1 5.400/220 kV 315 MVA Amreli ICT 2 6.400/220 kV 315 MVA Amreli ICT 3 7.400/220 kV 315 MVA Amreli ICT 4 8.400 kV 125 MVAR Bus reactor 2 9.400 kV 50 MVAR Bus reactor 1	GETCO	12/11/2017	12:50	12/11/2017	13:35	0:45	While taking out 400 kV 125 MVAR Bus reactor, Bus bar protection operated at Amreli Substation and all the elements connected to 400 kV Bus 1 and 2 tripped.	Nil	Nil	GI-2	Nil
6	WR	Tripping of 1.220 kV OSP-Nirmani 2.220 kV OSP-Barwaha 3.220 kV OSP-Juluwania 4.220 kV OSP-Chhagaon 5.220 kV OSP-Khandwa	NHDC	19/11/2017	5:43	19/11/2017	8:47	3:04	B phase CT of Bus Coupler bursted which resulted in Bus bar protection operation and tripping of all the outgoing lines from OSP	Nil	Nil	GI-1	Nil
7	WR	Tripping of 1. 220 kV Amona-Ponda 2 2.220 kV Tillari-Amona 3.220 kV Mahalakshmi-Amona	Goa	20/11/2017	5:30	20/11/2017	6:50	1:20	220 kV Amona-Ponda 2 tripped on pole discrepancy at Amona end and at the same time the other two circuits, 220 kV Tillari-Amona and 220 kV Mahalakshmi-Amona were tripped at Amona end.	Nil	Nil	GI-1	Nil
8	WR	Tripping of 1. 50 MW SSP CPH Unit 1 2.50 MW SSP CPH Unit 3 3.50 MW SSP CPH Unit 5 4.220 kV SSP-RBPH 1 5.220 kV SSP CPH Bus Coupler	SSP	20/11/2017	17:14	20/11/2017	17:52	0:38	SSP CPH Unit 3 LBB protection operation resulted in tripping of Unit 1 and 5 along with the 220 kV Bus Coupler	101	Nil	GI-1	Nil
9	WR	Tripping of 1.800 kV HVDC Champa-Kurukshetra Pole 1 2.800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	21/11/2017	21:15	21/11/2017	21:39	0:24	Transient Over Voltage control protection operation resulted in tripping of HVDC Bi-Pole	Nil	Nil	GI-2	Nil
10	WR	Tripping of 1.660 MW APL Unit 7	APL	27/11/2017	8:35	27/11/2017	15:15	6:40	While taking Outage of 500 kV HVDC Mundra-Mohendargarh Pole 1, the flow in the sectionaliser between Phase 3 and 4 increased above 1000 MW and Mundra Unit 7 tripped on SPS operation.SPS was deactivated before taking outage, however due to DC Cable problem the trip signal extended.	622	Nil	GI-2	Nil
11	WR	Tripping of 1.220 kV Malanpur-Gwalior(PG) D/C 2.220 kV Malanpur-Morena D/C 3.220 kV Malanpur-Auraiya 4.220 kV Malanpur-Mahgaon 5.220/132 kV 160 MVA Malanpur ICT 1&2	MPPTCL	30/11/2017	4:01	30/11/2017	5:21	1:20	B phase PT of 220 kV Bus 1 bursted and resulted in tripping of all the elements connected to 220 kV Bus 1 and 2	Nil	Nil	GI-1	Nil

*Disclaimer : The Above details are based on the preliminary/flash report of the event and may change after finalisation of the detailed report.The quantum of load/generation loss is based on details given by SLDC and utility and may vary later with updated details.*

**Annexure-6****Status of healthiness of SERs/DRs**

<b>S.I. No.</b>	<b>Name of Constituent</b>	<b>Date Receipt</b>
1	PGCIL,WRTS-I	06.12.2017
2	PGCIL,WRTS-II	05.12.2017
3	MPPTCL	15.11.2017
4	NTPC	06.12.2017
5	CSPTCL	04.12.2017
6	GETCO	06.12.2017
7	MSETCL	15.11.2017
8	DD/DNH	
9	GOA	11.06.2017
10	NPCIL	
11	NCA/SSP	05.12.2017
12	NHDC	
13	Jindal PL	17.08.2017
14	CGPL	15.11.2017
15	DB POWER	07.08.2017
16	KWPCL	01.12.2014
17	ACBIL/TRN ENERGY	03.11.2017
18	KS K	14.08.2017
19	GMR CHHATTISHGARH	15.11.2017
20	JNSTPS	09.08.2017
21	MB POWER	09.09.2017
22	SASAN UMPP	22.08.2017
23	NSPCL	22.08.2017
24	RGPPL	
25	SUGEN	13.11.2017
26	RKM POWER	13.11.2017
27	ESSAR POWER	09.08.2017
28	BDTCL/JTCL/RTCL	10.08.2017
29	RELIANCE TRANSMISSION	12.08.2017
30	ADANI POWER	04.12.2017
31	JHABUA POWER	12.08.2017
32	EPTCL	09.11.2017
33	TPGL	11.11.2017

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## **Annexure-7**

### **7.1 Status of Reactors**

<b>Sl. No.</b>	<b>400 kV Sub/Stn.</b>	<b>Size (MVar)</b>	<b>Implementing agency</b>	<b>Expected date of commissioning</b>
1	Nanded	125	MSETCL	December – 2017
2	Sholapur	125	MSETCL	Jan – 2018
3	Kolhapur	125	MSETCL	Jan – 2018
4	Akola	125	MSETCL	November – 2017
5	ISP	125	NHDC	November – 2017 expected (Tendering done)
6	Satpura-ISP Line Rx	50	MPPGCL	Dec-2017
7	Karad	125	MSETCL	Commissioned on 26.10.2017

Chief Engineer, SLDC Maharashtra informed following during the meeting:

- a. Commissioning of 125 MVAR shunt reactor at Kolhapur, Solapur, by MSETCL –Tender are floated for above 3 Number substation.
- b. Planning of additional shunt reactors in south Maharashtra – shunt reactors are planned under phase- II by MSETCL. Proposed 125 MVAR Bus reactors are at following 400 KV substations:-
  1. Chandrapur-II
  2. Koradi-II
  3. Khaparkheda
  4. Bhusawal-II
  5. Lonikand-II
  6. Chakan
  7. Kudus

*The WR utilities may kindly intimate the current status on above.*

## 7.2 Status of Transmission schemes: 765/400 kV and above

The updated status on various ongoing transmission schemes for the year 2017-18 as per the current information available is as follows: -

<b>Sl. No.</b>	<b>Name of the Line</b>	<b>Ckt km</b>	<b>Target Completion Date</b>	<b>Remarks</b>
<b>Powergrid</b>				
1	400 kV Vapi – Kudus D/C Line	234	Dec -17	ROW/Forest problem
2	765 kV Wardha Nizamabad-Hyderabad D/C	577 +486		765 kV Wardha Nizamabad commissioned in 31 <sup>st</sup> March-17.
3	400 kV Aurangabad – Boisar line D/C line	690		Ckt-1 & 2 charged on 02/10/2017
4	765 kV Aurangabad (PG) – Padghe (PG) D/C	570	Dec -17	
5	800 kV Champa – Kurukshetra Bipole	2574		One pole test charged on 25.01.2017 Pole two expected at end of Sept 2017.
6	400 kV MOUDA – BETUL PG LINES	393		Ckt-1 Charged on 25/07/2017; Ckt-2 charged on 31/07/2017.
7	800 kV Raigarh-Pugalur HVDC Bipole	3676	Nov-19	4 out of 10 packages awarded
8	400 kV Lara-Champa	224		Charged on 30.06.2017
9	765kV Bhuj-Banaskamta DC	583	Sept 18	
10	400 kV Mundra UMPP – Bhuj DC	190	Dec 18	
<b>Chhattishgarh</b>				
1	400 kV DCDS Raipur (Raita)-			Commissioned on

	Jagdalpur(DCDS)			26.05.2017
2	LILO of 220 kV Raigarh-Budipadar at 400 kV PGCIL S/s Raigarh. Idle charged on 11.8.2015 for anti theft reason		Feb -17	
<b>Gujarat</b>				
1	400 kV D/C Vadinar-Amreli line	116.85	Feb -18	
2	400kV APL-Hadala LILO to Halvad	89.40	June 18	
3	400 kV D/C Amreli-Kasor line(Part-1)	160.95	March -18	
4	400 kV D/C Amreli-Kasor line(Part-2)	164.34	March -18	
5	400 kV D/C Amreli-Kasor line(Part-3)	145.26	March -18	
6	400 kV Varsana-Halvad	143.39	March -18	
7	400 kV Wanakbori-Soja DC	213.17	May 18	
8	400 kV Soja-Zerda DC	268.92	Nov 18	
9	400 kV Hadala-Shapar D/c	124.34	Mar 19	
10	400 kV Bhogat- Kalawad D/C	260.57	Mar 20	
11	400 kV Bhachuunda-Varsana D/c	276.16	June 20	
<b>Madhya Pradesh</b>				
<b>Maharashtra (STU)</b>				
1	400 kV Bableswar-Kudus D/C (Quad)		July -18	Forest clearance awaited, severe ROW problem
<b>Adani Transmission Ltd</b>				
1	765 kV switching station at Rajnandgaon.	-		Completed
2	Raipur Pool - Rajnandgaon 765 kV D/C line.	40	Completed	Completed
3	Rajnandgaon – new pooling station at near Warora 765 kV D/C line.	266	June 2018	
4	400 / 220 kV Substation at	-	Feb 2018	

	Morena.			
5	Gwalior 765 /400 kV – Morena 400 kV D/C	48	Dec'2017	
6	VindhyaChal-IV&V STPP - VindhyaChal Pool 400 kV D/C (Quad) 2nd line.	27	Dec'2017	
7	2-Nos 400 kV Line bays at VindhyaChal IV. STPP Switchyard.	-	Dec'2017	
8	1-No 765 kV line bay at Sasan UMPP.	-	Dec'2017	
9	Sasan UMPP - VindhyaChal Pooling station 765 kV S/C line.	6	Dec'2017	
10	LIGO of one circuit of Aurangabad – Padghe 765 kV D/C line at Pune.	64	Mar'2018	
11	Raigarh (Kotra) – Champa (Pool) 765 kV 2nd S/C Line.	94	Mar'2018	
12	Champa (Pool) –Dharamjaygarh 765 kV 2nd S/C line.	49	Mar'2018	
13	Bilaspur pooling station – Rajnandgaon 765 kV D/C line.	162	Mar'2018	
14	Sipat – Bilaspur Pooling station 3 <sup>rd</sup> 765 kV S/C line.		Jan'2018	
15	1 No 765 kV Line bay at Sipat STPPS of NTPC.			Completed & Charged on 30.05.2017

The WR utilities may intimate the current status on above.

### **7.3 Status of Generating Units**

The status regarding Generating units, commissioned /expected to be commissioned during the current year 2017-18 according the available information is as below:

<b>Name of the Power Projects</b>	<b>Unit No.</b>	<b>Capacity (MW)</b>	<b>Date of Commissioning /Schedule Date</b>
<b>Gujarat</b>			
	NIL		
<b>Chhattisgarh</b>			
	NIL		
<b>Maharashtra</b>			
CHANDRAPUR	8	500	COD on 04.06.2016
CHANDRAPUR	9	500	Commissioned on 21.03.2016. COD done on 24.11.2016
<b>Madhya Pradesh</b>			
Essar Power MP Ltd(Mahan)	2	600	Synchronized on 03.08.2017
BLA	2	45	Commissioned on 20.03.2017
<b>Central sector/IPP</b>			
KS K	3	600	March -2018
KS K	4	600	July – 2018
RKM	3	360	Commissioned on 14.11.2017
RKM	4	360	April 2018
TRN Energy	2	300	COD on 01.05.2017
SKS	2	300	Commissioned on 06.10.2017.
SKS	1	300	Expected by Dec 2017
Rattan India	3	270	Achieved full load on 14.04.2017
NTPC Mouda	4	660	Commissioned on 18.03.2017. Trial run of 72

			hrs completed on 20.08.2017. COD done on 18.09.2017
NTPC Lara	1	800	Dec 2017
NTPC Solapur	1	660	Commissioned on 25.03.2017. COD done on 25.09.2017
NTPC Solapur	2	660	April 2018

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**ANNEXURE-8.1**

**REPORT ON MOCK DRILL FOR CRISIS  
MANAGEMENT PLAN IN POWER SECTOR**

for the quarter ending .....

- 1. Name of Power Utility / Generating Station :**
- 2. Date / Time of Mock-drill :**
- 3. Location site of Mock-drill :**
- 4. Observers :**  
(Indicate names of Team designated Leader / Members to handle crisis situation)
- 5. Scenario of mock emergent situation :**
- 6. Objective :**
- 7. Chronological order of events logged :**

<b>Time</b>	<b>Events</b>	<b>Response Time</b>

- 8. Observations on effectiveness of Mock Drill :**
- 9. Recommendations / Suggestions on the observations (S. No. 8) :**

**Signature of Designated  
(Safety / Security Officer)**

**Dated.....**

**Signature of  
(Head O & M of Plant)**

**Dated.....**

## **Annexure-8.1**

The current status of submission of CMP and P&CS report (constituent wise) for the first quarter (April 2017 to June 2017) is given below:

<b>Sr No</b>	<b>Name of Constituents</b>	<b>CMP Status</b>	<b>P&amp;CS Status</b>
1	NTPC I & II	NTPC I Submitted on 11.04.2017 NTPC II Submitted on 08.03.2017	—
2	PGCIL I & II	PGCIL I Submitted status on 11.04.2017 PGCIL II Submitted status on 07.03.2017	—
3	WRLDC	Report Submitted on 02.05.2017	Report Submitted on 02.05.2017
4	GUJARAT	Report Submitted on 05.06.2017	P&CS report is covered alongwith CMP report
5	MAHARASHTRA	Submitted status by SLDC Maharashtra	
6	CHHATTISGARH		
7	MADHYA PRADESH	Submitted status by SLDC MP	P&CS report is covered alongwith CMP report
8	DD/DNH		
9	GOA		
10	NPCIL	Submitted	
11	NCA	Status Submitted on 07.12.2017	
12	NHDC		
13	Jindal PL		
14	CGPL	Status Submitted on 06.11.2017	
15	DB POWER	Status Submitted on 06.08.2017	
16	KWPCL	Status Submitted on 09.09.2017	
17	ACBIL/TRN	Status Submitted on 05.07.2017	
18	KSK	Status Submitted on 14.07.2017	
19	GMR CHHATTISHGARH		Submitted on 20.09.2017
20	JNSTPS	Status Submitted on 07.11.2017	
21	MB POWER	Status Submitted on 05.07.2017	

22	SASAN UMPP	Status Submitted on 29.04.2017	
23	NSPCL	Submitted status by NSPCL	
24	RGPPL		
25	SUGEN/DGEN	Status Submitted on 06.10.2017	
26	RKM POWER	Status Submitted on 06.09.2017	
27	ESSAR POWER	Submitted for Mahan Location	
28	BDTCL/JTCL/RTCL		
29	RELIANCE		
30	ADANI POWER	Status Submitted on 04.10.2017	
31	JHABUA POWER		
32	EPTCL		

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Status as on 30.11.2017  
ANNEXURE 8.2 A

Schemes approved under PSDF(D1)

Sl.N	Name of State/Entity	Name of Entity	Name of Scheme and Unique ID No	Date of Submission of Scheme by Entity	Estimated cost by entity	Date of Techno-Economic clearance	Date of Recommendation by Appraisal Committee	Project Cost accepted by Appraisal Committee	Category of Funding	Quantum of Funding Recommended by Appraisal Committee	Date of Concurrence by CERC.	Grant Approved by Monitorin	Date of Approval by Monitoring Committee.	Date of Issuance of sanction order by MoP	Date of Signing of Agreement
1	Gujarat	GETCO	Automatic Demand Management Scheme. (034)	1-Jan-15	1.72	12-Jan-15	14-Jan-15	1.67	5.1 (c)	90	18-Mar-15	1.5	19-Mar-15	11-May-15	23-Aug-15
2	Gujarat	GETCO	Load Forecasting Scheme(035)	3-Jan-15	3.7	25-Feb-15	12-Mar-15	3.7	5.1 (e)	100	28-May-15	3.7	14-Jul-15	4-Aug-15	24-Feb-16
3	Gujarat	GETCO	Implementation of OPGW based reliable communication at 132 kv and above substations	27-Mar-17	576.64	21-Jun-17	4-Jul-17	507.89	5.1(c)	50.00	4-Oct-17	253.95	25-Aug-17	15-Nov-17	
4	Gujarat	PGVCL	Installation of capacitor banks for reactive power compensation system on 11kV feeders. (121)	10-Nov-16	82.85	19-Jan-17	17-Apr-17	63.32	5.1 (b)	90.00	15-May-17	56.99	1-May-17	22-May-17	
5	Gujarat	MGVCL	Installation of capacitor banks for reactive power compensation system on 11kV feeders. (50)	5-Mar-15	37.15	11/4/2015 & 8.1.2016	17-Apr-17	28.39	5.1 (b)	90.00	15-May-17	25.55	1-May-17	22-May-17	
6	Gujarat	UGVCL	Installation of capacitor banks for reactive power compensation system on 11kV feeders. (53)	9-Mar-15	54.80	8-Jan-16	17-Apr-17	15.63	5.1 (b)	90.00	15-May-17	14.07	1-May-17	22-May-17 & 27-Nov-17	
7	Gujarat	GETCO	Wind Generation forecasting for state of Gujarat(58)	6-Jul-15	1.62	28-Sep-15	17-Nov-15	1.62	5.1(e)	100.00	14-Jan-16	1.62	22-Feb-16	17-Mar-16	5-Dec-16
8	Gujarat	GETCO	Super conducting fault current limiter (SCFCL) project (043)	24-Feb-15	48.13	17-May-16	6-Sep-16	32.37	5.1 (c)	90.00	24-Nov-16	29.13	24-Nov-16	2-Jan-17	_
9	Gujarat	DGVCL	Installation of capacitor banks for reactive power compensation system on 11kV feeders. (71)	10-Dec-15	21.73	8-Jan-16	17-Apr-17	15.77	5.1 (b)	90.00	15-May-17	14.19	1-May-17	22-May-17	
10	Maharashtra	MSETCL	75 Nos. RTUs for 132 kv Substations in Maharashtra (104)	18-Jul-16	32.04	16-Feb-17	10-Mar-17	25.65	5.1(c)	30.00	5-May-17	7.70	10-Apr-17	16-May-17	
11	Maharashtra	MSETCL	30 Nos. of Data Concentrators in MSETCL networks. (114)	19-Aug-16	13.12	16-Feb-17	10-Mar-17	10.41	5.1(c)	90.00	5-May-17	9.37	10-Apr-17	16-May-17	10-Oct-17
12	Maharashtra	MESTCL	Installation of Capacitor Banks at HV & EH level at various EHV substation under Nashik & Pune zones in MSETCL. (086)	20-May-16	19.49	19.01.2017	17-Apr-17	15.72	5.1 (b)	90.00	15-May-17	14.15	1-May-17	22-May-17	10-Oct-17
13	Maharashtra	MSETCL	Replacement of existing 0.15 ACSR wolf conductor of 132kV Balapur-Patur-Malegaon corridor by High Ampacity Conductor. (098)	1-Jul-16	51.25	16-Feb-17	10-Mar-17	46.15	5.1(d)	75.00	5-May-17	34.61	10-Apr-17	16-May-17	
14	Maharashtra	MSETCL	Replacement of existing 0.2 ACSR wolf conductor of 132kV Khapri-Besa (Nagpur Ring Main Line) High Ampacity Conductor	1-Jul-16	51.25	16-Feb-17	10-Mar-17	46.15	5.1(d)	75.00	5-May-17	34.61			
15	Maharashtra	MSETCL	(Installation of Shunt Bus Reactors at 400KV Solapur, 400 KV Kolhapur and 400KV Karad substations. (100)	18-Jul-16	129.33	16-Feb-17	10-Mar-17	103.38	5.1(b)	90	5-May-17	93.04	10-Apr-17		
16	Maharashtra	MSETCL	Installation os Shunt Bus Reactors at 400KV Akola, 400 KV Bhusawal-II and 400kV Nanded substations. (101)	18-Jul-16	129.33	16-Feb-17	10-Mar-17	103.38	5.1(b)	90	5-May-17	93.04			
17	Maharashtra	MSETCL	Installation os Shunt Bus Reactors at 400KV Koradi, 400 KV Khaparkheda and 400kV Chandrapur-II substations. (102)	18-Jul-16	129.33	16-Feb-17	10-Mar-17	103.38	5.1(b)	90	5-May-17	93.04			
18	Maharashtra	MSETCL	Installation os Shunt Bus Reactors at 400KV Lonikand-II, 400 KV Chakan and 400kV Kudus substations. (103)	18-Jul-16	129.33	16-Feb-17	10-Mar-17	103.38	5.1(b)	90	5-May-17	93.04			
19	Maharashtra	MSETCL	Implementation of ADMS scheme on 33/11kv feeders in Maharashtra. (113)	19-Aug-16	43.73	31-Mar-17	17-Apr-17	32.58	5.1(c)	90	15-May-17	29.32	1-May-17	22-May-17	10-Oct-17
20	Madhya Pradesh	MPPGCL	Installation of : 50 MVAR Line Reactor at 400kV substation at Sami, Dist. Betul. (123)	14-Dec-16	7.45	31-Mar-17	17-Apr-17	7.45	5.1(b)	60.00	15-May-17	6.71	1-May-17	22-May-17	
21	Madhya Pradesh	MPPTCL	Renovation and Upgradation of protection system of substations.(28)	25-Nov-14	173	3/07/2015 & 4/11/2015	17-11-15	103	5.1(C)	90.00	14-Jan-16	92.70	22-Feb-16	17-Mar-16	22-Jun-16
22	Madhya Pradesh	MPPGCL	Installation of 125MVAR Bus Reactor at SSTPP Khandwa substation of MPPGCL (062)	24-Aug-15	18.85	7-Jan-16	8-Mar-16	6.21	5.1(b)	90.00	12-Jul-16	5.59	19-Aug-16	5-Sep-16	29-Dec-16
23	Madhya Pradesh	MPPGCL	Renovation and Upgradation of protection system of substations.(029)	25-Nov-14	88.5	13/1/2015 & 07-15	03-8-Mar-16	52.34	5.1 (c)	90.00	12-Jul-16	47.11	19-Aug-16	5-Sep-16	4-Oct-16
24	Madhya Pradesh	MP SLDC	Implementation of Integrated system for ABT Open Access and MIS for MPSLDC (061)	1-Aug-15	4	28-Sep-15	17-Nov-15	4	5.1(c)	90.00	14-Jan-16	3.60	22-Feb-16	17-Mar-16	22-Jun-16
25	Chhattisgarh	CSPTCL	Implementation of Automatic Demand Management Scheme (ADMS) in the Chhattisgarh State. (112)	29-Aug-16	5.68	16-Feb-17	10-Mar-17	5.03	5.1(c)	90.00	5-May-17	4.53	10-Apr-17	16-May-17	
26	Chhattisgarh	CSPTCL	Renovation and Upgradation of protection system. (039)	6-Jan-15	176.63	6/05/2015 & 16/10/2015	8-Mar-16	68.52	5.1 (c)	90.00	12-Jul-16	61.67	19-Aug-16	5-Sep-16	13-Dec-16

Total 451.47

### Reporting Format to the PSDF Project Monitoring Group

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

**Report for the Month of MM / YY**

No.	Supply Description	Qty. AS PER LOA	Quantity Received during Month	CUMMULATIVE PROGRESS till date		BALANCE	Remarks
				Sch.	Act.		
1	item Details						
1.1							
1.2							
....							
2	work details						
2.1							
2.2							
....							
3	Others						

Signature with seal of the Nodal Officer

Gujarat

## Overall status of Project Proposals submitted for PSDF

Sr. No.	Project Title	Estimated Cost of Project in Cr.	Category	Eligible Grant %	Date of Submission	Date of Sanction	Cost Estimate Sanctioned for Grant in Cr.	Amount of Grant Sanctioned in Cr.	Release of Fund by PSDF in Cr.			Values of contract awarded so far in Cr.	Values of contract under process of award in Cr.	Quantum of grant likely to be utilized out of total approved amount in Cr.	Status
									1st Stage	Intermediate Stage	Final Stage				
1	Automatic Demand Management Scheme (ADMS)	1.72	c	90%	20-Jan-15	11-May-15	1.67	1.50 (19-Jan-16)	0.45 (31-Mar-16)	0.90		1.50		SLDC has applied 1.50 instalment of 0.15 on 27.02.17.	
2	Load Forecasting	3.70	e	100%	20-Jan-15	04-Aug-15	3.70	3.70						Bids are reinvited. (Re-tenderized)	
3	220kV Super Conducting Fault Current Limiter (SCFCL) project	32.37	e	90%	24-Feb-15	02-Jan-17	32.37	29.13						The grant of ₹ 29.13 Cr. sanctioned on dt.02.01.2017. (Sanction letter received 29.13 14.02.17). Tri Party Agreement is to be signed. Yet to be tenderized	
4	Wind generation forecasting	1.62	e	100%	12-Jun-15	17-Mar-15	1.62	1.62 (27-Jun-17)	0.3245 (27-Jun-17)		0.8125			First installment of 0.3245 received on 27.06.17. Work in progress.	
5	Implementation of OPGW based reliable communication at 132 kV and above substations	576.64	c	50%	27-Mar-17	15-Nov-17	507.89	253.95						The grant of ₹ 253.95 Cr. sanctioned on dt.15.11.2017. Tri Party Agreement is to be signed.	
6	Purchase, testing and commissioning various schemes under renovation & modernization Scheme of Gujarat. - Busbar Protection Schemes : Replacement & New Schemes - CTS - Hybrid Switchgear for 2nd Busbar	40.79	d	75%	30-May-17									With Nodal Agency - NL	
<b>Total Amount</b>		<b>656.84</b>							<b>547.25</b>	<b>289.90</b>	<b>0.7745</b>	<b>0.9</b>			

Reporting Format to the PSDF Project Monitoring Group		
1. Name of the Scheme	Implementation of Integrated System for ABT, OA and MIS for MPSLDC	
1.1 Name of the substation and its Location	MPSLDC	
1.2 Executing Agency	M/s Kalki Communication Tech Pvt. Ltd., Bangalore.	
1.3 State/Region	MADHYA PRADESH/WESTERN REGION	
2. Date of Sanction Order	17.03.2016	
2.1 Date of Agreement of Entity with State Govt. / NLDC	22.06.2016	
2.2 Total Approved Cost of Scheme	Rs.400 Lakhs	
2.3 Approved Grant by Monitoring Committee (Rs. In Lakhs)	Rs.360 LAKHS	
2.4 Date of Requisition by the Entity		
2.4 a) Date and Reference of LOA	06.08.2016, Letter No. 07-05/174-A/1723	
2.4 b) Amount of LOA	Rs.301.62 LAKHS	
2.5 Date of Disbursement and amount		
2.5.1 1st Installment	Received (Rs 36 Lakhs)	
2.5.2 2nd Installment	Received (Rs 54.29 Lakhs)	
2.5.3 3rd Installment	Not yet Received (Rs. 162.88 Lakhs)	
2.6 Date of Scheduled completion of work	30/Sep/17	
2.7 Date of Handing over of Site to entity ( in case of Turn key project)	30/Sep/17	

## Report for the Month of NOVEMBER 2017

No.	Supply Description	Qty. AS PER LOA	Quantity Received during	CUMMUL ATIVE		Balance	Remark
				Sch.	Act.		
1	Item Details						
1.1	Supply of hardware & software modules	Lot	Nil	Full quantity of hardware & operating software were received			
1.2	Deployment of software modules	Lot	Nil	Development / customization in progress			

	Erection Description	works as per LOA	Progress During Month	CUMMUL ATIVE		Balance	
2	Development / customization of software modules in progress	Lot		Development / customization in progress			
2.1							
2.2							
3	Others						

Signature With Seal of The Nodal Officer

## REPORTING FORMAT TO THE PSDF PROJECT MONITORING GROUP

<b>1</b>	<b>Name of the scheme</b>	<b>Renovation and Upgradation of protection system of substations of MPPTCL, Madhya Pradesh</b>
1.1	Name of the Substation and its Location	400kV and 220kV EHV Substations of MPPTCL within the MP State
1.2	Executing Agency	M.P.Power Transmission Co. Ltd. (MPPTCL)
1.3	State / Region	Madhya Pradesh / Western Region Load Despatch Centre
<b>2</b>	<b>Date of sanction Order</b>	<b>3/17/2016</b>
2.1	Date of Agreement of Entity with State Govt. / NLDC	6/22/2016
2.2	Total Approved cost of Scheme	10300 Lac
2.3	Grant approved by Monitoring Committee	9270 Lac
2.4	Date of Requisition by the Entity	MPPTCL has made requisition for disbursement of 10% PSDF grant towards signing of aggrement
2.4 (a)	Date and Reference of LOA	MPPTCL Reference letter no. 04-02/PSP-385/3564 dated 17.12.2016
2.4 (b)	Amount of LOA	Rs 9.27 Crore
2.5	Date of Disbursement and Amount	
2.5.1	1st Installment	Date of Disbursement-31.03.2017 and Amount - Rs 9.27 Crore (@10% of approved grant)
2.5.2	2nd Installment	Date of Disbursement-14.07.2017 and Amount - Rs 11.76 Crore (@20% of approved grant)
2.5.2	3rd Installment	-
2.6	Date of scheduled completion of work	March-2018
2.7	Date of Handing over of site to entity (In case of Turn Key Contract)	Not Applicable

Sl No.	Supply Discription	Qty. As per LOA	Qty. Received during Month	Cummulative Progress till date		Balance	Remark
				Schedule	Actual		
<b>1 Item Details</b>							
1.1	198kV Lightning Arresters	15	-	15	15	-	-
1.2	120kV Lightning Arresters	12	-	12	12	-	-
1.3	400kV Current Transformers	121	23	121	121	-	-
1.4	220kV Current Transformers	312	24	312	54	258	-
1.5	132kV Current Transformers	446	42	446	82	364	-
1.6	220kV Potential Transformers	62	-	62	-	62	-
1.7	132kV Potential Transformers	61	6	61	12	49	-
1.8	33kV Potential Transformers	3	-	3	3	-	-
1.9	400kV Isolators 3 Ph(Horizontal Break)	44	5	44	41	3	-
1.10	400kV Isolators 3 Ph(Pantograph)	21	9	21	19	2	-
1.11	220kV Isolators	435	20	435	335	100	-
1.12	132kV Isolators	493	5	493	478	15	-
1.13	Numerical Distance Protection Relays	284	-	284	284	-	-
1.14	400kV Circuit Breaker 3 PH with PIR	17	5	17	17	-	-
1.15	400kV Circuit Breaker 3 PH without PIR	11	3	11	11	-	-
1.16	220kV Circuit Breaker 3 PH	69	-	50	50	19	-
1.17	132kV Circuit Breaker	51	-	51	51	-	-
1.18	400kV Capacitor Voltage Transformers	49	16	49	41	8	-
1.19	220kV Capacitor Voltage Transformers	123	2	123	115	8	-
1.20	132kV Capacitor Voltage Transformers	9	-	9	9	-	-
<b>2 Erection Discription</b>							
2.1	198kV Lightning Arresters	15	NIL	-	-	-	-
2.2	120kV Lightning Arresters	12	NIL	-	-	-	-
2.3	400kV Current Transformers	121	NIL	-	-	-	-
2.4	220kV Current Transformers	312	NIL	-	-	-	-
2.5	132kV Current Transformers	446	NIL	-	-	-	-
2.6	220kV Potential Transformers	62	NIL	-	-	-	-
2.7	132kV Potential Transformers	61	NIL	-	-	-	-
2.8	33kV Potential Transformers	3	NIL	-	-	-	-
2.9	400kV Isolators 3 Ph(Horizontal Break)	44	NIL	-	-	-	-
2.10	400kV Isolators 3 Ph(Pantograph)	21	NIL	-	-	-	-
2.11	220kV Isolators	435	NIL	-	-	-	-
2.12	132kV Isolators	493	NIL	-	-	-	-
2.13	Numerical Distance Protection Relays	284	NIL	-	-	-	-
2.14	400kV Circuit Breaker 3 PH with PIR	17	NIL	-	-	-	-
2.15	400kV Circuit Breaker 3 PH without PIR	11	NIL	-	-	-	-
2.16	220kV Circuit Breaker 3 PH	69	NIL	-	-	-	-
2.17	132kV Circuit Breaker	51	NIL	-	-	-	-
2.18	400kV Capacitor Voltage Transformers	49	NIL	-	-	-	-
2.19	220kV Capacitor Voltage Transformers	123	NIL	-	-	-	-
2.20	132kV Capacitor Voltage Transformers	9	NIL	-	-	-	-
<b>3 Others</b>							

Reporting Format to the PSDF Project Monitoring Group		
S.No	Particulars	Remarks
1.0	Name of the Scheme	Renovation and Up-Gradation of 400 and 220 KV switch Yards of MPPGCL.
1.1	Name of the substation and its Location	1. Amarkantak Thermal Power Station/ Chachai Distt Anuppur MP. 2. Sanjay Gandhi Thermal Power Station/ Birsinghpur Distt Umaria, MP. 3. Satpura Thermal Power Station/ Sarni Distt Betul, MP. 4. Ban Sagar Hydel Power Station - I / Sirmour Distt Rewa, MP.
1.2	Executing Agency	Madhya Pradesh Power Generating Company
1.3	State/Region	Madhya Pradesh /Western Region
2.0	Date of Sanction Order	05.09.2016
2.1	Date of Agreement of Entity with State Govt. / NLDC	04.10.2016
2.2	Total Approved Cost of Scheme	Rs 52.34 Crs
2.3	Approved Grant by Monitoring Committee (Rs. In Lakhs)	Rs 47.11 Crs
2.4	Date of Requisition by the Entity	16.10.2016
2.4 a)	Date and Reference of LOA	
2.4 b)	Amount of LOA	Nil
2.5.0	Date of Disbursement and amount	31.03.17 and Rs 4.71 Crs
2.5.1	Ist Installment	Rs 4.71 Crs (10% advance out of 30%) on 31.03.2017.
2.5.2	II nd Installment	-
2.5.3	III rd Installment	-
2.6	Date of Scheduled completion of work	18 months from date of order of each item.
2.7	Date of Handing over of Site to entity. ( In case of Turn key project)	Not Applicable

## Report for the Month of Nov' 2017

No	Supply Description	Remark
1	Supply of 400 KV and 220 KV Lightening Arresters	Order for supply has been placed vide No 07-09 /PSDF/ T-212/Ord/689 dtd 27.05.2017. Schedule period for supply and installation is 18 months. Dispatch clearance issued on 14.11.17.
2	Supply of 400 KV Isolators	Order for Supply of 400 KV Isolators has been placed vide No 07-09/PSDF/ T-213/Ord/698 dtd 30.05.2017. Schedule period for supply and installation is 18 months. Some drawings have been vetted by STPS Sarni, same are being forwarded to Engg section for concurrence.
3	Supply of 400 KV Circuit Breakers	Detailed order has been issued vide No 07-09 /PSDF/ T-207Ord/1463 dtd 17.10.2017. Schedule period for supply and installation is 18 months.
4	Supply of 220 KV Circuit Breakers	Detailed order has been issued vide No 07-09 /PSDF/ T-207Ord/1480 dtd 24.10.2017. Schedule period for supply and installation is 18 months.
5	Supply of 400 KV and 220 KV Current Transformers	Price Bids has been opened. Case is under scrutiny in view of GST implication.
6	Supply of 400KV and 200 KV Capacitive Voltage Transformers.	Case has been evaluated and submitted for competent approval for placing order on sucessful bidder.
7	Supply of 220 KV Isolators.	Case has been sent for evaluation.
8	Supply of 220V, 600 Ah battery along with Charger, 48V 300 Ah battery along with Charge and 220 H 1200 & 1500 Ah Battery Chargers	Technical Bids are under evaluation.
9	Supply of 20 MVA 220/33 KV Transformers and 2.5 MVA 33/0.4 KV Transformer.	Price Bids has been opened on 16.08.17. Case has been submitted for competent approval for placing order on sucessful bidder.
10	Various Carrier Communication Equipments.	NIT issued and uploaded on webportal on 18.08.17 with due date of opening 20.09.17. No offer received till due date extended first time up to 11.10.17 and second time up to 07.11.17 and further up to 06.12.17
11	Various Electrical Testing Equipments.	NIT issued and uploaded on webportal on 26.09.17 with due date of opening on 28.10.17. Due to some minor correction in the tecnhnicle specifications, due date extended up to 08.11.17. Only two offers were received hence due date extended up to 30.11.17.
12	Supply of 220 KV Wave Trap	NIT issued and uploaded on webportal on 03.10.17 with due date of opening 09.11.17. No offer received till due date extended up to 12.12.17.
13	Various Numerical Relays.	NIT issued and uploaded on webportal on 09.11.17 with due date of opening 22.12.17.
14	String and Solid Core insulators	NIT issued and uploaded on webportal on 09.11.17 with due date of opening 16.12.17.
	Proposals under preparation	
1	Thermovision Camera.	PQR has been obtained after vetting/concurrence to GoMP. Technical and Commercial Specifications are being prepared and NIT shall be issued shortly.

No	Erection Description	Remark
1	ET&C 400 KV and 220 KV Lightening Arresters	Order placed and scheduled period for ET&C works is 18 Months from date of Order.
2	ET&C of 400 KV Isolators.	Order placed and scheduled period for ET&C works is 18 Months from date of Order.
3	ET&C of 400KV Circuit Breakers.	Order placed and scheduled period for ET&C works is 18 Months from date of Order.
4	ET&C of 220 KV Circuit Breakers.	Order placed and scheduled period for ET&C works is 18 Months from date of Order.
5	ET&C of 400KV and 220 KV Current Transformers.	Price Bids has been opened. Case is under scrutiny in view of GST implication.
6	ET&C of 400KV and 200 KV Capacitive Voltage Transformers.	Case has been evaluated and is being submitted for competent approval for placing order on sucessful bidder.
7	ET&C of 220 KV Isolators.	Case has been sent for evaluation.
8	ET&C of 220V, 600 Ah battery along with Charger, 48V 300 Ah battery along with Charge and 220 H 1200 & 1500 Ah Battery Chargers.	Technical Bids are under evaluation.
9	ET&C of 20 MVA 220 KV / 33 KV Transformers and 2.5 MVA 33KV /0.4 KV Transformer.	Price Bids has been opened on 16.08.17. Case has been submitted for competent approval for placing order on sucessful bidder.
10	Various Carrier Communication Equipments.	NIT issued and uploaded on webportal on 18.08.17 with due date of opening 06.12.17.
11	Various Electrical Testing Equipments.	NIT issued and uploaded on webportal on 26.09.17 with due date of opening 30.11.17.
12	Supply of 220 KV Wave Trap	NIT issued and uploaded on webportal on 03.11.17 with due date of opening 12.12.17.
13	Various Numerical Relays.	NIT issued and uploaded on webportal on 09.11.17 with due date of opening 22.12.17.
14	String and Solid Core insulators	NIT issued and uploaded on webportal on 09.11.17 with due date of opening 16.12.17.

Reporting Format to the PSDF Project Monitoring Group		
S.No	Particulars	Remarks
1.0	Name of the Scheme	Installation of 125 MVAR Bus Reactor At SSTPP Khandwa
1.1	Name of the substation and its Location	Shri Singajee Thermal Power Project/ Dongalia Distt Khandwa, MP.
1.2	Executing Agency	Madhya Pradesh Power Generating Company
1.3	State/Region	Madhya Pradesh /Western Region
2.0	Date of Sanction Order	05.09.2016
2.1	Date of Agreement of Entity with State Govt. / NLDC	04.10.2016.
2.2	Total Approved Cost of Scheme	Rs 6.21 Crs
2.3	Approved Grant by Monitoring Committee (Rs. In Lakhs)	Rs 5.59 Crs
2.4	Date of Requisition by the Entity	23.03.2017
2.4 a)	Date and Reference of LOA	Nil
2.4 b)	Amount of LOA	Nil
2.5.0	Date of Disbursement and amount	01.06.2017 Rs 55.90 Lakhs
2.5.1	Ist Installment	Rs 55.90 Lakhs (10% of approved grant)
2.5.2	II nd Installment	-
	III rd Installment	-
2.6	Date of Scheduled completion of work	
2.7	Date of Handing over of Site to entity. ( In case of Turn key project)	Not Applicable

Report for the Month of Nov' 2017		
No	Supply Discription	Remark
1	Supply of 125 MVAR Bus Reactor alongwith all associated accessories for SSTPP Khandwa.	Offer(s) received have been opened on 4/5/17,16.05.17. T&C Bids documents openeed on 24.07.17 and evaluated. Proposal has been evaluated and price bide and revised price bids(due to implication of GST) are scheduled to be opened on 30.11.17.

No	Erection Discription	Remark
1	Erection of 125 MVAR Bus Reactor alongwith all associated accessories for SSTPP Khandwa.	Offer(s) received have been opened on 4/5/17,16.05.17. T&C Bids documents openeed on 24.07.17 and evaluated. Proposal has been evaluated and price bide and revised price bids(due to implication of GST) are scheduled to be opened on 30.11.17.

Sig with Seal of Nodal Officer

Maharashtra

**Status of PSDF Schemes (As on 08-12-2017)**

Scheme Sr. No. as per Annexure-1	Scheme Name	Estimated Cost in Rs. (In Cr.)	Project Cost Accepted in Rs. (In Cr.)	Grant Approved in Rs. (In Cr.)	Balance Amount awarded in Rs. (In Cr.)	Value of contract under process of award	Value of contract under process of award	Quantum of grant likely to be utilised out of total approved grant (In Cr.)	Remark	
									FY-2017-18	FY-2018-19
71	Supply, Installation, Testing and Commissioning of 75 Remote Terminal Units at 132 kV Substations for data acquisition and integration in SCADA systems at SLDC Kalwa and ALDC Ambazari	32.03	25.65	7.7	24.33	Nil	Nil	0	0	Approval for 30 % funding received from PSDF. As many projects of Real Time visibility are under taken by MSEETCL, a letter to hold funding till March 2019 is submitted to Convener PSDF, NLDC New Delhi.
72	Supply, Installation, Testing and Commissioning (STTC) of 30 Nos. Data Concentrators (DCs) for data acquisition from RE pooling stations in MSEETCL network with communication links for real time data transmission to Renewable Energy Management Centre(REMC)	13.12	10.41	9.37	3.75	Nil	Nil	2.81	6.56	Tripartite agreement between MSEETCL, Govt. of Maharashtra and Nodal agency for PSDF (i.e. NLDC) duly signed by Maharashtra Authorities has been submitted to the PSDF.
80	Implementation Of Automatic Demand Management Scheme (ADMS) On 33/11 KV HV Feeders In Maharashtra With Automatic Triggering Mechanism At State Load Despatch Centre, Airoli, Navi Mumbai	43.73	32.58	29.32	14.41	Nil	Nil	8.79	20.53	1) Maharashtra Electricity Regulatory Commission (MERC) has accorded their "In Principle Approval" for implementation of Automatic Demand Management Scheme (ADMS) on 33/11 KV HV Feeders in Maharashtra at total estimated cost of Rs 44.73 Crores including IDC & applicable taxes. 2) Tripartite agreement between MSEETCL, Govt. of Maharashtra and Nodal agency for PSDF (i.e. NLDC) duly signed by Maharashtra Authorities has been submitted to the PSDF.

Ref: ATL/WRPC/07122017

Date: 07.12.2017

**To,**  
Member Secretary,  
WRPC  
Mumbai

**Subject:** Availability certificate for Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) to Adani Transmission Limited (ATL).

**Ref:** Our letter no. ATL/WRPC/17112017 dated 17.11.2017 regarding intimation of transfer of shareholding of WTPL and WTGL to Adani Transmission Ltd.

Dear Sir,

This has reference to our aforesaid letter regarding intimation of transfer of shareholding of WTPL and WTGL to Adani Transmission Ltd.

We hereby request you to kindly issue separate availability certificates for WTPL and WTGL.

We look forward to a long and fruitful relationship with WRLDC and assure you of our best services.

Thanking You

**For Adani Transmission Ltd.**



Vivek Singla

Jt. President-Transmission & Distribution



Ref: ATL/WRPC/17112017

Date: 17.11.2017

**To,**  
 Member Secretary,  
 WRPC  
 Mumbai

**Subject:** Intimation regarding the transfer of the entire shareholdings of RInfra in Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) to Adani Transmission Limited (ATL).

**Ref:** Hon'ble Commission's Order dated 07th August 2017 in case no 31/MP/2017

Dear Sir,

Please refer to the Hon'ble Commission's order dated 7<sup>th</sup> August 2017 in the case no 31/MP/2017 vide which Hon'ble commission approved the transfer of the entire shareholdings of RInfra in Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) to Adani Transmission Limited (ATL).

We are now pleased to inform that ATL has acquired the entire shareholdings of Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) from RInfra. CERC order No: 31/MP/2017 dated 07<sup>th</sup> August, 2017, Letter dated 01<sup>st</sup> November 2017 regarding disclosure to this effect to BSE Ltd and National Stock Exchange of India Limited in terms of Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, Media release of ATL dated 01<sup>st</sup> November 2017, Demat account statement of ATL and Company Master Details of WTPL & WTGL available at Ministry of Corporate Affairs are enclosed herewith for kind information.

We hereby like to inform you that in future all intimations & communications regarding outages and tripping's related to transmission line assets of Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) shall be done by our correspondence of whose details as under :-

Particular	Contact Person
Name	Mr. Akshay V. Mathur
Designation	General Manager
Address	Adani Enterprises Limited 62, Maker Chambers -3 6th Floor, Nariman Point, Mumbai, Maharashtra -400 021
Contact no.	+91 9870663062
E-mail address	Akkshayv.Mathur@adani.com



We look forward to a long and fruitful relationship with WRPC and assure you of our best services.

Thanking You

For Adani Transmission Ltd.

Vivek Singla  
Jt. President-Transmission & Distribution



Enclosures:

1. CERC order 31/MP/2017,
2. Intimation Letter to Stock Exchanges
3. Media Release of ATL,
4. Demat Account Statement of ATL
5. Company Master Details of WTPL & WTGL available at Ministry of Corporate Affairs

Adani Transmission Ltd  
Sambhaav House  
Judges Bungalow Road, Bodakdev  
Ahmedabad 380 015  
Gujarat, India  
CIN : L40300GJ2013PLC077803

Tel +91 79 2555 6900  
Fax +91 79 2555 7155  
[info@adani.com](mailto:info@adani.com)  
[www.adani.com](http://www.adani.com)

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 31/MP/2017**

**Coram:**

**Shri Gireesh B. Pradhan, Chairperson  
Shri A.K. Singhal, Member  
Shri A.S.Bakshi, Member  
Dr. M.K. Iyer, Member**

**Date of Order : 7<sup>th</sup> of August, 2017**

**In the matter of**

Petition under Section 17(3) of the electricity Act, 2003 for permission to transfer the Utility and assignment of licence comprising the transmission business/assets of the petitioner No.1/Reliance Infrastructure Limited formerly under Licence No. 6/Transmission/CERC in the name of Western Region Transmission (Maharashtra) Private Limited and Licence No.7/Transmission/CERC in the name of Western Region Transmission (Gujarat) Private Limited in favour of petitioner No.2 Western Transco Power Limited and Petitioner No.3 Western Transmission (Gujarat) Limited respectively.

**And**

**In the matter of**

1. Reliance Infrastructure Limited  
H-Block, First Floor  
Dhirubhai Ambani Knowledge City  
Navi Mumbai 400710

2. Western Transco Power Limited  
502, Plot no.91/94  
Prabhat Colony, Santacruz (East),  
Mumbai – 400 055

3. Western Transmission (Gujarat) Limited  
502, Plot no.91/94  
Prabhat Colony, Santacruz (East),  
Mumbai – 400 055

**....Petitioners**

## **Vs**

1. Power Grid Corporation of India  
“Saudamini”  
Plot No.2, Sector 29,  
Gurgaon 122001
2. MP Power Trading Company Ltd. (MP Tradeco)  
Shakti Bhawan, Rampur,  
Jabalpur 482008
3. Gujarat Urja Vikas Nigam Ltd. (GUVNL)  
Race Course Road,  
Vadodara 390007
4. Maharashtra State Electricity Distribution  
Company Ltd (MSEDCL),  
Prakashgad, Bandra (East)  
Mumbai 400051
5. Chhattisgarh State Power Distribution  
Company Ltd (CSPDCL)  
Vidyut Seva Bhavan, P.O. Sunder Nagar,  
Danganiya, Raipur 492013
6. Government of Goa, Electricity Department,  
Third Floor, Vidyut Bhavan  
Panaji, Goa 403001
7. Electricity Department,  
Administration of Daman & Diu  
Secretariat, Fort Area  
Moti Daman,  
Daman 396220
8. Administration of Dadra and Nagar Haveli  
Electricity Department,  
Govt. of UT of Dadra and Nagar Haveli  
Silvassa-396230
9. MP Audyogik Kendra Vikas Nigam Ltd (MPAKVNL)  
Free Press House,  
1<sup>st</sup> Floor, 3/54 Press Complex  
A.B.Road, Indore 452008
10. Jindal Power Limited,

Second Floor, DCM Building,  
Plot No.94, Sector 32, Near Exit-9  
Gurgaon 122001

11. Power Trading Corporation of India Ltd  
NBCC Tower, 15, Bhikaji Cama Place  
New Delhi 110 066

12. Heavy Water Project,  
Department of Atomic Energy,  
Heavy Water Board, Vikaram Sarabhai Bhawan  
Anushakti Nagar, Mumbai 400094

13. Sugen Mega Power Project  
Torrent Power Limited,  
Off. National Highway No.8  
Taluka Kamrej,  
Dist. Surat 394155

14. Adani Power Limited  
8-A Sambhav Bldg  
Judges Bungalow Road, Bodak Dev  
Ahmadabad 380015

15. Adani Transmission Ltd,  
Adani House, Near Mithakhali Six Roads,  
Navrangpura, Ahmadabad- 380009

16. L&T Infrastructure Finance Company Limited  
3<sup>rd</sup> Floor, Brindavan Plot No. 177,  
CST Road, Kunchi Kurve Nagar  
Kalina, Santacruz (East)  
Mumbai 400 098

17. IndusInd Bank Limited  
Peninsula Corporate Park,  
Tower A, 4<sup>th</sup> Floor, Ganpatrao Kadam Marg  
Lower Parel, Mumbai 400 013

18. India Infrastructure Finance Company Limited  
8<sup>th</sup> Floor, Hindustan Times House  
18 & 20, Kasturba Gandhi Marg  
New Delhi 110 001

19. Credit Agricole Corporate & Investment Bank  
168 Robinson Road

#23-00, Capital Tower, Singapore 068912

20. Mizuho Bank Limited  
Global Project Finance Division  
Asia Development, 12 Manna View, # 08-01,  
Asia Square 2, Singapore 018961

.....**Respondents**

**Following were present:**

1. Shri Sanjay Sen, Senior Advocate, RInfra
2. Shri Buddy Ranganadhan, Advocate, RInfra
3. Shri Saswat Patnaik, Advocate, RInfra
4. Shri Naveen Nagpal, RInfra
5. Shri Rupin Rawat, RInfra
6. Shri Alok Roy, RInfra
7. Shri Harsha Manal, Advocate, PGCIL
8. Ms. Jyoti Prasad, PGCIL
9. Shri R.P. Padhi, PGCIL
10. Shri S.M. Singh, PGCIL
11. Shri Sitesh Mukherjee, Advocate, CA-CIB & MBL
12. Shri Gautam Chawla, Advocate, CA-CIB & MBL
13. Shri Deep Rao, Advocate, CA-CIB & MBL

**ORDER**

The Petitioners, Reliance Infrastructure Limited (**RInfra**), Western Transco Power Limited (**WTPL**) and Western Transmission (Gujarat) Limited (**WTGL**) have jointly filed the present petition under sub-section (3) of Section 17 of the Electricity Act, 2003 seeking permission to transfer of the utility and assignment of licence comprising the transmission business/assets of RInfra along with security interest in such utilities in favour of WTPL and WTGL. The Petitioners have made the following prayers:

“(1) Permit the transfer of the utility indicated in Appendix A and B in favour of Petitioner No 2 / Western Transco Power Limited and Petitioner No 3 /Western Transmission (Gujarat) Limited respectively; and

(2) Assign the transmission licenses No (i) 6/Transmission/CERC dated December 30, 2008 granted by the CERC for WRTM; and (ii) 7/Transmission/CERC dated December 30, 2008 granted by the CERC for WRTG in favour of Petitioner No 2 /

Western Transco Power Limited and Petitioner No 3 / Western Transmission (Gujarat) Limited respectively; and

(3) Permit the transfer of the security interest in such utilities to be transferred along with the utility; and

(4) Permit Petitioner No 2 /Western Transco Power Limited and Petitioner No 3 / Western Transmission (Gujarat) Limited to enter into a connection agreement(s) with PGCIL/other utilities as applicable as required under the Indian Electricity Grid Code Regulations, 2010 for WRTM and WRTG projects respectively; and

(5) Approve transfer of the approval(s)granted under Section 68 of the Electricity Act, 2003 in relation to WRTM and WRTG projects, in favour of Western Transco Power Limited and Western Transmission (Gujarat) Limited respectively; and

(6) Permit the signing of Transmission Service Agreement & Revenue Sharing Agreement by Petitioner No 2 /Western Transco Power Limited and Petitioner No 3/Western Transmission (Gujarat) Limited post transfer of license(s) to Petitioner No 2/Western Transco Power Limited and Petitioner No 3 /Western Transmission (Gujarat) Limited; and

(7) Permit assignment/novation of erstwhile Western Region Transmission Maharashtra Pvt. Ltd and Western Region Transmission Gujarat Pvt Ltd /Petitioner No 1 rights and obligations in favour of Petitioner No 2/ Western Transco Power Limited and Petitioner No 3/Western Transmission (Gujarat) Limited under respective Power Transmission Agreement(s); and

(8) Permit transfer of all consents, permits, permissions, exemptions, registrations relating to WRTM and WRTG undertakings and vested in the Petitioner No 1 to Petition No. 2 and Petitioner No. 3 respectively so as to facilitate continuation of operations without any hindrance.

(9) Permit entry into all contracts, deeds, bonds, agreements and other instruments to substitute WTPL and WTGL in place of the erstwhile WRTM and WRTG SPVs / Petitioner No 1 in relation to various project documents. The existing project documents shall remain in full force and effect in favour of WTPL and WTGL and shall be enforceable by and against WTPL and WTGL as if WTPL and WTGL had at all material times been a party thereto.

(10) Permit the transfer of share holding in Petitioner No 2 / Western Transco Power Limited and Petitioner No 3 / Western Transmission (Gujarat) Limited to Respondent No 15 /Adani Transmission Limited; and

(11) Pass such order or orders as may be deemed just, fit and necessary in the facts and circumstances of the case.”

2. Brief facts of the case leading to filing of the present petition are discussed as under:

(a) PGCIL notified the Request for Selection in November, 2005 for selection of Independent Private Transmission Company for establishment of Western Region System Strengthening Scheme (WRSSS) Project B and WRSSS Project C on Build Own Operate Transfer (BOOT) basis through international competitive bidding. Reliance Infrastructure Limited (RInfra) through its wholly owned subsidiary Reliance Energy Transmission Limited (RETL) submitted the bid. Being the lowest bidder, PGCIL declared RETL as the successful bidder in November, 2007. Western Region Transmission (Maharashtra) Private Limited (WRTMPL) was incorporated as a 100% subsidiary of RInfra to establish Project B in the State of Maharashtra. Similarly, Western Regional Transmission (Gujarat) Private Limited (WRTGPL) was incorporated as 100% subsidiary of RInfra to establish Project C in the State of Gujarat and Madhya Pradesh. The Commission vide its orders dated 30.12.2008 granted licences to WRTMPL and WRTGPL to execute the WRSSS Project B and WRSSS Project C respectively.

(b) A consortium of financial institutions and banks led by SBI agreed to lend ₹329.70 crore to WRTGPL for part financing the WRSSS C and ₹638.40 crore to WRTMPL for WRSSS B with SBI CAP Trustee Co. Ltd as security trustee. The Commission vide orders dated 11.2.2010 in Petition Nos. 207/2009 and 208/2009 granted approval to WRTMPL and WRTGPL under Section 17 (3) of the Act to create security in favour of SBI CAP Trustee Co. Ltd. for the benefits of WRTMPL and WRTGPL lenders respectively.

(c) WRTGPL approached Credit Agricole Corporate and Investment Bank and Mizuho Corporate Bank, Singapore for part financing of the cost of the WRSSS Project C through External Commercial Borrowings in place of the rupee loans of USD 30 million each (i.e. USD 60 million) which was subsequently revised to USD 50 million. WRTGPL in Petition No. 173/MP/2011 approached this Commission seeking approval for creation of security in favour of IDBI Trusteeship Company Limited acting on behalf of Credit Agricole Corporate and Investment Bank and Mizuho Corporate Bank which was accorded by the Commission vide order dated 5.1.2012.

(d) WRTMPL approached IDFC Ltd. for part financing of the cost of the project in place of the existing rupee loan by the SBI led consortium and IDFC Ltd. agreed to give a loan of ₹601 crore. The Commission vide its order dated 22.3.2013 in Petition No. 7/MP/2013 granted approval to WRTMPL to create security in favour of SBI CAP Trustee Ltd. acting on behalf of IDFC Ltd. After getting the no dues certificate from IDFC Limited, WRTMPL approached L&T Infrastructure Finance Company Limited and IndusInd Bank Limited for part financing of WRSSS Project B and the said lenders agreed to provide loan of Rs.645 crore. WRTMPL approached this Commission for approval under section 17(3) of the Act for creation of security in favour of SBI CAP Trusteeship Company Limited on behalf of L&T Infrastructure Finance Company Limited and IndusInd Bank Limited which was accorded vide order dated 21.9.2015 in Petition No. 169/MP/2015.

(e) WRSSS B Project achieved its COD on 1.1.2014 and WRSSS C project achieved its COD on 29.12.2015. RInfra approached the Commission for approval for restructuring of its business by merging WRTGPL and WRTMPL with RInfra on the basis of approval of merger by Bombay High Court vide order dated 15.7.2014. The Commission vide order dated 7.1.2015 in Petition No.54/MP/2014 accorded the approval for merger of WRTGPL and WRTMPL with RInfra subject to the condition that RInfra shall maintain the accounts of transmission businesses separately. Subsequently, the Commission approved the assignment of licences granted to WRTGPL and WRTMPL in favour of RInfra vide order dated 22.9.2015 in Petition No.176/MP/2015.

(f) RInfra has decided to focus on the Defence and EPC sector and as part of its strategy to divest its transmission business, RInfra has proposed to sell its transmission assets under WRSSS B and WRSSS C projects to Adani Transmission Limited (ATL). RInfra has entered into Term Sheet Agreement dated 5.10.2016 and Share Purchase Agreement dated 6.12.2016 with ATL for sale of 100% economic interest in WRSSS B and WRSSS C projects. As part of divestment process, RInfra has incorporated two fully owned subsidiaries in the form of Special Purpose Vehicles (SPVs) on 6.12.2016 namely, Western Transco Power Limited (WTPL) and Western Transmission (Gujarat) Limited (WTGL) for the purpose of holding the assets of WRSSS B and WRSSS C projects through execution of Business Transfer Agreement (BTA) between

RInfra and the SPVs. After transfer of the assets of WRSSS B and WRSSS C to WTPL and WTGL, RInfra will transfer its 100% equity shareholding in WTPL and WTCL to ATL.

(h) RInfra has approached the Commission for approval under Section 17(3) of the Act for transfer of the assets of WRSSS B and WRSSS C to WTPL and WTGL alongwith assignment of the transmission licences in favour of these SPVs and thereafter for transfer of its entire equity shareholding in these two SPVs to ATL.

3. RInfra has submitted that after conducting strategic review of its business verticals and noting the high growth opportunities in the defence and EPC sectors arising from various initiatives of Government of India, RInfra has decided to focus on the defence and EPC sector as the primary driver of future growth and accordingly has decided to divest certain existing businesses like road development and transmission businesses. As part of the strategy, RInfra has proposed to sell its undertakings formerly under WRTMPL and WRTGPL i.e. the assets of WRSSS B and WRSSS C to ATL. RInfra has submitted that ATL presently owns 5,450 circuit kilometers of transmission lines ranging from 400 kV to 765 kV, with a total transformation capacity of 12,000 MVA., RInfra has further submitted that ATL is now constructing additional 1900 ckms in Rajasthan, Chhattisgarh, Madhya Pradesh, Maharashtra, Jharkhand and Bihar which were awarded through the Tariff Based Competitive Bidding (TBCB) process. RInfra has submitted that the transfer of the proposed utility ultimately in favour of ATL through sale of stake in WTPL and WTGL shall not prejudice any interest or benefits of the beneficiaries of both erstwhile WRTMPL and WRTGPL or in any way weaken the

obligations of the licensee under the respective licence and project documents. RInfra has submitted that ATL, through acquisition of WTPL and WTGL, shall undertake to comply with all obligations under the (i) Implementation Agreements dated 23.11.2007 entered into between WRTMPL and PGCIL and between WRTGPL and PGCIL; and (ii) Transmission Service Agreements dated 1.8.2011 entered into between WRTMPL and PGCIL and between WRTGPL and PGCIL.

4. RInfra has submitted that vide its letter dated 7.12.2016, RInfra has informed the BSE Ltd. and National Stock Exchange (NSE) in respect of proposed divestment of WRTGPL and WRTMPL transmission businesses to ATL. RInfra has submitted that it has sought the consent of the lenders of erstwhile WRTMPL and WRTGPL to allow transfer of WRTMPL and WRTGPL undertakings from RInfra to WTPL and WTGL alongwith the designated outstanding borrowings. It has been submitted that RInfra shall transfer the WRTMPL and WRTGPL undertakings from RInfra to WTPL and WTGL only after obtaining the written consent of the lenders. RInfra has submitted that since the erstwhile WRTMPL and WRTGPL would continue to be owned and operated by ATL which has been successfully operating the transmission business, the beneficiaries of the business are likely to receive the same quality of service.

5. The Commission directed RInfra to make the lenders of WRTMPL and WRTGPL as parties to the petition. RInfra has complied with the said direction by making L&T Infrastructure Finance Company Limited, IndusInd Bank Limited, India Infrastructure Finance Company Limited, Credit Agricole Corporate & Investment Bank and Mizuho Bank Limited as parties. In response to the petition, M.P. Power Management Company

Ltd. (MPPMCL), Gujarat Urja Vikas Nigam Ltd. (GUVNL), Power Grid Corporation of India Ltd (PGCIL) and two lenders of WRTGPL namely, Credit Agricole Corporate & Investment Bank and Mizuho Bank Limited, have filed their replies.

6. MPPMCL in its reply dated 5.5.2017 has submitted that the terms and conditions of the transfer shall not be detrimental to the interests of the beneficiaries. MPPMCL has further submitted that with regard to RInfra's request for approval for transfer of the projects and permission to transfer all consents, permits, permissions, exemptions, registrations relating to WRTMPL and WRTGPL to WTPL and WTGL, it has no issue with such transfer but the Commission may direct RInfra to ensure that no financial burden shall pass on to the beneficiaries on account of transfer of utilities. MPPMCL has further requested the Commission to ensure that there shall be no upward tariff revision on account of transfer of equity shareholding of RInfra in WTPL and WTGL to ATL and in case, the proposed transfer process results in any additional financial burden, it shall not be passed on to MPPMCL.

7. GUVNL in its reply dated 18.5.2017, has submitted that while granting the approval for transfer of transmission utility and assignment of licence under Section 17 of the Act, the Commission is required to consider the cause and justification for such transfer, the terms and conditions on which such transfer has to be permitted, the interest of the beneficiaries and protection of public interest. GUVNL has submitted that the Petitioners are required to submit the details relating to the arrangement proposed for the Commission to take an informed view before granting any permission for the transfer of the utility or for assignment of the licence. GUVNL has further submitted that the transfer of utility or assignment of licence can at no time lead to any increase in tariff

payable/additional financial obligation for the use of transmission system to the beneficiaries at any time.

8. PGCIL in its reply dated 6.6.2017 has submitted that based on the International Competitive Bidding process carried out by PGCIL for selection of Independent Private Transmission Company (IPTC), RETL was notified as the prospective IPTC and thereafter, RETL incorporated WRTMPL and WRTGPL as its wholly owned subsidiaries for execution of Projects B and C of WRSSS-II on Build, Own and Operate (BOO) basis for the purpose making available the entire transmission capacity to the beneficiaries. Implementation Agreements were signed by PGCIL on 23.11.2007 with WRTMPL for implementation of WRSSS-II Project B and with WRTGPL for implementation of WRSSS-II Project C. In terms of the IAs, PGCIL was to provide assistance to IPTCs for obtaining necessary Consents and Way leaves for establishment of the Projects and to suitably connect the Project to the Inter-State Transmission Systems. PGCIL has submitted that it had no liability towards payment of transmission service charges to IPTC. PGCIL has submitted that in terms of clause 4.7 of the IA, the IPTCs were required to furnish the development security of Rs.629 million to PGCIL valid upto three months beyond Required Commercial Operation Date in order to secure performance of IPTC under the IAs. A Parent/Affiliate Company Guarantee of Rs.629 million was also required to be furnished by the Parent or Affiliate Company of IPTC to be valid till the 1<sup>st</sup> anniversary of Commercial Operation Date to secure performance and obligations of IPTC. Accordingly, WRTMPL furnished Development Security in the form of Bank guarantee amounting to Rs.62.9 crore and a Parent/Affiliate Bank Guarantee amounting to Rs.62.9 crore. The validity dates of BGs were upto 31.12.2014 and same were returned back to WRTMPL by PGCIL on their expiry. In respect of WRSSS-II Project C,

WRTGPL furnished a Bank Guarantee of Rs. 31.7 crore towards Development Security and Rs.31.7 crore towards Parent/Affiliate Company Guarantee which were valid till 31.3.2016 and the same were returned by PGCIL on their expiry. PGCIL has submitted that if the proposed scheme is approved by the Commission, then as per the Commission's Regulations, (i) all the fresh agreements including Transmission Service Agreements, and (ii) Revenue Sharing Agreements, etc. are required to be signed by the new entities which would replace erstwhile WRTMPL and WRTGPL. PGCIL has submitted that it should not suffer at any cost, in pursuance to approval of the arrangement as sought by the Petitioners and all such agreements with PGCIL of the erstwhile /proposed companies should stand valid in the eyes of law and such arrangement should not expose PGCIL to any harassment with respect to the work to be done in accordance with agreements and applicable law. PGCIL has requested the Commission to direct the Petitioners including new companies to follow all the rules and regulations, and sign all relevant agreements with CTU on taking over by new company and declare that PGCIL should not suffer at any cost, in pursuance to approval, if accorded, of the arrangement as sought by the Petitioners.

9. Amongst the lenders, Credit Agricole Corporate & Investment Bank (CA-CIB) and Mizuho Bank Limited (MB), two foreign lenders of WRTGPL in their separate replies dated 12.6.2017 have submitted that they were the lenders to erstwhile WRTGPL pursuant to the Credit Agreements dated 29.6.2011 with CA-CIB and MB. Subsequent to the merger of WRTGPL with RInfra, CA-CIB and MB have become lenders to RInfra and have executed Amended and Restated Credit Agreement (ARCA-1) with RInfra effective from 29.9.2015. CA-CIB and MB have submitted that after obtaining internal credit approval and after negotiation and finalization of loan documentation, they have

executed among others, amended ARCA- 1 on 12.6.2017 (amended agreement referred as "ARCA-2"). CA-CIB and MB have submitted that in terms of ARCA-2 and other relevant documents, CA-CIB and MB have no objection to the transfer of the WRSSS-II Project C from RInfra to WTGL on the basis that RInfra and WTGL would continue to be in compliance with the terms of the finance documents and ARCA-2 would be effective after RInfra and WTGL have obtained all approvals for the said transfer. For the second part of the transaction i.e. sale of equity shareholding of RInfra in WTGL to ATL, CA-CIB and MB expect their credit facilities to be transferred to another lender on or prior to the transfer of shares of WTGL to ATL.

10. RInfra in a common rejoinder to the above responses of the Respondents has submitted as under:

- (a) The Petitioners are not seeking any change in TSA and other agreements between the Transmission Companies and beneficiaries which shall remain the same. After the approval of the Commission, the new entities shall sign fresh agreements with the beneficiaries and the terms of the agreements shall remain the same.
- (b) As regards contention of GUVNL for submission of additional material to consider whether the transfer is in public interest or not, it has been submitted that the justification for transfer is contained in the petition itself and GUVNL has not denied any contents of the petition including justification for the transfer. RInfra has assured that no additional financial burden by way of revision in tariff

would be imposed on the beneficiaries by the reason of the transfer of assets to ATL.

(c) As regards GUVNL's submission that the Commission may take an informed decision before granting permission for transfer of the utility or assignment of the licence since the project was awarded to the WRTGPL based on qualification and criteria fulfilled by the bidder, RInfra has submitted that ATL is already in the business of transmission and is operating inter-State and intra-State transmission lines of 400 kV, 765 kV, etc. and is also constructing various transmission systems under TBCB route.

(d) In response to the submission of CA-CIB and MB that upon the sale of equity shareholdings of RInfra in WTGL to ATL, their credit facility to WTGL would be replaced by another lender, RInfra has submitted that ATL has availed suitable arrangements from Standard Chartered Bank (SCB) in such a way that upon transfer of shares of WTGL from RInfra to ATL, the facility from CA-CIB and MB would be replaced by a facility from SCB. RInfra has placed on record a letter dated 17.5.2017 from SCB committing to lend upto USD 27.7 million to ATL on the date of acquisition of WTGL by ATL.

11. During the hearing on 15.6.2017, learned senior counsel for the Petitioners submitted that NoC for transfer of utility from RInfra to SPVs has been received from the lead consortium of the WRTMPL i.e. L&T Infrastructure Finance and NoCs from the other two lenders namely, IndusInd Bank and IIFCL were in the process. Learned senior counsel for the Petitioners further submitted that the commitment letter of SCB dated

17.5.2017 has been forwarded to CA-CIB and MBL. Learned counsel for CA-CIB and MB submitted that the lenders have given their consents for the transfer of utility from RInfra to WTGL upon their credit facility being transferred to another lender on or prior to the transfer of shares of WTGL to ATL. Learned counsel for CA-CIB and MB confirmed that a commitment letter dated 17.5.2017 of Standard Chartered Bank for replacing the credit facility of CA-CIB and MBL by a facility of SCB upon the transfer of shares from WTGL to RInfra has been received from the Petitioners.

12. The Commission, vide Record of Proceedings for hearing dated 15.6.2017, directed the Petitioner to submit the following information and clarifications:

- (i) Valuation of the assets to be transferred under the proposed transfer scheme; and
- (ii) A detailed write up giving the chronological order of events regarding assignment of licence for drawal of loan, transfer of WRTM and WRTG to RInfra, transfer of RInfra to WTPL and WTGL and proposed transfer of shares from WTPL and WTGL to ATL alongwith independent Balance Sheet before the merger of WRTM and WRTG with RInfra, Separate Balance Sheet for these assets in RInfra. The write up must also include the basis of valuation of assets at first level, second level, third level and finally at the level of transfer to the prospective buyer. Copies of arrangement of transfer at each stage may also be furnished. The Balance Sheet of the respective companies must be certified by the Statutory Auditors.

13. As regard the valuation of assets, RInfra vide affidavit dated 23.6.2017 has submitted that the demerger of WRSS undertakings from RInfra to WTPL and WTGL would be carried out at book value of the assets. The total value of the assets of WRSSS-II B and WRSSS-II C projects as on 31.3.2017 was Rs.947 crore and Rs. 623 crore respectively. The debt outstanding in WRSSS B (WRTM) and WRSSS C as on 31.3.2017 was Rs. 517 crore and Rs. 180 crore respectively. In support, RInfra has placed on record the audited financial statements as certified by the statutory auditors. The transfer of WRSSS-II B and WRSSS-II C undertakings from RInfra to WTPL and WTGL respectively shall be carried out in accordance with Business Transfer Agreement (BTA). RInfra has submitted that the sale of 100% shareholding of WTPL and WTGL by RInfra to ATL is being done at a valuation determined based on Discounted Cash Flow (DCF) valuation method. RInfra has submitted that the enterprise value for both projects combined works out to be approximately Rs. 1000 crore as on 1.1.2017 which has been disclosed by the Petitioners to stock exchanges namely, BSE Ltd. and National Stock Exchange on 7.12.2016. RInfra has placed on record the Binding Term Sheet and Share Purchase Agreement signed between RInfra and APL in a sealed envelope separately claiming confidentiality for commercial information.

14. With regard to details in chronological order of events, RInfra has submitted the same from November, 2005 (i.e. date of notification of RFP by PGCIL) till 26.12.2016 (incorporation of SPV, namely WTPL and WTGL). RInfra has also submitted the chronological steps towards completing the proposed transaction as under:

- (a) Approval of CERC and lenders for transfer of WRSSS-II B and C undertakings from RInfra to WTPL and WTGL, and transfer of shareholdings in WTPL and WTGL from RInfra to ATL.
- (b) Execution of Business Transfer Agreement (BTA) between RInfra and WTGL/WTPL. Draft BTA has been placed on record.
- (c) Transfer of WRSSS-II B and C undertakings from RInfra to WTPL and WTGL respectively after completion of conditions precedent specified under BTA and any conditions precedent specified by lenders under the financial documents/approvals for such transfer of undertakings.
- (d) Completion of Conditions Precedent under Share Purchase Agreement [including execution of Transmission Service Agreement (TSA), Revenue Sharing Agreement (RSA)] and any conditions precedent specified by lenders under the financing documents/approvals for transfer of shareholding.
- (e) Simultaneous transfer of,-
  - (i) Shares of WTPL and WTGL from RInfra to ATL on receipt of equity consideration by RInfra from ATL.
  - (ii) Outstanding loans in WTGL from CA-CIB and MB to Standard Chartered Bank.

**Analysis and Decision:**

15. The present petition has been filed under Section 17 (3) of the Act for seeking approval of the Commission to transfer the WRSSS-II B and C undertakings from RInfra

alongwith security interests to WTPL and WTGL, two SPVs incorporated as fully owned subsidiaries of RInfra and assignment of licence of erstwhile WRTMPL and WRTGPL (now assigned to RInfra) in favour of WTPL and WTGL. Approval has also been sought under Section 17(3) of the Act for permission to transfer 100% shareholdings in WTPL and WTGL to Adani Transmission Limited (ATL) in terms of the Term Sheet Agreement and Share Purchase Agreement between RInfra and ATL. Permission has been further sought for certain incidental activities to be carried out pursuant to the above proposed transfers.

16. Section 17 of the Act provides as under:

“17. Licensee not to do certain things: (1) No licensee shall, without prior approval of the Appropriate Commission,

(a) undertake any transaction to acquire by purchase or takeover or otherwise, the utility of any other licensee; or

(b) merge his utility with the utility of any other licensee:

Provided that nothing contained in this sub-section shall apply if the utility of the licensee is situate in a State other than the State in which the utility referred to in clause (a) or clause (b) is situate.

(2) Every licensee shall, before obtaining the approval under sub-section (1), give not less than one month's notice to every other licensee who transmits or distributes, electricity in the area of such licensee who applies for such approval.

(3) No licensee shall at any time assign his licence or transfer his utility, or any part thereof, by sale, lease, exchange or otherwise without the prior approval of the Appropriate Commission.

(4) Any agreement, relating to any transaction specified in sub-section (1) or sub-section (3), unless made with the prior approval of the Appropriate Commission, shall be void.”

As per clause (1) of Section 17 of the Act, a licensee cannot acquire the utility of any other licensee nor merge its utility with the utility of any other licensee without the prior approval of the Appropriate Commission. Sub-section (3) of Section 17 of the Act

provides that no licensee shall transfer its utility by sale, lease, exchange or otherwise and assign its licence without the prior approval of the Appropriate Commission. Sub-section (4) of Section 17 further states that any agreement relating to any transaction in terms of sub-section (1), i.e. for acquisition and merger of the utility and in terms of sub-section (2) i.e. transfer of utility or assignment of licence, without obtaining the prior approval of the Appropriate Commission shall be void. In the present case, RETL was selected as the IPTC through international Competitive Bidding to execute the WRSSS-II Projects B and C for which RETL incorporated two fully owned subsidiaries namely, WRTMPL and WRTGPL respectively. WRTMPL and WRTGPL were granted transmission licences by this Commission vide order dated 30.12.2008. Therefore, this Commission is the Appropriate Commission to accord approval in terms of Section 17 of the Act.

17. WRTMPL and WRTGPL entered into Implementation Agreements with PGCIL and Transmission Service Agreements with the respective beneficiaries of WRSSS-II Project B and Project C. As per the Implementation Agreements, PGCIL was required to provide assistance for obtaining necessary consents, provide connectivity to the inter-State transmission system and exercise supervision and control during construction phase. WRTMPL and WRTGPL were required to provide “development security” and “Parent/Affiliate Company Guarantee” which were to be released after COD of the projects and 1<sup>st</sup> anniversary of the COD of the projects respectively. WRSSS-II Project B achieved COD on 1.1.2014 and WRSSS-II Project C achieved COD on 29.12.2015 and PGCIL is stated to have returned the bank guarantee in both cases to WRTMPL and WRTGPL. As per the Transmission Service Agreements, WRTMPL and WRTGPL

are required to make available entire capacity in both projects to the beneficiaries and receive transmission charges.

18. Both WRTMPL and WRTGPL raised loans from the financial institutions for part financing of the projects. They have also resorted to refinancing of the loans. On all occasions, both WRTMPL and WRTGPL had sought and were granted approval by this Commission under Section 17(3) of the Act. WRTMPL has last financed the loan of Rs.601 crore from IDFC Limited by creating security in favour of SBICAP Trustee Limited. WRTGPL has last financed the loan CA-CIB and MB and created security in favour of IDBI Trusteeship Limited as Security Trustee.

19. As per the Scheme of Amalgamation approved by the High Court of Judicature at Bombay, WRTMPL and WRTGPL were merged with RInfra on 29.9.2015 after obtaining approval from this Commission. Pursuant to the merger, IDFC Limited became a lender of RInfra in respect of WRSSS-II Project B and CA-CIB and MB became the lenders of RInfra in respect of WRSSS-II Project C and necessary agreements were executed between RInfra and the lenders. As per the affidavit dated 23.6.2017 filed by RInfra, merger of WRTMPL and WRTGPL with RInfra with effect from 1.4.2014 was on the basis of the valuation at book value of the assets which were Rs. 1,127 crore and Rs.618 crore as on 31.3.2014 for WRSSS B and WRSSS C respectively. The external debts outstanding in WRSSS B and WRSSS C projects as on 31.3.2014 were Rs.589 crore and 259 crore respectively.

20. The proposal in the present petition is in two parts: (a) demerger of WRSSS B & C from RInfra to WTPL and WTGL at the book value of the assets and (b) transfer of

WTPL and WTGL to ATL in terms of the Term Sheet Agreements and Share Purchase Agreements between RInfra and ATL. RInfra has submitted that as on 31.3.2017, the total value of assets of WRSSS B and WRSSS C were Rs.947 crore and Rs.623 crore respectively and debt outstanding as on 31.3.2017 are Rs.517 crore and Rs.180 crore respectively. RInfra has submitted audited financial statements in support of the value of assets and debt outstanding as on 31.3.2017. According to RInfra, transfer of WRSSS B and WRSSS C undertakings to WTPL and WTGL respectively shall be carried out in accordance with the terms of the Business Transfer Agreement between RInfra and WTPL and RInfra and WTGL. WTPL and WTGL have been incorporated as public companies and are wholly owned and controlled subsidiaries of RInfra. RInfra has placed on record the Memorandums of Association and Articles of Association of WTPL and WTGL which show that the main object of the companies are to "carry on the business of establishing, commissioning, setting up, operating and maintaining electric power transmission systems/network,.....and to acquire in any manner power transmission system/networks.....".RInfra has also placed on record the draft Business Transfer Agreements in respect of WTPL and WTGL. As per the BTAs, RInfra as the Transferor intends to sell, assign, transfer, convey and deliver all rights, title, ownership, possession and economic interest in the WRSSS Project B and Project C to WTPL and WTGL respectively which are the Transferee Companies on Slump Sale basis. BTA defines "Slump Sale as "transfer of the Undertaking from the Transferor to the Transferee, as a going concern such that the consideration is a single undivided lump sum consideration for the Undertaking and no independent value is assigned to each or any of the components of the Undertaking." We have also considered the submissions

of PGCIL, the beneficiaries such as MPPMCL and GUVNL, the lenders of WRSSS-II Project C, namely CA-CIB and MB. None of these parties have any objection to the transfer of WRSSS-II Project B and Project C to WTPL and WTGL which are the wholly owned subsidiaries of RInfra. MPPMCL and GUVNL have expressed the view that the proposed transfer of utilities and assignment of licences in favour of WTPL and WTGL should not result in additional financial obligations to the beneficiaries. PGCIL has submitted that it should not suffer any cost in pursuance of the approval of the arrangement sought by RInfra and should not be exposed to any harassment with reference to any work to be done in accordance with the agreements. CA-CIB and MB have stated that they have entered into ARCA 2 on 12.6.2017 with RInfra and WTGL and they have no objection to the transfer of utility from RInfra to WTGL on the basis that RInfra and WTGL will continue to be compliant with the terms of the finance documents. RInfra in its rejoinder has submitted that RInfra is not seeking any change in the TSA and the other terms of the TSA and other Agreements between the beneficiaries and transmission companies (WRTMPL and WRTGPL/RInfra). RInfra has further submitted after approval of the Commission, the new entities, namely WTPL and WTGL pursuant to the transfer shall sign fresh agreements with the beneficiaries and terms of the Agreements shall remain the same.

21. After taking note of the submission of the parties and on perusal of the documents on record, we approve the transfer of the WRSSS Project B and Project C from RInfra to WTPL and WTGL respectively under Section 17(3) of the Act subject to the following conditions:

- (a) There shall be no change in the terms and conditions of the agreements between erstwhile WRTMPL and WRTGPL (subsequently RInfra) and the beneficiaries and PGCIL pursuant to the transfer of WRSSS Project B and Project C to WTPL and WTGL respectively;
- (b) No extra liability or obligations shall accrue to PGCIL on account of the Implementation Agreement between erstwhile WRTMPL and WRTGPL with PGCIL pursuant to the transfer of the WRSSS Project B and Project C to WTPL and WTGL respectively;
- (c) There shall be no change in the terms and conditions of the TSAs between the erstwhile WRTMPL and WRTGPL and the beneficiaries including the transmission charges payable under the TSAs pursuant to the transfer of the WRSSS Project B and Project C to WTPL and WTGL respectively;
- (d) RInfra shall ensure that the transfer of all rights, title, ownership, possession and economic interest in the WRSSS Project B and Project C vest in WTPL and WTGL, respectively in terms of the Business Transfer Agreements;
- (e) Pursuant to the transfer, WTPL and WTGL shall enter into Transmission Service Agreement, Revenue Sharing Agreement and other Agreements as required under the applicable regulations of the Commission to inter-State transmission licensees;
- (f) RInfra and WTPL and WTGL shall protect the interest of the lenders of erstwhile WRTMPL and WRTGPL through appropriate contractual instruments;

(g) It shall be the responsibility of RInfra to ensure that all legal and contractual requirement for and pursuant to the transfer of WRSSS Project B and Project C vest in WTPL and WTGL respectively are complied with and any instance of non-compliance shall be construed as contravention of the directions of the Commission and shall be dealt with in accordance with law.

(h) The Commission in its order dated 1.4.2012 in Suo Motu Petition No. 176/2011 had decided as under:

“14. In view of the above, we direct that the tariff of the WRSSS-II Project 'B' and Project 'C' after the concession period of 25 years (3 years for construction and 22 years for operation) shall be determined on the basis of the buy-out price of Rs. 5 crore quoted by the licensees at the time of submitting their bids for the project.”

WTPL and WTGL shall comply with the directions contained in the said order.

(i) Within one month of the completion of transfer, RInfra alongwith WTPL and WTGL shall file the status report on the transfer of WRSSS Project B to WTPL and WRSSS Project C to WTGL.

22. After the transfer of WRSSS Project B to WTPL and WRSSS Project C to WTGL in terms of the directions above, licence granted to erstwhile WRTMPL and WRTGPL shall stand assigned in favour of WTPL and WTGL on the same terms and conditions as the original licences.

23. The second part of the proposal in the present petition is transfer of WTPL and WTGL to ATL in terms of the Term Sheet Agreements and Share Purchase Agreements between RInfra and ATL. RInfra has submitted that 100% shareholding together with

economic interest of WTPL and WTGL by RInfra to ATL is being done on Discounted Cash Flow (DCF) valuation method. The enterprise value for both projects combined works out to Rs.1000 crore as on 1.1.2017. RInfra has entered into Share Purchase Agreement with ATL for divestment of its transmission assets in WRSSS Project B and C. RInfra vide its letter dated 7.12.2016 has made a disclosure to that effect to BSE Ltd and National Stock Exchange of India Limited in terms of Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. RInfra has placed on record copies of the Term Sheet Agreement and Share Purchase Agreement in sealed cover. We have gone through the Agreements and do not express any view thereon as it is contractual issue between RInfra and ATL and does not affect the tariff to be paid by the beneficiaries under the TSA. After the issue of this order, we direct the staff to return the documents in sealed cover to RInfra.

24. In terms of the Share Purchase Agreement, ATL is acquiring 100% of shareholding of RInfra in WTPL and WTGL alongwith the liabilities to the lenders. The present lenders of WRSSS project B are IDFC Limited with security interest created in favour of SBICAP Trustee Limited. The same shall be vested in WTPL and after transfer of 100% equity in WTPL, the ATL through WTPL shall be liable for the said loan. The present lenders of WRSSS Project C are CA-CIB and MB which are the lenders to WRTGPL in terms of ARCA 1 and to RInfra in terms of ARCA 2. Both CA-CIB and MB have categorically stated that for sale of equity shareholdings by WTGL to ATL, they would expect their credit facility to be transferred to another lender on or prior to transfer of shares of WTGL to ATL. RInfra has submitted that ATL has tied up with Standard Chartered Bank who has agreed to provide the credit facility in place of the credit facility

of CA-CIB and MB. A letter dated 17.5.2017 from Standard Chartered Bank has been placed on record. The relevant portion of the letter is extracted as under:

"ATL is proposing to arrange refinancing or transfer/assignment of the existing project debt (USD 27.70 million as on March 31, 2017) on the date of acquisition of WTGL by ATL, through External Commercial Borrowing of same tenor or a longer tenor ("Facility").

We, Standard Chartered Bank ("SCB") , refer to the Facility and are pleased to confirm SCB has obtained internal credit approvals to lend upto USD 27.7 million of the Facilities subject to satisfactory documentation and terms outlined in Term Sheet (the "Commitment"). This Commitment shall expire on 30 September 2017"

During the hearing of the Petition, learned counsel for CA-CIB and MB confirmed that they are satisfied with the arrangement and have no objection to the proposed transfer of equity shares by RInfra in WTGL to ATL, subject to compliance with the commitment by SCB. RInfra in its affidavit dated 23.6.2017 has submitted that share transfer of WTPL and WTGL from RInfra to ATL and transfer of outstanding loan from CA-CIB and MB to SCB shall take place simultaneously. We expect the parties to comply with the above arrangement and commitment so that transfer of loan and substitution of lenders take place smoothly and ATL after share transfer in WTPL and WTGL discharges its obligations towards servicing of loan in respect of WRSSS Project B and Project C.

25. GUVNL has submitted that the transmission project was vested in the Petitioner pursuant to the tariff based competitive bid undertaken for the development of the transmission project and selection of the bidder was based on qualification and criteria fulfilled by the bidder as well as the competitive bid which the selected bidder has given. GUVNL has requested the Commission to take an informed view before granting

permission for transfer of the utility or for assignment of the licence. RInfra has submitted that ATL is already in the business of transmission and is operating inter-State and intra-State transmission lines of 400 kV, 765 kV, etc. and is also constructing various transmission systems under TBCB route. We have considered the submissions of GUVNL and RInfra. While selecting a project developer for development and operation of transmission system, two aspects are mainly seen, namely whether the bidder possesses technical qualifications and experience to undertake the business of transmission and whether the bidder has quoted the lowest bid price. We have to consider whether these conditions based on which RETL was selected as IPTC and its subsidiaries, namely the erstwhile WRTMPL and WRTMGL were granted licences are likely to be altered or modified on account of the proposed transfer of WTPL and WTGL to ATL. As regards the first condition, it is noted that ATL has been incorporated as a company to carry out transmission business. This Commission had granted licence to Adani Power Limited for its dedicated transmission system of 400 kV D/C Mundra-Dehgam Transmission Line +\_ 500 kV Bipole Mundra-Mohindergarh HVDC transmission line including associated 400 kV lines and Mundra to Dehgam which was subsequently assigned to ATIL which is subsidiary company of ATL. Based on competitive bidding, ATL was declared as the successful bidder and acquired three companies, namely Raipur-Rajandgaon-Warora Transmission Ltd., Chhattisgarh-WR Transmission Ltd., and Sipat Transmission Ltd. who have been granted transmission licences on Build, Own, Operate and Maintain basis for the following transmission systems:

- (a) Additional System Strengthening for Chhattisgarh IPPs-Part-B;

- (b) Additional System Strengthening for IPPs in Chhattisgarh and other Generation Projects in Western Region;
- (c) Additional System Strengthening for Sipat STPS.

Apart from the above, ATL is also having business of intra-State transmission based on the licences granted by MERC and RERC. Therefore, ATL possesses the necessary qualification and expertise to carry out the business of transmission. As regards the second condition, tariff of WRSSS Project B and Project C are being paid by the beneficiaries at the rates discovered through competitive bidding in terms of the TSAs. Both GUVNL and MPPMCL have submitted that the proposed transfer shall not result in change in tariff. RInfra has submitted on affidavit that consequent to the transfer of the WTPL and WTGL, there will be no additional burden by way of revision of tariff on the beneficiaries. It is clarified that since, the tariff of WRSSS Project B and Project C were discovered through competitive bidding, they shall remain in force throughout the terms of the TSAs and no mid-course revision in tariff shall be made, subject to the provisions of the TSAs.

26. In view of the above discussion, there are no technical and legal impediments to permit transfer of entire equity shareholdings of RInfra in WTPL and WTGL to ATL. We approve the transfer of entire shareholding of RInfra in WTPL and WTGL in favour of ATL under Section 17(3) of the Act subject to the following conditions:

- (a) On transfer of entire shareholdings of RInfra in WTPL and WTGL to ATL, both WTPL and WTGL shall become fully owned subsidiaries of ATL. It is directed that ATL shall ensure that such transfer does not contravene any provisions of the applicable laws.

- (b) Since, after the transfer, WTPL and WTGL shall become the wholly owned subsidiaries of ATL, the transmission licences to be assigned in favour of WTPL and WTGL shall not be further assigned in favour of ATL without approval of the Commission.
- (c) ATL shall ensure that WTPL and WTGL comply with all their obligations under the various Agreements in force and Agreements to be entered including the obligations towards their respective lenders.
- (d) ATL shall not divest its interest in WTPL and WTGL or otherwise part with these companies without the prior approval of this Commission.
- (e) There shall be no change in the transmission service charges being paid by the beneficiaries of WRSSS Project B and WRSSS C Project which shall continue to be governed as per the charges discovered through Tariff Based Competitive Bidding.
- (f) ATL shall comply with our direction contained in order dated 4.1.2012 in Petition No. 176/2011.

27. After transfer of the entire shareholdings of RInfra in WTPL and WTGL to ATL, ATL shall file a status report about WTPL and WTGL including compliance of all legal and contractual requirements by these entities and ATL.

28. In the light of the above discussions, the prayers in the petition are disposed of as under:

- (a) Prayers (1), (2) , (3) and (7) are disposed of in terms of para 21 of this order.

(b) As regards prayers (4) and (6), WTPL and WTGL shall enter into the necessary agreements under the IEGC and Sharing Regulations in place of erstwhile WRTMPL and WRTGPL after transfer of the WRSSS Project B and Project C from RInfra to WTPL and WTGL respectively.

(c) As regards prayer (5), this approval shall stand transferred in terms of Business Transfer Agreement.

(d) As regards prayers (8) and (9), the consents, permits, permissions, exemptions, registration etc. relating to WRTMPL and WRTGPL shall stand transferred in terms of Business Transfer Agreement.

(e) Prayer (10) is disposed of in terms of para 26 above.

29. It is directed that all concerned shall comply with the directions contained in this order for transfer of WRSSS Project B and Project C to WTPL and WTGL respectively and transfer of entire shareholdings of RInfra in WTPL and WTGL to ATL. If the necessary transactions do not materialise within a period of three months, the same shall be reported to the Commission.

30. The Petition is disposed of in terms of the above.

Sd/-  
**(Dr. M.K. Iyer)**  
Member

s/-  
**(A.S. Bakshi)**  
Member

s/-  
**(A.K. Singhal)**  
Member

s/-  
**(Gireesh B. Pradhan)**  
Chairperson



AXIS BANK LTD (DP ID : IN300484)

**AXIS BANK LIMITED**  
**DP ID : IN300484**

TRISHUL, OPP SAMARTHSHWAR TEMPLE, LAW GARDEN , ELLIS BRIDGE,  
AHMEDABAD - 380006  
Phone No : 079-66306102/103 Fax No : 079-26409321

**Statement of Holding As on 14-Nov-2017**

<b>Name</b>	ADANI TRANSMISSION LIMITED	<b>Client ID</b>	19930338
<b>Address</b>	ADANI HOUSE NR MITHAKHALI SIX ROADS NAVRANGPURA AHMEDABAD GUJARAT 380009		
<b>Category</b>	Non House Beneficiary	<b>Status</b>	Active
<b>Type / Sub Type</b>	Corporate Body / Domestic	<b>BSDA:</b>	No

<b>ISIN Code</b>	<b>Scrip Name</b>	<b>Account Description</b>	<b>Balance</b>
INE822R01013	ADANI TRANSMISSION (INDIA) LIMITED - EQ	Pledge	110049994
INE194W01017	ADANI TRANSMISSION (RAJASTHAN) LIMITED - EQ	Pledge	2650000
	ADANI TRANSMISSION (RAJASTHAN) LIMITED - EQ	Beneficiary	2349993
INE090N01016	ARAVALI TRANSMISSION SERVICE COMPANY LIMITED - EQ	Unconfirmed Pledge	1098294
	ARAVALI TRANSMISSION SERVICE COMPANY LIMITED - EQ	Pledge	2771900
INE801U01011	CHHATTISGARH-WR TRANSMISSION LIMITED - EQ	Pledge	30600000
	CHHATTISGARH-WR TRANSMISSION LIMITED - EQ	Beneficiary	29399400
INE710M01011	MAHARASHTRA EASTERN GRID POWER TRANSMISSION COMPANY LIMITED - EQ	Pledge	707499994
INE747M01013	MARU TRANSMISSION SERVICE COMPANY LIMITED - EQ	Unconfirmed Pledge	1877394
	MARU TRANSMISSION SERVICE COMPANY LIMITED - EQ	Pledge	4738200
INE220W01010	NORTH KARANPURA TRANSCO LIMITED - EQ	Beneficiary	49994
INE798U01019	RAIPUR-RAJNANDGAON-WARORA TRANSMISSION LIMITED - EQ	Pledge	44395500
	RAIPUR-RAJNANDGAON-WARORA TRANSMISSION LIMITED - EQ	Beneficiary	42603900
INE799U01017	SIPAT TRANSMISSION LIMITED - EQ	Pledge	22440000
	SIPAT TRANSMISSION LIMITED - EQ	Beneficiary	21559400
INE797X01015	WESTERN TRANSCO POWER LIMITED - EQ	Beneficiary	9999994
INE829X01016	WESTERN TRANSMISSION	Beneficiary	9999994

(GUJARAT) LIMITED - EQ

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Any discrepancy in the statement should be brought to the notice of Axis Bank Limited within one month from the date of the statement.

You can now hold your mutual fund investments in this demat account. Contact your nearest Branch or your Stock Broker for more information.

As per SEBI directive Delivery Instruction Slips issued on or before 1st October 2014 will not be accepted from 7th January 2016. Kindly apply for new DIS booklet.

In case of change in income details provided at the time of account opening, please submit updated details in prescribed form available at your nearest Branch providing Depository Services.

Kindly update your mobile number in demat account for availing SMS Alert facility.

For the benefit of the investors SEBI has directed Depositories to send Consolidated Account Statement (CAS) from February 2015 for the investments of an investor in Mutual Funds (MF) and securities held in Demat form with the Depositories. NSDL CAS will enrich your experience of managing your portfolio effectively and benefit you in many other ways viz. better decision making, simplified monitoring, rich analysis of portfolio etc. However, if you do not wish to receive the CAS (not recommended), you may write to us on dp.operations@axisbank.com or send your request to any of our branch nearest to you offering Demat services.

NSDL is maintaining a Trade Repository in which the consolidated primary market data and secondary market data of corporate bonds would be disseminated on NSDL website www.nsdl.co.in under the menu Data Releases. Clients can use the data provided in the Trade Repository by NSDL to take informed decisions

As per Government directive, it is mandatory to link your Aadhaar Number with your Demat Account before 31st December 2017 or else the account will be frozen (Suspended for Debit and Credit) till updation of Aadhaar number. Ignore if already done.

Corporate Office: Gigaplex, Building No. 1, 4th Floor, Plot No I.T.5, MIDC,  
Airoli Knowledge Park, Airoli, Navi Mumbai - 400708.  
Email- dp.operations@axisbank.com

Registered Office: Trishul - 3rd Floor, Opp. Samartheshwar Temple, Near Law Garden, Ellisbridge, Ahmedabad -380006 Tel No. 079-26409322 Fax No. 079-26409321 CIN: L65110GJ1993PLC020769 Website - www.axisbank.com

\*\*\*End of Report\*\*\*

1<sup>st</sup> November, 2017

**BSE Limited**

P J Towers,  
Dalal Street,  
Mumbai – 400 001

**Scrip Code: 539254**

**National Stock Exchange of India Limited**

Exchange plaza,  
Bandra-Kurla Complex,  
Bandra (E),  
Mumbai – 400051

**Scrip Code: ADANITRANS**

Dear Sir,

**Sub: Completion of 100% acquisition of R-Infra's WRSSS Transmission Assets.**

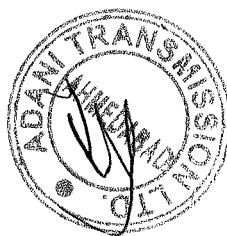
In continuation of our announcements dated 5<sup>th</sup> October, 2016 and 7<sup>th</sup> December, 2016 relating to acquisition of WRSSS Operational Transmission Assets of Reliance Infrastructure Limited, please find enclosed herewith Media Release relating to completion of 100% shares each of Western Transco Power Limited for Western Region Transmission Maharashtra project and Western Transmission (Gujarat) Limited for Western Region Transmission Gujarat project.

Kindly take the same on your record.

Thanking you,

Yours faithfully,  
For Adani Transmission Limited

Jaladhi Shukla  
Company Secretary



Encl: A/a

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Government of India

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## Company/LLP Master Data

CIN	U40300MH2016PLC288929
Company Name	WESTERN TRANSMISSION (GUJARAT) LIMITED
ROC Code	RoC-Mumbai
Registration Number	288929
About Master Data	Company limited by Shares
<a href="#">View Company / LLP Master Data</a>	Non-govt company
View Index of Charges	Public
View Signatory Details	110000000.0
View Director Master Data	110000000.0
View Director / Designated Partner Details	Number of Members(Applicable in case of company without Share Capital)
Advanced Search	0
LLP Services	Date of Incorporation
LLP Services For Business User	26/12/2016
e-Filing	Registered Address
Company Services	601, 6th Floor, Hallmark Business Plaza, Opp. Guru Nanak Hospital, Bandra (East), Mumbai Mumbai City MH 400051 IN
Complaints	Address other than R/o where all or any books of account and papers are maintained
Document Related Services	-
Fee and Payment Services	
Investor Services	Email Id
Track SRN/Transaction Status	krutarth.thakkar@adani.com
Address for sending physical copy of G.A.R. 33	Whether Listed or not
Public Search of Trademark	Unlisted
Notices Under Section 248(2)	Suspended at stock exchange
	-
	Date of last AGM
	08/08/2017
	Date of Balance Sheet
	31/03/2017
	Company Status(for efilng)
	Active

## Charges

Assets under charge	Charge Amount	Date of Creation	Date of Modification	Status
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No Charges Exists for Company/LLP

## Directors/Signatory Details

DIN/PAN	Name	Begin date	End date
01952408	LAXMI NARAYANA MISHRA	01/11/2017	-
03548350	VIVEK SINGLA	01/11/2017	-
07557989	DILIP PORWAL	01/11/2017	-

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Government of India

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Public Search of Trademark

Notices Under Section 248(2)

## Company/LLP Master Data

CIN	U40300MH2016PLC288938
Company Name	WESTERN TRANSCO POWER LIMITED
ROC Code	RoC-Mumbai
Registration Number	288938
Company Category	Company limited by Shares
Company SubCategory	Non-govt company
Class of Company	Public
Authorised Capital(Rs)	110000000.0
Paid up Capital(Rs)	110000000.0
Number of Members(Applicable in case of company without Share Capital)	0
Date of Incorporation	26/12/2016
Registered Address	601, 6th Floor, Hallmark Business Plaza, Opp. Guru Nanak Hospital, Bandra (East), Mumbai Mumbai City MH 400051 IN
Address other than R/o where all or any books of account and papers are maintained	-

## Charges

Assets under charge	Charge Amount	Date of Creation	Date of Modification	Status
---------------------	---------------	------------------	----------------------	--------

No Charges Exists for Company/LLP

## Directors/Signatory Details

DIN/PAN	Name	Begin date	End date
01952408	LAXMI NARAYANA MISHRA	01/11/2017	-
03548350	VIVEK SINGLA	01/11/2017	-
07557989	DILIP PORWAL	01/11/2017	-

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## Progress of Capacitor Installation for the month of-----

State	Constituent	Installed as on 01.04.2017	Installed as on 31.10.2017	Installed During the current month	Installed Capacity at the end of the month	Capacitors installed from April 17 to Current Month	Remarks
		MVAR	MVAR	MVAR	MVAR	MVAR	
Gujarat	GETCO - 11 kV & above						
	Electricity Deptt. Daman						
	Torrent Power - 11 kV & above						
Madhya Pradesh	MPPTCL - All voltage levels						
	MP Discom Poorva 11-33 kV						
	MP Discom Madhya 11-33 kV						
	MP Discom Paschim 11-33 kV						
Maharastra	MSETCL - 132 kV & above						
	Mah Discom(1) -11 - 33 kV						
	TATA Power - 11 kV and above						
	RIL - 11 kV and above						
	BEST - 11 kV - 33 kV						
Chattisgarh	CSPTCL- 132 kV and above						
	CS Discoms(1) - 11-33 kV						
Goa	GED - 11kV and above						
WR	WR-11 kV and above						



**MADHYA PRADESH POWER TRANSMISSION COMPANY LIMITED  
STATE LOAD DESPATCH CENTRE, NAYAGAON, RAMPUR, JABALPUR**

Telephone: (0761) 2970089 Fax: (0761) 2664343/2970119 e-mail: sldcmpjbp@gmail.com  
Corporate office: Madhya Pradesh Power Transmission Co. Ltd., Block No 2, Shakti Bhawan, Rampur  
Jabalpur 482008, CIN-U40109MP2001SGC014880, Email-mdtransco.nic.co.in

e-mail



आई एस ओ : 9001 2008  
ISO 9001:2008

No.07-05/RPC-14/ 2870

Jabalpur, dtd: . 11.2017

To  
**The Member Secretary,**  
**WRPC,**  
**F-3, MIDC Area, Andheri (East)**  
**Mumbai-400093.**

Sub:- Agenda Item of 502<sup>nd</sup> OCC meeting of WRPC- for construction of 2 nos 220 KV feeder bays by June 2018 at Khandwa (PGCIL) 400 KV substation matching with 220 KV down stream line of MPPTCL.

The agenda Item regarding construction of 2 nos 220 KV feeder bays by June 2018 at Khandwa (PGCIL) 400 KV substation matching with 220 KV downstream line of MPPTCL is enclosed herewith and requested that the same may be included in agenda item for ensuing meeting of OCCM.

Encl: As above

Addl. Chief Engineer,  
SLDC, MPPTCL: Jabalpur

Copy to: The General Manager ,WRLDC, POSOCO, F-3, MIDC Area, Andheri (East)  
Mumbai-400093.

Sub: Agenda Item of 502<sup>nd</sup> OCC meeting of WRPC- for construction of 2 nos 220 KV feeder bays by June 2018 at Khandwa (PGCIL) 400 KV substation matching with 220 KV down streamline of MPPTC.

The CE (Planning & Design) MPPTCL has intimated that 220 KV Khadwa (PGCIL) to Chhanera DCDS line ( 40 Kms) is under construction and is expected to be completed by June 2018. Considering the importance of 220 KV Khandwa –Chhanera DCDS line , it is submitted that 2 nos bays at Khandwa (PGCIL) may be constructed on priority so that aforesaid DCDS line may be commissioned as per target scheduled so that reliable power supply to Chhanera substation may be ensured. Accordingly, PGCIL may look into the matter and arranged to expedite 2 nos 220 KV bays construction at 400 KV Khandwa substation. The PGCIL may provide updated status of above work so that the committee may discuss the same and necessary directives could be issued in this regard.



Addl. Chief Engineer  
SLDC, MPPTCL, JABALPUR

# MADHYA PRDAESH POWER TRANSMISSION CO. LTD.



(A wholly owned Govt of Madhya Pradesh Undertaking)

CIN: U40109MP2001SGC014880

Block No.2, Shakti Bhawan, Rampur, Jabalpur (MP)-482008. Tel : (0761) 2702132,2242

Fax No : (0761) 2660908. e-mail: ceps321@yahoo.com/ce.pnd@mptransco.nic.in



No. 04-02/PSP-14/ 2847

Jabalpur, Date: 13/11/17

To,

**Chief Operating Officer(CTU-Planning),  
Power Grid Corporation of India Ltd. (PGCIL),  
"Saudamini", Plot No.-2, Sector-29,  
GURGAON (HR)-122001.**

MD, MPPTCL

Lr. No. 2193

Date 14-11-17

- Sub: Request for construction of 2 Nos. 220kV feeder bays by June-2018 at Khandwa (PGCIL) 400Kv S/s matching with 220kV downstream line of MPPTCL.
- Ref: This office letter No.04-02/PSP-14/2216 dated 29.08.2017.

In context to this office letter cited under reference (Copy enclosed), it is to intimate that looking to the progress of the work 220kV Chhanera to Khandwa (PGCIL) DCDS line (40 Km) is expected to be completed by June-2018. It is, therefore, requested to construct 2 Nos. 220kV feeder bays at Khandwa(PGCIL) 400kV S/s by June-2018 matching with the completion schedule of 220kV DCDS line from Chhanera to Khandwa(PGCIL) 400kV S/s.

Chief Engineer (Plg. & Design)  
MPPTCL-Jabalpur

Copy :-

1. The Chief Engineer (PSP&PA-I), Central Electricity Authority(CEA), Sewa Bhawan, RK Puram, New Delhi-110066.
2. The Chief Manager(Engg.) Power Grid Corporation of India Ltd.(PGCIL), WRTS-II, Regional Head Quarters, 5<sup>th</sup> & 6<sup>th</sup> Floor, "VUDA" Bhawan, Karelibaugh, Vadodara-390018 (Gujrat).
3. The Chief Engineer(EHT-Constrn), MPPTCL, Jabalpur.
4. The Staff Officer O/o MD, MPPTCL, Jabalpur.

CE, SLDC, MPPTCL
R/Nr: 3690
Date: 14/11/17
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# पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## POWER SYSTEM OPERATION CORPORATION LIMITED

(A Govt. of India Enterprise)



पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी-9, कुतुब इंस्टीट्यूशनल एरिया, कट्वारिया सराय, नई दिल्ली-110016  
Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi -110016  
CIN : U40105DL2009GOI188682, Website : [www.posoco.in](http://www.posoco.in), E-mail : posoccc@posoco.in, Tel.: 011- 41035696, Fax : 011- 26536901

Ref: NLDC/ SR\_synch\_SPS/

Dated: 1<sup>st</sup> Dec 2017

To

Member Secretary, Southern Regional Power Committee (SRPC), No. 29, race Course cross Road, Bengaluru -560 009	Member Secretary, Western Regional Power Committee (WRPC) F-3, MIDC Area, Marol, Andheri East, Mumbai-400 093
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**Sub: Suggested Revision in System Protection Schemes (SPS) for secured operation of the All India Grid after commissioning of new lines towards and inside Southern Region**

Reference:

- 1) SRPC letter no. SRPC/SE-II/2017/ dated 06<sup>th</sup> October 2017
- 2) NLDC letter no. NLDC/ SR\_synch\_SPS/ dated 16<sup>th</sup> March 2016

Dear Sir,

With the commissioning of 765 kV Wardha-Nizamabad D/C, 765 kV Angul –Srikakulam D/C, 765 kV Srikakulam-Vemagiri D/C, 765 kV Nizamabad-Maheswaram D/C, 2 x 1500 MVA, 765/400 kV ICTs at Vemagiri and Maheswaram, 400 kV Aurangabad-Boisar and several other lines, certain modifications in the existing System Protection Schemes (SPS) are proposed. The proposed SPS schemes and background note is enclosed as **Annexe-I**.

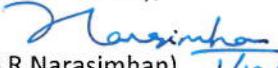
A number of System Protection Schemes (SPS) were commissioned for secure transfer of power towards Southern Region. These schemes presently in operation as communicated vide NLDC letter dated 16<sup>th</sup> March 2016 is enclosed as **Annexe-II**. As would be observed from **Annexe-II**, presently there are SPS-1A, 1B, 1C, SPS-3, SPS-4, SPS-6 and SPS-8 in operation.

It is proposed that SPS-1C, SPS-4 and SPS-6 may be blocked considering the present system conditions. Generation backing down in WR is also proposed to be removed in the other SPS. In SPS-1A, SPS-1B, SPS-3 and SPS-8 the threshold for operation of SPS is proposed to be modified for the present system and network conditions.

It is requested that the suggested revisions in System Protection Schemes (SPS) may please be deliberated and agreed by the appropriate Regional Power Committees (RPCs) expeditiously so that the same may be commissioned by CTU, POWERGRID, at the earliest.

Thanking you,

Yours faithfully,

  
(S R Narasimhan) 1/12/2017  
General Manager,  
System Operation, NLDC.

Encl: As above

Copy to:

- 1) Chief Engineer (National Power Committee), CEA.
- 2) Member Secretary, ERPC
- 3) Executive Director (Asset Management), POWERGRID
- 4) ED WRLDC/ ED, ERLDC
- 5) GM SRLDC

## Annexe-I

### **System Protection Schemes (SPS) on NEW-SR corridor**

Date: 1<sup>st</sup> Dec 2017

1)

Item	Information
Reporting Party	NLDC, POSOCO
Scheme's Name	SPS for tripping of 765 kV Wardha-Nizamabad D/C
Classification	SPS Related to overloading / loss of Critical Line/Corridor
Reference No.	SPS-1A & SPS-1B
Operating Procedure	Not specified
Design Objectives	To Relieve impact of tripping of 765 kV Wardha-Nizamabad D/C on 765 kV Solapur – Raichur D/C and 765/400 kV, 2x1500 MVA ICTs at Vemagiri.
Operation	Load Shedding in SR
Modelling	<p><b>SPS-1A (3000 MW):</b>  If total flow on 2*765kV Solapur-Raichur S/C lines crosses a pre-set value of 3000 MW in Solapur to Raichur direction and remains above 3000 MW for 5 seconds, then <ul style="list-style-type: none"> <li>i. RS2 load shall be shed immediately</li> <li>ii. After RS2 load shedding, if the flow remains above 3000 MW for 2.5 sec, RS3 load shall be shed.</li> </ul> </p> <p><b>SPS-1B (3500 MW):</b>  If total flow on 2*765kV Solapur-Raichur S/C lines crosses a pre-set value of 3500 MW in Solapur to Raichur direction and remains above 3500 MW for 2.5 seconds, then <ul style="list-style-type: none"> <li>i. RS1, RS2 &amp; RS3 load shall be shed immediately</li> </ul> </p>
Original In-Service Year	2014
Recent Assessment Group	NLDC, POSOCO
Recent Assessment Dates	March 2016, Dec 2017

2)

<b>Item</b>	<b>Information</b>
Reporting Party	NLDC, POSOCO
Scheme's Name	SPS for tripping of 765 kV Raichur-Solapur D/C
Classification	SPS Related to overloading / loss of Critical Line/Corridor
Reference No.	SPS-3
Operating Procedure	Not specified
Design Objectives	To Relieve impact of tripping of 765 kV Raichur-Solapur D/C on 765/400 kV 2x1500 MVA ICTs at Vemagiri and 765 kV Wardha-Nizamabad D/C.
Operation	Load Shedding in SR
Modelling	<p><u>SPS-3:</u></p> <p>If there happens a loss of 765 kV Solapur – Raichur D/C lines carrying more than 1500 MW towards SR, then</p> <ul style="list-style-type: none"> <li>i. Reduction of import of SR by immediately shedding loads in Groups RS1, RS2 and RS3.</li> </ul>
Original In-Service Year	2014
Recent Assessment Group	NLDC, POSOCO
Recent Assessment Dates	March 2016, Dec 2017

3)

<b>Item</b>	<b>Information</b>
Reporting Party	NLDC, POSOCO
Scheme's Name	SPS for tripping of 765 kV Aurangabad – Solapur D/C lines
Classification	SPS Related to loss of Critical Line/Corridor
Reference No.	SPS-8
Operating Procedure	Not Specified
Design Objectives	To Relieve impact of tripping of 765 kV Aurangabad – Solapur D/C (When flow exceeds 2000 MW on these lines) on 765/400 kV 2x1500 MVA ICTs at Vemagiri and to improve voltage profile near 400 kV Parli(PG), 400 kV Pune(PG), 765 kV Pune(PG) and 765 kV Solapur.
Operation	Load Shedding in SR
Modeling	If there is loss of 765 kV Aurangabad-Solapur D/C lines and loss of import at Sholapur is greater than 2000 MW, then i. Reduction of import of SR by immediately shedding loads in Groups RS1, RS2 and RS3.
Original In-Service Year	2016
Recent Assessment Group	NLDC, POSOCO
Recent Assessment Dates	March 2016, Dec 2017

### **List of existing SPS proposed to be blocked**

SPS-5 (400 kV Wardha-Parli), SPS-6 (400 kV Parli-Solapur) and SPS-1C (single circuit operation of 765 kV Raichur-Solapur) can be blocked to minimise chances of nuisance due mal operation. SPS-4 (400 kV Raipur-Wardha) was already communicated to be blocked.

Generation backing down in Western Region removed from all SPS.

---

**Load Grouping for System Protection Schemes for Raichur-Sholapur SPS (RS-3)/ 765kV  
Aurangabad-Solapur lines**

Sl No.	Tamilnadu		Karnataka		Telangana		Group Total
	Load	Planned Load (MW)	Load	Planned Load (MW)	Load	Planned Load (MW)	
1	400kV K R Thoppur [Salem] (PGCIL)-- 400kV K R Thoppur [Salem] (TNEB)		400kV Nelamangala SS		400kV Gajwel SS		
	230 kV Salem #Sakagiri, Rasipuram & GC TR	113	220kV H.N.Pura #66kV C.R.Patna # 66kV Mysore-1&2	37	220kV Medchal # 132kV Manoharabad #132kV Tuniki Bollaram # 132kV Tukkapur # 132kV Chegunta	159	
	230kv Ujanani #Paruhipally TR	2	220kV T.K.Halli # 66kV Akkurmole	25	220kV Kamareddy #Kamareddy TR 1&2 132kv Redypet 132kV Domakonda # 132kV Kamareddy 1&2	73	
	230kV Pudhansandai # Link, K.N.Patty, Namakkal, Namagiripet & Valayapatty TR	117	220kV C.R. Nagar #66kV Honalli	12			
	230kV Deviakuruchi #Vilupuram, Thalaivasal & Thampatty TR	72	220kV Kadakola # 66kV D.K.Maidan # 66kV R.K.Nagar	23			
<b>TOTAL</b>		<b>304</b>		<b>97</b>		<b>232</b>	<b>633</b>

**Load Grouping for System Protection Schemes for Raichur-Sholapur SPS#1  
(RS-1)/ 765kV Aurangabad-Solapur lines**

Sl No.	Tamilnadu		Telangana		Group Total
	Load	Planned Load (MW)	Load	Planned Load (MW)	
1	230kV Madurai ----- 230kV Chekannoorani ----- 230kV Nallamanaikanpatty #NN Patty TR 230kV Aunuppankulum # Rajapalayam & Thullukapatty TR	23	400kV Ramagundam SS		
2	230kV Tirchy --- 110kV Kallakudi #Perambalur TR 230kV Echangadu #Pennadam TR	31	220kV Ramagundam #220kV Vemannur #220kV Jagityal	165	
3	230kV Tiruvarur ----- 230kV NT Kudi #Thanjavur TR 230kV Karaikudi # Devakottai TR 230kV Pudukottai #Atahnkotai TR	82	220kV Durshed #220kV Siddipet1&2 # 132kV Ellanthakunta # 132kV Shanigram	150	
			220kV Bheemgal #220/132kV Bheemgal TR	44	
<b>TOTAL</b>		<b>136</b>		<b>359</b>	<b>495</b>

**Load Grouping for System Protection Schemes for Raichur-Sholapur SPS (RS-2)**

Sl No.	Karnataka		Tamilnadu		Telangana		Kerala		Group Total
			Load	Planned Load (MW)	Load	Planned Load (MW)	Load	Planned Load (MW)	
1	400kV Nelamangala SS		230kV Arasur SS #110kV Karuvalur #110kV Karamadai fdr2	115	400kV Velttoor SS <b>(Mehboobnagar)</b> 220kV Waddakothapally		400kV Madakathara SS # 220kV Orkaterry	64	
2	220kV CR Patna # 66kV Mattanavile # 66kV S.Belagola	#	40	230kV Arasur SS 230kV Gobi #Anthiyur TR	38	220kV Bhootpur # 132kV Puttaphad-1&2 # 132kV Khilaghapur # 132kV Kothakota	54		
3	220kV Hootagalli # 66kV Bogadhi # 66kV Elwala		31	230kV Arasur SS 230kV Gobi 230kV Pallakkapalayam #Thevur & Sankagiri TR	45	220kV Wanaparthy # 220/132kV TR	127		
4	220kV Tubinakere #66kV Ukkada		10	230kV Arasur SS 230kV Thudiyalur SS #GC & Karamadai TR	65				
5	220kV K.R.Pet # 66kV Madeshpura		20						
	<b>TOTAL</b>		<b>101</b>		<b>263</b>		<b>181</b>		<b>545</b>

## Background note for System Protection Scheme (SPS) settings on NEW-SR corridor

1<sup>st</sup> Dec 2017

To review the SPS, all the recently commissioned lines and the proposed rearrangement under execution by CTU (eight outlets at 400 kV Vemagiri) are considered. Limiting case was prepared considering high flows on NEW-SR corridor.

At around 9700 MW import by Southern Region, limiting constraint comes out to be n-1 contingency of 2x 1500 MVA, 765/400 kV ICT at Vemagiri will lead to overloading of the other ICT. On this case, power flows were studied on important lines for different double circuit contingencies tabulated below. The main objective was to keep the system secure after major contingencies.

All line flows in MW

S.No.	Line	Base Case	Case-1: Outage of 765 kV Wardha- Nizamabad D/C	Case-2: Outage of 765 kV Solapur- Raichur D/C	Case-3: Outage of 765 kV Aurangabad- Solapur D/C	Case-4: Outage of both 765/400 kV 2x1500 MVA ICTs at Vemagiri	Case-5: Outage of both poles of HVDC Talcher- Kolar carrying 2000 MW	Case-6: Outage of 400 kV Wardha- Parli D/C	Case-7: Outage of 400 kV Parli- Solapur D/C
1	765 kV Wardha- Nizamabad D/C	2*1088	0	2 * 1589	2 * 1386	2 * 1500	2 * 1308	2 * 1130	2 * 1107
2	765 kV Solapur- Raichur D/C	2* 975	2 * 1594	0	2 * 551	2 * 1327	2 * 1341	2* 934	2 * 948
3	765 kV Aurangabad- Solapur D/C	2 * 1200	2 * 1616	2 * 730	0	2 * 1410	2 * 1441	2 * 1302	2 * 1260
4	2x1500 MVA, 765/400 kV ICTs at	2 * 827	2 * 1164	2 * 1053	2 * 953	0	2 * 1118	2 * 843	2 * 835

S.No.	Line	Base Case	Case-1: Outage of 765 kV Wardha- Nizamabad D/C	Case-2: Outage of 765 kV Solapur- Raichur D/C	Case-3: Outage of 765 kV Aurangabad- Solapur D/C	Case-4: Outage of both 765/400 kV 2x1500 MVA ICTs at Vemagiri	Case-5: Outage of both poles of HVDC Talcher- Kolar carrying 2000 MW	Case-6: Outage of 400 kV Wardha- Parli D/C	Case-7: Outage of 400 kV Parli- Solapur D/C
	Vemagiri								
5	400 kV Kolhapur- Kudigi D/C	2 * 114	2 * 235	2 * 409	2 * 134	2 * 186	2 * 245	2 * 98	2 * 113
6	400 kV Wardha-Parli D/C	2 * 450	2 * 527	2 * 396	2 * 577	2 * 482	2 * 491	0	2 * 415
7	400 kV Parli - Solapur D/C	2 * 202	2 * 303	2 * 84	2 * 455	2 * 267	2 * 274	2 * 91	0
8	400 kV Raipur- Wardha D/C	2 * 475	2 * 451	2 * 455	2 * 479	2*552	2*542	2*443	2*470
9	765 kV Durg- Wardha 2 * D/C	952*2+974	823*2+842	935*2+957	908*2+929	1142*2+1169	1105*2+1131	2*942+964	953*2+976

Considering the above studies, all the existing NEW-SR SPS are divided into 3 major groups:

- i. SPS for tripping of 765 kV Wardha-Nizamabad D/C (existing SPS-1A and 1B)
  - ii. SPS for tripping of 765 kV Raichur-Solapur D/C (existing SPS-3)
  - iii. SPS for tripping of 765 kV Aurangabad – Solapur D/C (existing SPS-8)
- 
- a. After load shedding in SR, in the earlier SPS, generation backing down in Western Region (WR) was also implemented. In the present proposed SPS, generation backing down in WR was removed as it has negligible impact on the interregional flow towards SR, particularly in relieving the ER-SR corridor.
  - b. After outage of 765 kV Wardha-Nizamabad D/C, angular separation from VindhyaChal to Thrissur increases by 9 degrees from 77 degrees. Standing angle between Wardha and Nizamabad becomes 32 degrees; check synchronizing this section would be a major challenge. No severe issue in voltages was noticed.
  - c. SPS-1A threshold setting for operation was changed from 3500 MW to 3000 MW considering that after outage of 765 kV Wardha-Nizamabad D/C, flow on 765 kV Raichur-Solapur D/C becomes 3200 MW.
  - d. Sensitivity of HVDC Bhadrawati, HVDC Gazuwaka and HVDC Talcher Kolar on 2x1500 MVA 765 /400 kV ICTs at Vemagiri:

HVDC Bhadrawati	2x7 = 14%
HVDC Gazuwaka	2x23 = 46%
HVDC Talcher-Kolar	2 x 15 = 30%

HVDC Gazuwaka has the highest sensitivity on the major limiting constraint. Since HVDC Gazuwaka cannot be increased beyond 650 MW because of low voltage at Gazuwaka East bus, 500 MW overload capacity of HVDC Talcher Kolar has to be utilised during major contingencies in the system.

- e. During single circuit operation of 765 kV Raichur-Solapur, system is not highly stressed unlike in 2016. Hence SPS-1C can be disarmed.
- f. During double circuit contingency of 765 kV Raichur –Solapur D/C, to bring back the system to n-1 compliance, around 1500 MW reduction in flow on NEW-SR corridor is required.
- g. During Aurangabad-Solapur D/C contingency, flow on 2x1500 MVA 765/400 kV ICT at Aurangabad will increase to around 900 MW each. Flow on Vemagiri ICTs will also increase. To bring back system to n-1 compliance, around 1500 MW reduction in flow on NEW-SR corridor is required. Threshold for operation is set to 2000 MW. Considering substation reliability threat in automatically opening breakers of bus reactors at 765 kV Pune and 400 kV Parli, that logic from earlier SPS settings may be disarmed.

# पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

## POWER SYSTEM OPERATION CORPORATION LIMITED

(A wholly owned subsidiary of POWERGRID)



पंजीकृत एवं केन्द्रीय कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110 016  
 Registered & Corporate Office : B - 9, 1st Floor, Qutub Institutional Area, Katwaria Sarai, New Delhi - 110 016  
 Website : [www.posoco.in](http://www.posoco.in), [www.nldc.in](http://www.nldc.in), Tel: 011-26536832, 26524522, Fax: 011-26524525, 26536901

Ref: NLDC/ SR\_synch\_SPS/

Dated: 16<sup>th</sup> March 2016

To

1	Member Secretary, Southern Regional Power Committee (NRPC), No. 29, race Course cross Road, Bengaluru -560 009	2	Member Secretary, Western Regional Power Committee (WRPC), F-3, MIDC Area, Marol, Andheri East, Mumbai-400 093
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Sub: Revision in System Protection Schemes (SPS) on NEW-SR Corridor to be implemented

Ref:

- i) SRPC's "Record notes of the deliberation of the Meeting on revision of SPS of Raichur-Sholapur Corridor", dated 22.02.2016 and available on SRPC website
- ii) NLDC Letter No. NLDC/SR\_synch\_SPS/1157 dated: 23<sup>rd</sup> Dec 2015
- iii) NLDC letter No. NLDC/SR\_synch\_SPS/781 dated: 7<sup>th</sup> Sep 2015

Dear Sir,

NLDC vide communications mentioned at S. No. (ii) & (iii) had suggested modifications in System Protection Schemes (SPS) commissioned for smooth transfer of power from NEW grid to SR grid. A communication has been sent to POWERGRID on 5<sup>th</sup> Oct 2015 for interim revision of SPS settings on WR-SR corridor and the same were implemented by POWERGRID. Subsequently, based on suggestions from SRPC at (i) above, the scheme required to be finally implemented is enclosed at Annex-1.

This communication will supersede all previous communications sent by us in this regard.

Thanking you,

Yours faithfully,

  
 (S R Narasimhan) 16/3/15

Additional General Manager,  
System Operation, NLDC

Encl: as above

**Copy for kind information to:**

- 1) Chief Engineer, National Power Committee (NPC), NRPC Building, 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110 016
- 2) Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata – 700 033
- 3) Executive Director (Asset Management), Power Grid Corporation of India Limited, Saudamini, Plot No. 2, Sector-29, Gurgaon - 122001.
- 4) Chief Operating Officer (CTU-Planning), POWERGRID, Gurgaon- 122001.
- 5) ED SRLDC, Bengaluru
- 6) GM WRLDC, Mumbai
- 7) GM ERLDC, Kolkata

A handwritten signature in black ink, appearing to read "Mansinha", is positioned below the list of contacts.

Annex-I to letter NLDC/SR-synch-SPS/  
dated 16<sup>th</sup> March 2016 from NLDC

## 1. Load Relief details for different SPS Signals in Southern Region (SR)

Trip Signal	Signal Name	Name of the SPS	Loads Identified in SR
1	TS-1	HVDC Talcher-Kolar	875
2	TS-2	HVDC Talcher-Kolar	780
3	TS-3	HVDC Talcher-Kolar	505
4	RS-1	Raichur-Sholapur TS-1	500
5	RS-2	Raichur-Sholapur TS-2	500
6	RS-3	Raichur-Sholapur TS-3	500
7	KK-1	KKNP Unit-1 Tripping	848

## 2. Talcher - Kolar SPS

Implemented Logic	Action
Loss of power < 500 MW	No SPS
500 MW < Loss of power < =1000 MW	TS-1
1000 MW < Loss of power < =1500 MW	TS-1 & TS-2
Loss of power > 1500 MW	TS-1,TS-2 & TS-3

Mangalha

### 3. Special Protection Schemes (SPS) on NEW-SR Corridor

S. No	SPS Name	Final Logic	SPS Action
1	<b>SPS-1A (Both lines in service)</b>	<p><b><u>2*765kV Sholapur-Raichur S/C flow</u></b></p> <p>Total flow on 2*765kV Sholapur-Raichur S/C lines crossing a pre-set value of 3500 MW in Sholapur to Raichur direction and remains above 3500 MW for 5 seconds.</p>	<ul style="list-style-type: none"> <li>- <b>800MW Gen Back down in WR:</b> JPL-150 MW, JPL extn – 150 MW, KSK – 100 MW, LANCO – 100MW, DB Power – 100 MW, KWPCL – 100 MW, BALCO – 50 MW, NSPCL – 50 MW</li> <li>- <b>RS2 load shall be shed immediately.</b></li> <li>- <b>After RS2 load shedding, if the flow remains above 3500 MW for 2.5 sec, RS3 load shall be shed.</b></li> </ul>
2	<b>SPS-1B (Both lines in service)</b>	<p><b><u>2*765kV Sholapur-Raichur S/C flow</u></b></p> <p>Total flow on 2*765kV Sholapur-Raichur S/C lines crossing a pre-set value of 4000 MW in Sholapur to Raichur direction and remains above 4000 MW for 2.5 seconds.</p>	<ul style="list-style-type: none"> <li>- <b>800MW Gen Back down in WR:</b> JPL-150 MW, JPL extn – 150 MW, KSK – 100 MW, LANCO – 100MW, DB Power – 100 MW, KWPCL – 100 MW, BALCO – 50 MW, NSPCL – 50 MW</li> <li>- <b>RS1, RS2 &amp; RS3 load shall be shed immediately.</b></li> </ul>
3	<b>SPS-1C (When Only One line in service)</b>	<p><b><u>765kV Sholapur-Raichur S/C flow</u></b></p> <p>Flow on 765kV Sholapur-Raichur S/C crosses 2000 MW and remains above 2000 MW for 2.5 seconds</p>	<ul style="list-style-type: none"> <li>- <b>800MW Gen Back down in WR:</b> JPL-150 MW, JPL extn – 150 MW, KSK – 100 MW, LANCO – 100MW, DB Power – 100 MW, KWPCL – 100 MW, BALCO – 50 MW, NSPCL – 50 MW</li> <li>- <b>RS1 &amp; RS2 load shall be shed immediately.</b></li> </ul>

*[Handwritten signature]*

S. No	SPS Name	Final Logic	SPS Action
4	SPS-3	<p><b><u>Loss of 765kV Sholapur-Raichur lines carrying 1500 MW towards SR:</u></b></p> <p>Loss of import of SR on 765kV Sholapur-Raichur section by more than 1500 MW due to tripping of these lines.</p>	<ul style="list-style-type: none"> <li>- RS1, RS2 &amp; RS3 load shall be shed immediately.</li> </ul>
5	SPS-4	<p><b><u>400kV Raipur – Wardha D/C:</u></b></p> <p>Flow on either circuit of 400 kV Raipur – Wardha D/C crossing 850 MW and remaining above this value for 2.5 seconds</p> <p>or</p> <p>Tripping of any one circuit of 400 kV Raipur – Wardha D/C carrying 700 MW or above</p>	<ul style="list-style-type: none"> <li>- SPS to be BLOCKED.</li> </ul>
6	SPS-5	<p><b><u>400kV Wardha - Parli D/C:</u></b></p> <p>Tripping of any one circuit of 400 kV Wardha - Parli D/C and flow on other circuit &gt; 750 MW</p>	<ul style="list-style-type: none"> <li>- <b>800MW Gen Back down in WR:</b> Tirora-200 MW, Koradi – 70 MW, Chandrapur – 250 MW, Mauda – 100MW, Khaperkheda– 150 MW, Indiabulls – 30 MW</li> <li>- <b>KK-1 load of 848 MW shall be shed in SR.</b></li> <li>- 200-300 MW load shedding in Western Maharashtra (Not yet implemented)</li> </ul>

Manohar

S. No	SPS Name	Final Logic	SPS Action
7	SPS-6	<p><b><u>400kV Parli – Sholapur D/C:</u></b></p> <p>Flow on either circuit of 400 kV Parli – Sholapur D/C crossing 800 MW and remaining above this value for 2.5 seconds</p> <p>Or</p> <p>Tripping of any one circuit of 400 kV Parli – Sholapur D/C and flow on other circuit &gt; 700 MW</p>	<ul style="list-style-type: none"> <li>- <b>800MW Gen Back down in WR:</b> JPL-150 MW, JPL extn – 150 MW, KSK – 100 MW, LANCO – 100MW, DB Power – 100 MW, KWPCL – 100 MW, BALCO – 50 MW, NSPCL – 50 MW</li> <li>- <b>KK-1 load of 848 MW shall be shed in SR.</b></li> <li>- 200-300 MW load shedding in Western Maharashtra (Not yet implemented)</li> </ul>
8	SPS-8	<p><b><u>Loss of 765kV Aurangabad-Sholapur D/C lines carrying 2500 MW</u></b></p> <p>Loss of 765 kV Aurangabad-Sholapur D/C lines and loss of import at Sholapur &gt; 2500 MW</p>	<ul style="list-style-type: none"> <li>- <b>800MW Gen Back down in WR:</b> JPL-150 MW, JPL extn – 150 MW, KSK – 100 MW, LANCO – 100MW, DB Power – 100 MW, KWPCL – 100 MW, BALCO – 50 MW, NSPCL – 50 MW</li> <li>- Trip bus reactor at Parli (400 kV) and 765 kV Pune of PG in WR</li> <li>- <b>RS1 &amp; RS3 load shall be shed in SR.</b></li> </ul>

#### References:

1. NLDC Letter No. NLDC/SR\_synch\_SPS/781 dated: 7<sup>th</sup> Sep 2015
2. NLDC Letter No. NLDC/SR\_synch\_SPS/1157 dated: 23rd Dec 2015
3. SRPC's "Record notes of the deliberation of the Meeting on revision of SPS of Raichur-Sholapur Corridor", dated 22.02.2016

*Mansirba*