भारत सरकार
Government of India
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पश्चिम क्षेत्रीय विद्युत समिति
Western Regional Power Committee
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सत्यमेव जयते

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सं: पक्षेविस/प्रचा. / प्रसस-कार्यवृत्त /2014-15/ दिनांक **23 | 12 | 2014**

सेवा में,

11586

विषय:- प.क्षे.वि.समिति, मुंबई की प्रचालन एवं समन्वय समिति की 466 वीं बैठक का कार्यवृत्त।

महोदय,

पश्चिम क्षेत्रीय विद्युत समिति, मुंबई की प्रचालन एवं समन्वय समिति की दिनांक 09.12.2014 को, JABALPUR में आयोजित 466 वीं बैठक का कार्यवृत्त आपकी सूचनार्थ संलग्न है ।

धन्यवाद।

भवदीय,

संलग्न : उपरोक्तानुसार

(एम एम धकाते)
अधीक्षण अभियंता (प्रचालन)

MINUTES OF 466TH MEETING OF OPERATION & COORDINATION SUB-COMMITTEE OF WRPC HELD ON 9TH DECEMBER 2014 AT JABALPUR

The 466TH meeting of Operation & Co-ordination Sub-Committee of WRPC was held on 9th December, 2014 at Jabalpur. The meeting was hosted by MPPGCL. The list of participants is enclosed at **Annexure-I.**

On behalf of Managing Director, MPPGCL, Shri. A P Bhairve, Director (Comml)., welcomed Sh. SD Taksande, Member Secretary, WRPC& other delegates of 466th OCC meeting in the city of Jabalpur situated on the banks of holy river "Narmada" in the valley between Vindhyachal and Satpura mountain ranges. He further informed that Jabalpur city is the one of the best communal harmony city in the India.

He further briefed about the capacity present and addition in MPPGCL. He added that MPPGCL is one of the most admired and reliable generating utilities in India to cater to the increasing demand at economical cost by adopting the best industry practices, thereby creating value for all stakeholders. MPPGCL always made effort to remain the status of the biggest provider of reliable and economical power in Madhya Pradesh by timely capacity addition, performance improvement, cost reduction, better utilization of human resources, concentration on environmental protection and health, safety and communication. He thanked WRPC for giving opportunity to MPPGCL for hosting the 466th OCCM at Jabalpur.

Shri S D Taksande, Member Secretary, WRPC extended warm welcome to Shri S P Soni, Director (Tech), MPPGCL, Shri. A P Bhairve, Director (Comml). MPPGCL, Shri A K Sankule ED(O&M), MPPGCL and all other members and participants of the 466th OCCM. He thanked MPPGCL for making excellent arrangement for meeting and stay of the participants. He informed that since last OCC meeting following important events had taken place:

1. 27th WRPC meeting was held on 21st& 22nd November 2014 at Bhopal. Some of the important issues discussed during TCC/WRPC meeting are as follows:
    - Shutdown of ISGS units under RSD (reserve shut down) during low regional demand: Present methodology will be continued and modified as per presence in future.
    - Allocation of URS from CGPL/Sasan UMPP units.
    - Excessive additional charges and capping amount in deviation pool

account after implementation of DSM: This will be taken as an agenda items in the ensuing NPC meeting.

- Report of the task force on power system analysis under contingencies headed by Shri V. RAMAKRISHNA: A group was formed to go into the details of report. Subsequently a meeting was held on 18.11.2014where Protection Audit & relay setting were discussed in detail.
- Load Forecasting in Western Region.

2. WR unrestricted demand was 45400 MW as compared to 42600 MW during the last year(6 % increased)
3. A mock test on black start was performed at NTPC Jhanor successfully on 07th December, 2014.
4. 765 kV Bhopal-Indore & 765 kV Dhule –Aurangabad were commissioned on 18th November & 4th December 2014 respectively.
5. RKM power generation connected with the CTU by LILO of Raigarh-KSK-Raipur Ckt-3 & started to draw Power from grid for their commissioning & testing activities.

There after he requested SE(O), WRPC to take up regular agenda items in seriatim for discussion.

ITEM No. 1: CONFIRMATION OF THE MINUTES

Shri M M Dhakate, S.E(Opn), stated that Minutes of 465thmeeting of Operation & Coordination Sub-Committee of WRPC held on 11thNovember 2014 at WRPC, Mumbai were forwarded vide letter No. WRPC/OPN/OCC-Minutes/2014-15/10500 dated 17.11.2014.

No comments have been received. The minutes were confirmed.

ITEM NO.2: REVIEW OF SYSTEM OPERATION DURING THE MONTH OF NOVEMBER 2014.

Member Secretary, WRPC requested WRLDC to brief the Committee on Grid Operation experiences during November 2014.

Chief Manager, WRLDC in the presentation (copy attached at Annexure – 2 in soft copy) concentrated broadly on the performance of the grid for month of November 2014 as below:

2.1 Frequency Particulars

The average frequency during the month of November, 2014 was 50 Hz. The maximum instantaneous frequency was 50.42Hz at 6:04hrs. on 16-nov-14 while minimum instantaneous frequency was 49.58 Hz at 17:40hrs. on 27-nov-14. The frequency profile during November, 2014 was as under:

01-Oct-2014 to 31-Oct-2014	% time
IEGC band (49.9 < f < 50.05 Hz)	53.53
< 49.9 Hz	16.52
> 50.05 Hz	29.91

The detailed frequency particulars are enclosed at Annex- 2.1.

The Sub-Committee noted.

2.2 Operational Discipline

There was a net inter-regional export of 3006.00 MUs by WR against net export schedule of 2443.00 MUs.

The Sub-Committee noted.

2.3 Voltage Profile

Voltage profile at some of 765/400 kV sub-stations during the month of November2014 furnished by WRLDC is enclosed at Annex-2.3.

The Sub-Committee noted as above.

2.4 U/F Relay Operations

As per WRLDC records during November 2014 the system frequency didn't touch 49.2 Hz and no UFR operation has been reported by WRLDC.

The UFR operation status reported by constituents is enclosed at Annexure-2.4

The Sub-Committee noted as above.

2.5 Power Cuts / Load Restrictions

Details of Power Cuts and Regulatory measures during November 2014 as furnished by the state utilities are given in Annex. 2.5.

The Sub-Committee noted as above.

2.6 Details of Generating Units under Forced outages

Details of generating units under forced outages during November 2014 are given in Annex-2.6.

The Sub-Committee noted as above.

2.7 Details of Generating Units under Planned outages

The details of generating units under Planned Outages during November 2014 are given in Annex-2.7

The Sub-Committee noted as above.

ITEM NO.3: OPERATIONAL PLANNING

3.1 Proposed Planned maintenance programme of generating units.

The maintenance programme of generating units for December 2014 &January 2015 was discussed.

The finalized outage schedule of generating units for the above period and the modified outages plan is placed at Annexure-3.1.

The Sub-Committee agreed as above.

3.2 A. Outage Programme of Transmission Lines/elements

The committee had received 471 nos. of proposals for outage planning during December 2014 &January 2015. Further some proposals were received at the last moment of the meeting.

The committee observed that :-

1. There were repetitions in the proposals, wherein the same line had been requested for outage a number of times.
2. The lines pertaining to STU were asked for outage. As per 446th OCCM, such lines should be first approached to concerned STU and only in case of problems faced in outages concern utilities shall approach to OCC of WRPC.
3. Line details/reasons in many cases were not already mentioned. Committee requested that while submitting outage planning data, necessary care may please be taken.
4. All utilities were requested to avail outages as planned.
5. Sub-Committee noted that the outages planning shall be period of 20th of the OCC month to 19th of the following month.
6. In case of any contingencies in parallel rout, online OPGW work A/R shall be bring in service from non auto mode.

The Sub-Committee agreed for the same.

3.3 ANTICIPATED POWER SUPPLY POSITION FOR THE MONTHS – DECEMBER2014&JANUARY 2015

Details of anticipated restricted & un-restricted demands for the months of December 2014 & January 2015are given in Annex 3.3.

The Sub-Committee noted the same.

ITEM NO. 4: OPERATIONAL STATISTICS FOR THE MONTH OF NOVEMBER2014

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

Annex 4.1 - Actual Generation and Requirement for November 2014
Annex 4.2 - Peak Demand: Schedule Vs Actual for November 2014
Annex 4.3 - Integrated Operation of the System and Operation of Inter State Tie lines for November2 014.
Annex 4.5- Details of Declared Capacity, Schedules and Injections from Central sector stations, Drawl Schedules and Entitlements of constituents during November 2014
Annex 4.6 - Inter System Exchanges for November 2014.
Annex 4.7 – Details of level of Major Reservoirs in Western Region for Month November 2014

The Sub-Committee noted.

ITEM NO. 5: SYSTEM DISTURBANCES IN WESTERN REGION

There was no major grid disturbance in the Western Region during the month.The other minor tripping details during the month received from WRLDC is enclosed at Annexure-5.

The Sub-Committee noted as above.

ITEM NO. 6:Healthiness status of SERs/DRs of equipment in the system.

Constituents have furnished the status of healthiness of SER/DRs in their systems on the dates below :

Sl No.	Name of constituents	Date of Receipt
1	PGCIL,WRTS-I	03.12.2014
2	PGCIL,WRTS-II	12.12.2014
3	MPPTCL	09.12.2014
4	NTPC	03.12.2014
5	CSPTCL	03.12.2014
6	GETCO	03.12.2014
7	MSETCL	09.12.2014

WRLDC informed that As per IEGC DR/EL data is to be forwarded within 24 hours of an event. The DR/EL of the events in ISTS in November, 2014 are yet to be received at WRLDC is enclosed at Annexure-6.

Constituents of WR were requested to ensure healthiness and sent information to this office regularly as per the recommendation of enquiry committee of Grid disturbances on 25.02.2007 and 28.02.2007.

The Sub-Committee noted.

ITEM NO. 7: STATUS OF COMPLETION OF ONGOING SCHEMES FOR COMMISSIONING OF REACTORS, TRANSMISSION LINES AND GENERATING UNITS IN WR.

7.1 Status of completion of ongoing Schemes for Commissioning of reactors.

The present status regarding schedule and commissioning of reactors is as below:

S. No.	400 kV Sub/stn.	Size (MVAR)	Implementing agency	Expected commissioning date
1	Jabalpur	125 MVAR	PGCIL	Commissioned on 26.03.2014
2	Khandwa	125 MVAR	PGCIL	Commissioned on 28.03.2014
3	India bulls	80 MVAR BR	MSETCL	Commissioned 26.11.2013
4	Nagda	50 MVAR	MPPTCL	Commissioned in Feb-2014
5	Sasan Line reactor-1	240 MVAR	RELIANCE	Commissioned on 16.02.2014
6	Shujalpur	125 MVAR	PGCIL	Commissioned on 31.07.2014
7	Bhatapara	125 MVAR	PGCIL	Commissioned on 24.07.2014
8	Raigarh	125 MVAR	PGCIL	Commissioned on 30.07.2014
9	Aurangabad	125 MVAR	PGCIL	28.04.2014
10	Nanded	125 MVAR	MSETCL	March - 2015
11	Sholapur	125 MVAR	MSETCL	March - 2015
12	Kolhapur	125 MVAR	MSETCL	March - 2015

13	Akola	125 MVAR	MSETCL	March - 2015
*14	Nagda	125 MVAR	MPPTCL	Feb 2015
15	Bhopal	80 MVAR	MPPTCL	Jan 2015
16	Damoh	125 MVAR	PGCIL	Commissioned on 30.09.2014
17	Bachau	125 MVAR	PGCIL	November- 2014
18	Pirana	125 MVAR	PGCIL	Commissioned on 02.10.2014
19	Itarsi	1X125 MVAR(Ist) 1X125 MVAR(IInd)	PGCIL	Commissioned on 15.08.2014
20	Seoni	125 MVAR	PGCIL	December 2014
21	Parli	125 MVAR	PGCIL	December 2014
22	Raipur	125 MVAR	PGCIL	Commissioned on 30.09.2014
23	Gwalior	125 MVAR	PGCIL	Commissioned on 30.06.2014
24	ISP	125 MVAR	NHDC	2015
25	Line reactor at Nagda-ISP line at Nagdaend	50MVAR	MPPTCL	December 2014
26	Satpura	50 MVAR	MPPGCL	March-2015
27	Sasan Line reactor-2	240 MVAR	RELIANCE	January-2015
28	Sasan Bus reactor	240 MVAR	RELIANCE	December-2014
29	Bus reactor at Wardha	330 MVAr	PGCIL	Commissioned on 01.11.2014

**50 MVAR existing bus reactor to be shifted to Nagda-ISP line as line reactor after commissioning of 125 MVAr reactor at Nagda.*

**50 MVAR existing bus reactor to be shifted to Nagda-ISP line as line reactor*

Sub-Committee noted as above.

7.2 Status of completion of 765/400 kV and above ongoing Transmission Schemes being executed/implemented by Transmission Agencies.

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

S. No.	Name of the Line	Target Completion Date	Remarks
POWERGRID			
1	400 kV Navsari – Kudus D/C Line	Dec- 2014	ROW problem
2	765kV S/C Satna-Gwalior line (359Km + 60Km D/C Portion) Ckt.-II		Commissioned on 06.08.2014
3	765 kV Raigarh (Kotra) pooling station -Champa Pooling station - Dharamjaygarh PS - 2nd ckt		Commissioned on 21.05.2014
4	765 kV Gwalior - Jaipur line (1st Ckt) S/C	Dec 2014	
5	765 kV Dharamjaygarh - Jabalpur Pooling Station D/C line	Dec-2014	
6	765 kV Wardha –Nizamabad-Hyderabad D/C	March-15	
7	765 kV Narendra-Kolhapur D/C	March-15	
8	400 kV Aurangabad - Boisar line D/C line	Dec -2014	
9	765 kV Aurangabad (PG) - Padghe (PG) D/C	Dec -2014	
10	800kV DC Champa – Kurukshetra Bipole	March 2015	
11	765 kV D/C Jharsuguda – Korba		Ckt I Commissioned on 28.07.14 Ckt II Commissioned on 29.07.14
12	765 kV Wardha- Aurangabad D/C Line.		Ckt I Commissioned on 01.07.14 Ckt II Commissioned on 03.07.14
13	765 kV Aurangabad- Solapur D/C line	Dec 2014	
14	765 kV Solapur-Pune line	Dec 2014	
15	765KV Durg-Wardha D/C		Commissioned on 15.11.14
16	765 kV Ranchi-Dharamjaigarh-Bilaspur II & 765 kV Ranchi-Dharamgaigad-I		Ckt I likely to be commissioned in Jan-2015 Ckt II Commissioned on 31.03.14
CHHATTISHGARH			
1	LILO of 400 kV Korba west-	Jan- 2015	

	Khedamara at Marwa		
2	400 kV DCDS Raipur(Raita)-Jagdalpur(DCDS)	March 2015	
2.1	220 kV Korba-Bishrampur line (DCSS)		Commissioned on 14.08.14
2.2	220 kV DCDS lines Chhuri to Mopka (Bilaspur), (DCDS)	Jan- 2015	
2.6	LILO of 220 kV Raigarh-Budipadar at 400 kV PGCIL S/s Raigarh	Feb-2014	
2.8	LILO of 220 Korba (E)- Bishrampur line at 220 kV Churri S/s	Feb-2014	
2.9	LILO of 220 kV Raigarh – Jindal (Tamnar) at Girwani 220 kV S/s		Charged on 22.08.14
GUJARAT			
1	400 kV D/C Kosamba-Chorania line (Package I		Commissioned on 05.07.14
2	400 kV D/C Kosamba-Chorania line (Package II)		Commissioned on 05.07.14
3	400 kV D/C Mundra-Zerda line No. 1	March-2015	
4	400 kV D/C Mundra-Zerda line No. 2	March-2015	
5	400 kV D/C Vadinar-Amreli line	Dec -2014	
6	400kV APL-Hadala LILO to Halvad	March -2015	
7	400 kV D/C Amreli-Kasor line(Part-1)	March -2015	
8	400 kV Charanka- Veloda	March 2015	
MADHYA PRADESH			
1	Chhegaon-Julwania 400 KV DCDS Line	OCT - 2014	Commissioned on 31.10.14
2	Pithampur- Indore 400KV DCDS Line		Ckt I Commissioned on 04.09.14 Ckt II Commissioned on 07.08.14
3	Satpura TPH-Ashta 400KV DCDS Line	March – 2015	
MAHARASHTRA(STU)			
1	400KV D/C line from Koradi-(II) to Wardha S/S(PG) D/C	Mar- 2015	
2	400 kV Akola(II)-Taptitanda -I	Jan 2015	Charged in Jan-14
3	765 kV Tiroda- Koradi-(III)-2	Dec - 2014	
4	765 kV Koradi-(III)- Akola(II)-2	Jan 2015	
5	765 kV Akola(II)- Taptitanda-2	Feb 2015	To be charged at 400 kV level
6	400 kV Akola(APML) to Akola(MSETCL)-II		Commissioned on 02.10.14
7	400 kV Taptitanda-Bableshwar-D/C	Dec-2014	
GUJARAT (IPTC route) by WR Transmission (Guj) Pvt. Ltd			

1	400 kV Rajgarh(PG)-Karamsad (GETCO) D/C	Jan-2015	
STERLITE (JTCL)			
1	765 kV Dhramjaygarh - Jabalpur (JTCL) D/C line	May -2015	Severe ROW Problem
2	765 kV Jabalpur - Bina (JTCL) S/c	May -2015	Severe ROW Problem
STERLITE (BDTCL)			
1	765 kV Bhopal - Indore (BDTCL) S/C		Commissioned on 19.11.14
2	765 kV Bhopal-Bhopal (BDTCL)		Commissioned on 16.07.14
3	765 kV Vadodara - Dhule (BDTCL) S/C	Jan - 2015	
4	765 kV Dhule - Aurangabad (BDTCL) S/C		Commissioned on 04.12.14
5	400 kV Dhule-Dhule(D/C) (up to dead end tower)		Commissioned on 05.12.14
RAICHUR SHOLAPUR TRANSMISSION CO. LTD.(RSTCL)			
1	765 kV Raichur - Sholapur line 2nd S/C		Commissioned on 29.06.2014

It was suggested by WRLDC and constituents that important list of line will be sent by each constituent to WRLDC and WRLDC will compile and furnish the list as per priority of commissioning.

The Sub-Committee noted and agreed as above.

7.3 Commissioning of new Generating units in Western Region and the capacity expected to be commissioned during the current year 2014-15.

The status regarding Generating units, expected to be commissioned during the current year 2014-15 is as below:

Name of the Power Projects	Unit No.	Capacity (MW)	Date of Commissioning /Schedule Date
GUJARAT			
	NIL		
CHHATTISGARH			
Marwa	1	500	Feb 2015
	2	500	March 2015
MAHARASHTRA			
Dhariwal	2	300	Synd. On 23.04.2014
CHANDRAPUR	8	500	March 2015
CHANDRAPUR	9	500	June 2015
KORADI	8	660	March 2015
KORADI	9	660	March 2015
KORADI	10	660	August-2015

PARLI	8	250	December 2015
APML	5	660	COD on 11.10.2014
MADHYA PRADESH			
Singhaji TPS	2	600	Commissioned on 15.10.14
M/s Jhabua Power, Seoni	1	600	Dec – 2014
MB Power, Anuppur	1	600	Dec – 2014
Jaiprakash Power, Nigri	1	660	Synchronized on 3.09.14 COD on 17.9.14
Jaiprakash Power, Nigri	2	660	Dec 2014
Moser Bear (Hindustan power)	1	600	Dec - 2014
Moser Bear (Hindustan power)	2	600	March 2015
EssarPower MP ltd (Mahan)	1	600	Synchronized on 24.04.13
EssarPower MP ltd(Mahan)	2	600	Dec 2014
Jhabua Power	1	600	Dec 2014
CENTRAL SECTOR/IPP			
KSK	2	600	Oct 2014
KSK	5	600	January 2015
ACBIL	1	300	March 2015
SASAN	5	660	Synchronized in 22.08.2014
SASAN	6	660	January 2014
Sasan	4	660	Synchronized in May 2014

Sub-committee noted as above.

ITEM NO. 8: MISCELLANEOUS OPERATIONAL ITEMS

(A) <u>FOLLOW-UP</u>

ITEM NO. 8.1: QUARTERLY REVIEW OF CRISIS MANAGEMENT PLAN

All the constituents are requested to submit the CMP report for the Second quarter (July 2014 to September 2014) for the year 2014-15.

<u>Healthiness of DG set at Black Start Capable Stations in Western Region</u>

Western Region has 32 stations capable of black start. As per section 5.8(b) of IEGC, *"…the Diesel generator sets for black start would be tested on weekly basis& the test report shall be sent to RLDC on quarterly basis."*

The list of stations in WR for black start with current status is enclosed at **Annexure 8.1**. Healthiness of remaining DG set from following Blackstart station are awaited.

- Gujarat (Ukai (H), Kadana, Dhuvaran, GIPCL-II, GPEC(CLPIPL), Sugen)
- Madhya Pradesh (Birsinghpur, Indira Sagar, Omkareswar)
- Maharashtra (Ghatghar)
- Chhattisgarh (Hasdeo Bango , Korba(E)-phase-I)

In addition to the above Blackstart stations, there is need of continuous checking of DG sets at various load dispatch centers.

The Sub-Committee members noted as above.

ITEM NO. 8.2: STATUS OF PHYSICAL & CYBER SECURITY IN POWER SECTOR

Status of physical & cyber security in Power Sector for the Second quarter (July 2014 to September 2014) have not been received from some of the constituents.

The Sub-Committee members noted as above.

ITEM NO. 8.3 ITEMS FROM SLDC JABALPUR, MADHYA PRADESH

Chief Engineer, SLDC Jabalpur MP vide letter dated 02.12.2014 requested for discussion of following agenda items:

A. DPR SETTING GUIDE LINES FOR 400KV LINES:-

DPR settings adopted by MPPTCL and PGCIL 400 kV transmission lines as well as settings recommended by CBIP, CEA and WRLDC is attached at Annexure 8.3 A. To minimize the fault clearing time in 3rd Zone, which is rare, the time setting adopted in MP is 700 ms and the backup O/C, E/F setting kept beyond 700 ms - 1000 ms for other end bus fault where bus protection is not provided whereas settings adopted by PGCIL are not consistent with that of MPPTCL. Fault clearing time for both the ends should be same for reliable system operation.

Member Secretary, WRPC informed that as per Shri V Ramakrishna recommendation the time setting for Zone-II is 300 msec to 400 msec based on line length & for Zone –III, it is 1000msec. He further informed that the matter will be discussed in PCM for uniform standardization of time setting.

B. PROVISION OF AUTO-RECLOSURE FACILITY ON 220KV BADOD-KOTA AND BADOD-MODAK END BY RAJASTHAN:-

WRLDC is repeatedly notifying violation of Protection Standard in case of tripping of 220 kV Badod-Modak and 220 kV Badod-Kota line on single phase to earth fault. MP SLDC has intimated WRLDC several times that two nos. PUNCOM make PLCC cabinets with protection couplers for 220 kV Badod-Kota and Badod-Modak lines have already been provided at 220 kV sub-station, Badod (MP). The scheme could not be

put to use due to non-availability of carrier equipments with protection coupler at 220 kV S/s, Kota (Rajasthan) and 220 kV S/s, Modak (Rajasthan) with a request to take up the matter with NLDC & NRLDC for providing PLC cabinet along with protection coupler at Kota and Modak S/s of Rajasthan.

Further, Auto-reclosure facilities on 220 kV Mehgaon-Auraiya and 220 kV Malanpur-Auraiya have already been commissioned and put into service on 14.11.2014 and 12.11.2014, respectively.

WRLDC may take up the matter of providing PLC cabinets along with protection couplers at Kota & Modak S/s of Rajasthan with NLDC and NRLDC to avoid violation of Protection Standard of the inter-regional lines of voltage class 220kV level and above.

GM, WRLDC intimated that the violation is on NR part and they have already taken up the matter with NRLDC/NLDC vide letter dated 8.12.14.

It was decided that Member Secretary, WRPC would also pursue the matter with NRPC.

C. NON-AVAILABILITY OF TELEMETRY OF NTPC RAJGARH(MP) SOLAR POWER PLANT

The telemetry of NTPC Rajgarh Solar Power Plant (50 MW) installed in Madhya Pradesh has not been provided by the NTPC despite repeated pursuance by MP SLDC. NTPC has neither commissioned the telemetry nor intimated any expected date for providing telemetry data to MP SLDC. The copies of correspondence made in the matter are attached at Annexure – 8.3 (D). NTPC may be advised to provide the telemetry of NTPC Rajgarh (MP) Solar Plant (50 MW) at the earliest.

GM(OS), NTPC informed that the telemetry of NTPC Rajgarh(MP)solar power plant will be made available by the end of February 2014.

The Sub-Committee noted as above.

ITEM NO. 8.4 :FREQUENT UPDATING OF STATUS OF APL UNIT NO.7

CE(SLDC), Gujarat intimated vide letter dated 29.11.2014 that APL unit no.7 was stopped at 06:05 Hrs of 25-11-2014 due to Boiler Tube Leakage and it was intimated that the unit will be out for 72 hrs.

On 26-11-2014, it was informed that APL unit-7 will be lit up at 00.00 Hrs / 28-11-2014 & tentative time of bringing on bar was 06.00 Hrs / 28-11-2014.

- On 27-11-2014, it was informed that APL unit-7 will be lit up at 14.00 Hrs / 28-11-2014 & tentative time of bringing on bar was 20.00 Hrs / 28-11-2014.
- On 28-11-2014, it was informed that APL unit-7 will be lit up on 30-11-2014.

The outage of 400 KV APL-Mohindergadh HVDC Pole no.1 has been approved and availed on daily basis from 27.11.14 to 30.11.2014 from 07:00 Hrs to 18:00 Hrs for insulator replacement. Due to above, STOA / MTOA has been curtailed and conveyed to WRLDC for necessary approval / action.

Due to frequent changes in timing / schedule of light up of APL unit-7, we have to process to WRLDC etc. every time as stated above and this leads to confusion on the part of WRLDC & hence, such frequent changes in STOA / MTOA curtailment cannot be entertained / processed due to change of schedule of light up of APL unit-7.

Representative from APL informed that APL appreciates the difficulties faced by real time operators (at any control room), due to uncertainties of tripping & restoration of lines and units in the system.

GM, APL further elaborated on the issue as follows:

- **During the incidences referred, such uncertainties were faced by APL regarding APL#7, however the factual position of APL#7, in detail , was promptly updated with SLDC.**
- **Further details were also made available to SLDC whenever asked.**
- **APL is committed to abide by all regulations and instructions from SLDC/RLDC/NLDC and which is why APL has not lighted up the unit#7 when, APL was so instructed.**
- **APL will continue to abide by the instructions of system operator and will share more information if necessary.**
- **It is to be noted that the generator loses the availability as the period of outage exceed and is thus penalized for non-availability of units, so as a generator he takes utmost care to make the unit available on bar.**

Member Secretary, WRPC informed that being a part of the grid, utilities have to adhere with existing regulations and follow all instructions from SLDC/RLDC and maintain the grid discipline for smooth& secure operation of the grid.

The Sub-Committee noted as above.

ITEM NO. 8.5 :COMMUNICATION GAP IN ISSUING CLOSING CODE FOR 400 KV APL-SAMI-DEHGAM LINE NO. 1 BY WRLDC ON 23.11.14

CE(SLDC), GETCO intimated vide letter dated 26.11.2014 that there was communication gap in issuing closing code for 400 KV APL-Sami-Dehgam line No. 1 by WRLDC on 23.11.14 without confirming completion of work by M/s. APL for the opportunity outage of 400 KV D/C Sami-Dehgam section of 400 KV D/C APL-Dehgam line during OCCM approved outage of 400 KV D/C APL-Sami section of 400 KV D/C APL-Dehgam line.

The OCCM approved outage of 400 KV D/C APL-Sami section of 400 KV D/C APL-Dehgam line was permitted on 23.11.14 from 07:00 Hrs to 16:00 Hrs for crossing work of 400 KV D/C Bhachau-Varsana line by M/s. PGCIL (WRTS-II).

However, it is learnt that during the same period M/s. APL have sought permission to avail opportunity outage on 400 KV D/C Sami-Dehgam section of 400 KV D/C APL-Dehgam line for attending hot spots and M/s. PGCIL have sought permission for opportunity outage at 400 KV Dehgam (PG) substation for bay maintenance work. This must have been their planned outage; but, SLDC-Gujarat was not intimated by either of them in advance about this opportunity outage to be availed by them. This is not at all desirable.

The code No. WR/11/2806 was issued by WRLDC at 16:34 Hrs for charging 400 KV APL-Sami-Dehgam line No. 1 and the same was conveyed to Sub-SLDC Jetpur for further communication to the field. However, it was learnt at that point of time that LCP on 400 KV D/C Sami-Dehgam section of 400 KV D/C APL-Dehgam line by M/s. APL was still pending and hence, WRLDC was immediately requested at 16:42 Hrs to cancel the said code. This is indeed a matter of concern that there was an inadvertent and apparent communication gap on the part of WRLDC while issuing the closing code for 400 KV APL-Sami-Dehgam line No. 1 considering the fact that M/s. APL had not yet returned their LCP by that time.

Though the work of crossing of 400 KV D/C Bhachau-Varsana line as well as bay maintenance work at 400 KV Dehgam substation were completed by M/s. PGCIL in time, the restoration of 400 KV D/C APL-Sami-Dehgam line was inordinately delayed due to pending LCP of 400 KV D/C Sami-Dehgam section of 400 KV D/C APL-

Dehgam line by M/s. APL. It is pertinent to state that all the STOA and MTOA transactions of M/s. APL were curtailed for facilitating the outage of 400 KV D/C APL-Sami section of 400 KV D/C APL-Sami-Dehgam line for the important crossing work of 400 KV D/C Bhachau-Varsana line. With this, the permission for opportunity outages by M/s. PGCIL as well as M/s. APL must have been restricted to complete the same prior to the main work is over.

GM, APL informed that, Adani Transmission Ltd(ATL) has gone through the issue and revised internal procedure for the communication with LD and only Sami SS is authorized from ATL (Transmission) for all the communication with LD related to Mundra – Sami – Dehgam line. The same is requested to SLDC / WRLDC to communicate with Sami control room only in case of outage / tripping of Mundra – Sami – Dehgam lines in future.

He ensured that such type of incidences will not be repeated in future.

Member Secretary WRPC requested all the utilities to make proper coordination among the utilities, SLDC's & WRLDC to avoid miscommunication & further avoid any mishap to human being and equipments. A professional and mature approach to be followed to avoid such incidences.

The Sub-Committee noted as above.

ITEM NO. 8.6:DELAY IN ISSUING CODE BY WRLDC FOR O&M, CONSTRUCTIONS WORKS AND ONLINE OPGW STRINGING WORKS:

DGM WR-II PGCIL, Vadodara intimated that the dates approved in OCC meeting for providing shutdown for completing project works (or) O&M works is not adhere in real time. This is affecting the work as lot of men & machinery is mobilized for transmission line construction / O&M works. All Load Dispatch Centers are requested to arrange shutdown on respective dates (or) if not possible due to any contingency, the same may be communicated one day in advance.

Representative from WRLDC stated that they always accommodate the requisite outages on priority basis as decided in OCC forum. Still some outages code can't be issued due to grid conditions at that instant of time.

MP SLDC representative intimated that in certain cases load shedding was required to be carried out in particular areas in MP for arranging above

shutdown for which the newspaper advertisement needs to be published which took time.

Member Secretary, WRPC informed that the grid security is prime concerns for system operator & they shall take best decision under instantaneous grid scenario and endeavor to accommodate the outage.

The Sub-Committee noted as above.

ITEM NO. 9 : ITEMS FROM WRLDC:

9.1 EXTENSION OF START-UP SUPPLY TO POWER STATIONS LOCATED IN REMOTE AREAS

WRLDC intimated that contingency arrangement for availing start up power by CGPL Mundra from 220 kV Nanikhakar was discussed in 465th OCC meeting. It was decided that a joint team of GETCO, WRTS-II and CGPL officials would visit the site and assess the feasibility of connectivity between CGPL Mundra and 220kV Nanikhakar line for drawing start-up supply under contingency situation.

Further the SLDCs were also advised to identify captive power plants which could extend the start-up supply during blackout.

Member secretary WRPC informed that CGPL, GETCO & POWERGRID jointly call meeting & outcome of the meeting shall be discussed in next OCC meeting. WRLDC was advised to prepare proper formats for collecting data for the above before the meeting is called.

The Sub-Committee noted as above.

9.2 HEALTHINESS OF CAPACITOR BANK AT 400KV INDORE(MP) TO ARREST LOW VOLTAGE

WRLDC intimated that during the 465th OCC meeting the issue of low voltage at Indore (Madhya Pradesh) was discussed. WRLDC informed that the Bus reactors at Indore(PG) were being switched to regulate voltage at Indore. It emerged that in 2004, 100 MVAr capacitor banks had been installed by POWERGRID at Indore and nearby substations. During last OCC meeting, CE(LD), SLDC, Jabalpur stated that they would check the healthiness of the capacitor banks and confirm.

DGM PGCIL informed that 2x25 MVAR capacitor bank & 2x25 MVAR capacitor bank have been installed at Indore & at Jetpura by PGCIL and the asset has been handed over to MPPTCL.

The Sub-Committee noted as above.

9.3 PROGRESS OF INSULATOR REPLACEMENT ON 400KV SSP-RAJGARH(MPPTCL PORTION)

WRLDC intimated that the issue of frequent tripping of lines from 400 kV Rajgarh was discussed in the 464th and 465th OCC meeting. It was noted that most of the tripping reported was due to insulator failure in the line section belonging to MPPTCL, accordingly MPPTCL has assured for insulator replacement, and consequently OCC approved outage on 400kV SSP-Rajgarh was facilitated from 20-Nov to 28-Nov on daily basis.

CE(SLDC), Madhya Pradesh informed that 587 no of insulator strings have been replaced & the balance work is under progress and agreed to furnish a report to WRPC.

The Sub-Committee noted as above.

9.4 REVIEW OF LIMITING CONSTRAINTS FOR IMPORT FROM GRID BY WESTERN REGION STATES

WRLDC intimated that in last OCC meeting it was decided to have joint study with other SLDCs to identifying measures to enhance import/export limits from the grid. Study of Maharashtra system was conducted by WRLDC and forwarded to SLDC, Kalwa. Likewise WRLDC has also forwarded a preliminary study report on 11th November 2014 to SLDC, MPPTCL regarding Import Capability of Madhya Pradesh control area.

The need for assessment of import ATC was also emphasized in a meeting taken by Member GO&D), CEA on 29th Oct 2014. Relevant extracts are as under:

Quote

To ensure safe, secure & stable operation of the system, Maharashtra should draw power from the grid keeping in view its import ATC, which should be assessed meticulously on regular basis by the SLDC.

Unquote

Thus it is important that simulation studies are carried out for TTC/ATC of all the States. Nominations from SLDC, GETCO, MPPTCL and MSETCL have been received at WRLDC. SLDC- Chhattisgarh, CSPTCL Goa, DD, DNH may also forward nominations.

It is proposed that the study group would conduct simulations on mutually convenient dates in January-2015 to assess import/export capability of respective States for March 2015. Nominated persons may be advised to compile the data required for simulations.

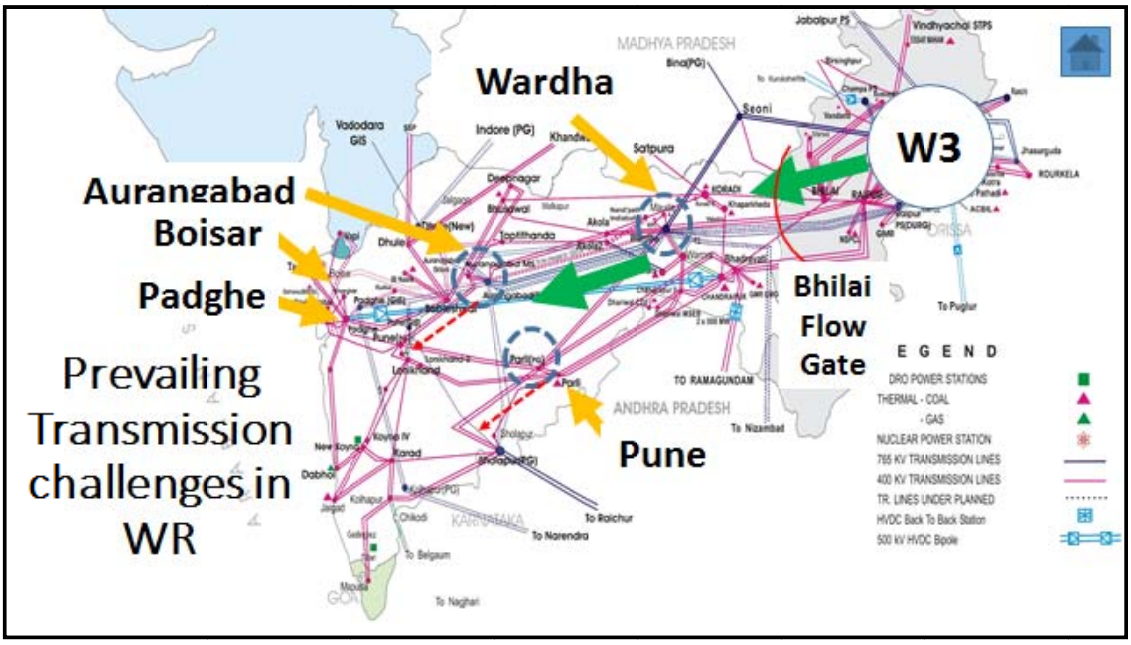
The sub-committee discussed the matter and suggested to hold a meeting on 17th January 2015. Constituents agreed to furnish the nomination within a week time.

The Sub-Committee noted as above.

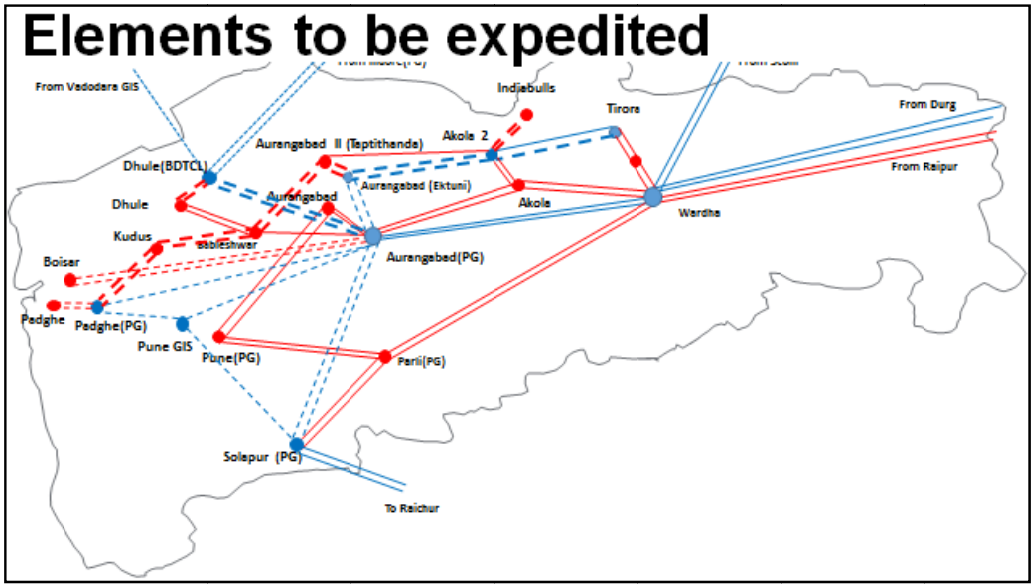
9.5 TRANSMISSION CONSTRAIN WITHIN MAHARASHTRA SYSTEM

This issue of transmission constrain on EHV lines within Maharashtra system has been deliberated in 458th OCC, 37th Standing committee as well as in 27th TCC/WRPC meeting. Presently the following elements are loaded in Maharashtra system

1. 400 kV Aurangabad-Waluj D/C
2. 400 kV Aurangabad-Pune D/C
3. 400 kV Parli(PG)-Solapur D/C
4. 400kV Wardha-Parli D/C
5. 400 kV Waluj-Bableshwar S/C
6. 400/220kV ICTs at Padghe
7. 400/220kV ICTs at Boisar
8. 400kV Pune-Chakan S/C



The operational flexibility in real time is reduced leading to constraints in facilitating planned transmission outage in above corridor. Several envisaged transmission elements within the Maharashtra system that could have relieved the above constraints are under various stages of construction/ commissioning. MSETCL and POWERGRID may appraise the members regarding progress of commission of the following transmission elements.



1. 765 kV Tiroda – Akola 2nd ckt
2. 765 kV Akola2- Ektunickts
3. 400 kV Taptithanda – Bableshwar
4. 400 kV Bableshwar – Kudus D/C

5. 400 kV Kudus – Padghe D/C
6. 220 kV outlets from Pune_PG
7. 765/400 kV Dhule bays
8. 765 kV Pune-Solapur S/C
9. 400 kV Dhule-Dhule D/C
10. 400 kV Aurangabad-Boisar D/C
11. 400 kV Padghe-Padghe D/C

MSETCL representative stated that the matter will be taken up with STU Maharashtra & requested them to expedite.

SE(O) WRPC informed that the same has been already discussed in Item no 7.2 and regular monitoring has been done in OCC meeting.

The Sub-Committee noted as above.

9.6 Harmonizing the format for Emergency outage proposal

Proposal for emergency outage to attend hot spot / oil sample collection / attending snapped jumper etc are received. In many cases coordination of these outages are a challenge in the absence of the even the basic information. In order to streamline the process, it is proposed that the outage proposal should have the following information.

1. Name and Voltage level of the Element required to be taken under emergency outage
2. Requesting Agency
3. Element owner
4. Date and duration of the outage
5. Reason of Emergency outage

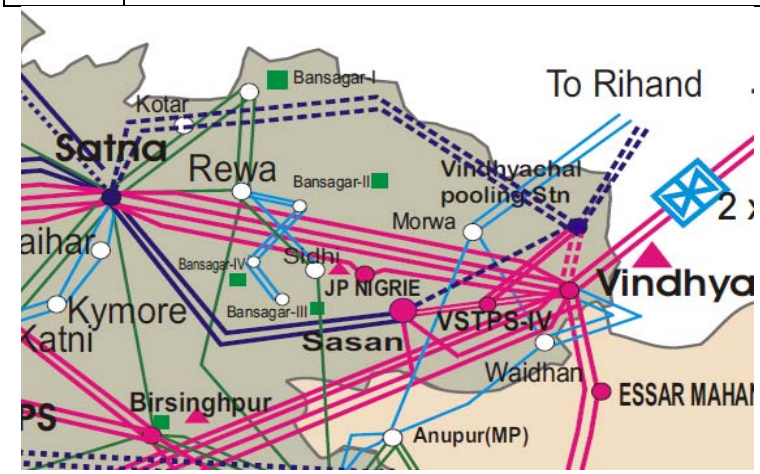
The Sub-Committee noted as above.

9.7 SECURE EVACUATION FROM SASAN-VINDHYACHAL COMPLEX

Sasan UMPP has an envisaged capacity of 3960 MW. Presently four units of Sasan are commercially in operation (2640 MW). Testing and commission activities of 5th unit (660 MW) are being facilitated by allowing infirm injection. Sasan Power has also sent advance notice for synchronization of the 6th unit. The installed capacity at Vindhyachal-I, II, III and IV is 4260 MW. This included 2x500 MW units of Vindhyachal-IV. The total generation at Sasan and Vindhyachal complex is around

6500 MW. The present position of the envisaged transmission system for evacuation from Sasan-Vindhyachal complex is as under:

S No.	Element Name	Status
1	765 kV Sasan-Satna ckt-1	In operation
2	765 kV Sasan-Satna ckt-2	In operation
3	2x1000 MVA, 765/400 kV ICT at Sasan	In operation
4	765 kV Sasan-Vindhyachal	March 2015
5	765 kV Vindhyachal-Satna ckt-1	March 2015
6	765 kV Vindhyachal-Satna ckt-2	March 2015
7	2x1500 MVA, 400/765 kV ICT at Vindhyachal PS	March 2015
8	765 kV Gwalior-Jaipur	March 2015



As a part of the contingency arrangements one 500 MW unit of Vindhyachal-IV is being evacuated through NR via 400 kV Vindhyachal-Rihand-III line. In addition an SPS for unit tripping in case of loss of 765 kV Sasan-Satna lines has also been commissioned. SPL representative intimated that Unit-5 and 6 are being commissioned in Dec-14 and Jan-15 respectively. GM, WRLDC intimated that infirm generation from Sasan complex (at half load) should not be continued for long periods.

GM, NTPC has expressed the concerns regarding VSTPS Stage -4, Unit-12 power evacuation contingency arrangement through NR grid as Vindhaychal pooling station is not ready. Power grid representative has informed the Pooling station shall be ready by March-15.

NTPC has requested to review, the Special Protection Schemes implemented at various NTPC stations in order to enhance the Generating station /units safety and tripping on account of spurious signals.

MS WRPC informed that as SPS supposed to act rarely and must be in service for taken care of exigency situation.

The Sub-Committee noted as above.

9.8 MOCK BLACK START 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 33 generating stations with black start capability. As per the information available with WRLDC the following 6 stations have complied to the above provision (Sec 5.8(b)) of IEGC. The list is enclosed at Annexure-9.8.

SLDC Maharashtra informed that mock black start drill of Koyna Stg I was done on 24th Nov and the black start drill for Ghatghar and Uran is scheduled on 2nd and 5th Dec 2014 respectively.

SLDC Gujarat informed that mock blackstart of NTPC Jhanor was done on 07th December 2014.

It was also informed that blackstart of Omkareshwar hydro power plant would be done when water level is above MDDL.

Remaining 26 stations may propose their tentative plan for conducting black start mock exercise at their stations.

The Sub-Committee noted as above.

9.9 WORKSHOP FOR REVIEW OF SYSTEM RESTORATION PROCEDURE OF WESTERN REGION

It was informed in 465th OCC meeting that the work shop on System Restoration Procedure of Western Region-2014 will be conducted by WRLDC on 15th December 2014 wherein representative from all 33 black start generators are invited to share their preparedness and review the system restoration procedure. The list of nomination received till date is enclosed at Annexure-9.9.

Subsequently a workshop was organized by WRLDC at WRPC conference Hall Mumbai wherein approximately 120 participants were present. SLDC MP will be organizing the workshop in respect of MP restoration system in next month.

The Sub-Committee noted as above.

9.10 TESTING OF SPS ENVISAGED FOR SR-NEW GRID OPERATION

The matter regarding inadequate participation of generators envisaged for SPS related with SR-NEW grid synchronization was discussed in 464th and 465th OCC as well as in PCM. POWERGRID representative intimated in 27th TCC/WRPC that the signal had been extended to the envisaged generators in Chattisgarh. A mock trial of SPS was conducted on 01st December 2014 wherein signal was sent from 400 kV Raipur are list below.

Report of MOCK SPS Signal Generated from PGCIL Raipur				
Time at which Signal Generated from Raipur		**Channel-1**	**Channel-2**	
		13:38:11:519	**14:09:58:834**	**Comments/ Remark**
Time at which Signal was received at Generators	**KWPCL**	13:38	14:09	Ok
	NSPCL	13:37:59	14:09	Ok
	JPL	13:38	14:09	OK
	JPL Exnt	No	No	JPL received the Signal but JPL still has to extend the Signal to JPL Stg-II
	BALCO	No	No	SPS Signal Not received at BALCO
	DB Power	13:38	14:09	Signal sent on Ch-1 at Raipur received on Ch-1 of Kotra-1 line and Signal sent on Ch-2 at Raipur received on Ch-1 of Kotra-2 Line.
	KSK	13:38	14:09	OK
	LANCO	No	No	Communication Not Implemented by PowerGrid

SPS related to Overloading or Tripping	**Station identified for Generator reduction in WR**	**Pending Action**	**Responsible Agency**
765kV Solapur-Raichur 400kV Raipur-Wardha	KWPCL/DB Power	Wiring for Generation Reduction within the Station	KWPCL /DB Power
	LANCO	Communication Channel to be Checked	POWERGRID
	JPL Extn	Signal to be extended from JPL Stg-1 to JPL Stg-2	JPL

SPS related to Overloading or Tripping	Station identified for Generator reduction in WR	Pending Action	Responsible Agency
	BALCO	Communication Channel to be Checked	POWERGRID
400kV Parli-Solapur	KWPCL/ DB Power	Wiring for Generation Reduction within the Station	KWPCL/ DB Power
	LANCO/JPL extn / BALCO	SPS Signal to be Extended	POWERGRID / JPL
	250 MW Load Shedding or Generator Pickup at Koyna	SPS Signal to be Extended	MSETCL and POWERGRID
400kV Wardha-Parli	India Bulls	SPS Signal to be Extended at IEPL, Koradi , Khaparkheda, Chandrapur in cordination with MSETCL	MSETCL and POWERGRID
	Koradi		
	Khaparkheda		
	Chandrapur		

JPL representative informed that extension of Signal to JPL Stg-II will be completed by the end of the month.

PGCIL, Raipur representative informed that SPS wiring for Balco will be completed within 7 days, whereas for Lanco plant, work is under progress and completed by the January 2015 end.

The Sub-Committee noted as above.

9.11 IMPLEMENTATION OF THE REVISED AUFLS IN DD AND DNH

DNH has informed in 465th OCC that work order has been placed and the agency has been deployed for implementation. It was informed by DD that retendering for the relays started on 7th November,2014.

DD and DNH representative were not present in the meeting.

9.12 Status of telemetry in Western Region

Western Region summary sheet and details of current status of implementation of telemetry system — **Annexure - IV**

Status as on : 27.11.14

Sl. No.	User Name	Total Nos of Stations		Telemetry not Provided				Telemetry Intemittent				Total non-availability of data in % (Telemetry not provided plus Telemetry intermittency)	
				Total nos of station		Non-availability of data in % (wrt total nos of stations)		Total nos of station		Non-availability of data due to intermittency in % (wrt total nos of stations)			
		GS	SS	GS	SS	GS	SS	GS	SS	GS	SS	GS	SS
1	Maharastra	32	192	2	23	6.3%	12.0%	4	62	12.5%	32.3%	18.8%	44.3%
2	Chattisgarh	8	23	0	0	0.0%	0.0%		-	0.0%	-	0.0%	0.0%
3	Madhya Prdesh	19	81	-	-	-	-	-	-	-	-	-	-
4	Gujarat	25	121	-	2	-	1.7%	-	1	-	0.8%	-	2.5%
5	Goa	-	7	-	2	-	28.6%	-	5	-	71.4%	-	100.0%
6	DD	-	1	-	1	-	100.0%	-	-	-	-	-	100.0%
7	DNH	-	4	-	4	-	100.0%	-	-	-	-	-	100.0%
8	ISGS	8	-	-	-	-	-	0	-	0.0%	-	0.0%	-
9	POWERGRID	-	36	-	0	-	0.0%	-	4	-	11.1%	-	11.1%
10	IPP	22	-	-	-	-	-	4	-	18.2%	-	18.2%	-
	TOTAL	114	465	2	32	1.8%	6.9%	8	72	7.0%	15.5%	8.8%	22.4%
	Total (over all)	579		34		5.9%		80		13.8%		19.7%	

Note:
1. Supporting Details are given below
2. Intermittancy of data due to shifting old to new communication & data is varified at WRLDC in current week
3. Communication between all SLDCs to WRLDC is in radial mode in ULDC network and any failure in any equipment /Fibre leads to total data black out.
4. Some of Major generating Stations &sub-stations are working on single channel leading to loss of data at times (Example CGPL,SASAN, Adani(MSEB),KOTRA, TAMNAR etc)

A) Maharashtra: The non-availability of telemetry is 44.3% for sub-stations (Last OCC 47.4% & 18.8% for generating stations(same). As per the information available with WRLDC as on 27.11.14 telemetry has been established for **74** (out of total 140) locations under phase 1.

Telemetry is **not available** from the following **generating stations** at 400 kV level.

- Kaparkheda,
- Deepnagar

Also telemetry is **not available** from the following **sub-stations** at 400 kV level.

- Warora, Lonikhand(New),
- Chandrapur-stg-II, Taptithanda

In addition to above telemetry is **intermittent** at many locations in **Maharashtra** system.

MSETCL to expedite and ensure the availability of telemetry from the remaining stations at the earliest. The issue has been discussed in several OCC meetings. Summary is given under.

B) Gujarat: As per the latest information submitted to CERC the non-availability of telemetry data from Gujarat as on 27.11.14 is 2.5% for sub-stations.

As per the information available with WRLDC,

Telemetry is **not available** form **2 number** of 220 kV sub-stations viz.

- Bhatiya

- Mokha.

Gujarat intimated in 462nd OCCM that these sub-stations were ready but lines were in construction phase.

Also telemetry is **intermittent** from the following S/S in Gujarat: PLCC tuning needs to be done.

- 220 kV Navasari (GETCO) s/s,

SLDC GETCO may expedite & resolve the issue for the above stations at the earliest.

C) Goa: As per the latest information telemetry is not available form 2 number of 220 kV sub-stations viz. Amona&Cuncolim. Telemetry is intermittent from 220 kV Tivim, Ponda, Xeldam& 110 kV Kadamba& Verna. Thus **Nonavailability** of telemetry from Goa is **100%**. Goa to resolve the issue on war footing.

D) DD: Telemetry is not available form 1 number of 220 kV sub-station viz. Magarwada. Thus **availability** of telemetry from DD is **NIL**. DD representative intimated in 460th OCCM that RTU was being installed at 220 kV Magarwada S/S under the new SCADA/EMS up gradation project & it would take 3 months to complete the work. DD representative was absent in 461st OCCM so information on progress in this matter is yet to be received from DD. DD to expedite the issue for the above station(s) on war footing.

E) DNH: Telemetry is not available form **2 number** of 220 kV sub-station viz. Kharadpara&Khadoli. Thus **availability** of telemetry from DNH is **NIL.** DNH representative was absent in 460th& 461st OCC meetings to comment on the issue. DNH to resolve the issue for the above station(s) on war footing.

F) POWERGRID: The non-availability of telemetry data from Power Grid substations as on date is 11.1 %. Telemetry is **intermittent** from the following s/s.

- 765 kV Kotra S/S
- 765 kV Dharamjaigad
- 765 kV Tamnar S/S
- 400 kV Navasari S/S

PGCIL has informed in 465th OCC that Kotra and Tamnar would be resolved by December 2014 and that for 765 kV Dharamjaygarh and 400 kV Navsari would be resolved by January 2015.

Additional points:

In the report available on the WRLDC website, it is clearly indicated that Communication link between all SLDC to WRLDC is in radial mode (without

redundancy) and any failure in any equipment / Fibre leads to total data black out. Power Grid to ensure that links are on two channels.

A. **IPP:**As per the latest information submitted to CERC the non-availability of telemetry data from IPP generating stations as on date is **18.2 %**. Telemetry is **intermittent** from Jindal &Essar Mahan, GMR Raipur. JPL, JP Nigrie to expedite.

B. **PMU data**: Regarding Satna to WRLDC link, WRTS II informed that work is under progress for laying of OPGW from Satna 220 kV (MPPTCL) to Satna 765 kV (PG) and it may take 3-4 months' time. It was suggested that till such time the OPGW operation is in place, WRTS-II may explore leased line connectivity at the earliest. Power Grid to expedite.

All utilities may update the status regarding the actions taken after the last OCC meeting.

Redundant Communication Channel for large Generation Complexes in WR:

Sasan- During 464 OCCM, Sasan has intimated that they have procured alternate channel, which was under testing. Present status to be reviewed

CGPL – During 464 OCCM, CGPL has intimated that they have placed order for procurement of redundant channel. Present status to be reviewed

APL Tirroda - As per the last minutes, APL Tiroda representative via their email dated 19-Sep-14 had confirmed as under

Quote

" we will ensure another link by one month. We are working on this and trying with 2 agencies for best possible reliability. At worst case it may take max 2 month".

Unquote

2 month got over on 19-Nov-14. Please update the present status

Aurangabad node (PGCIL) – last month there was 5 days total black out from Aurangabad node. The critical necessity of 2nd channel was emphasized .data is intermittent from such a critical Aurangabad node. Powergrid WRTS-1 to indicate the present status of the 2nd channel.

Nodes with single channel: There are more then 550 + outage in a month being handle by WRLDC. Many a times due to poor data, WRLDC is facing hurdles in timely clearance of this outage. Concern utilities are requested to start arranging secondary channel.

Constituents updated status & WRLDC submitted the latest status as below:

a) MSETCL confirmed that all issues of Maharashtra would be resolved by March'15
b) Representative from DD , DNH and Goa Stated that work is in progress.
c) PGCIL stated that 765kV Kotra and 765kV Tamnar would be completed by 31-Januaray'15 and the work of 765kv Dharmjaygarh and 400kV Navsari would be completed by 28-February'15.
d) Representative of JPL, Essar Mahan, Jindal informed that issue of intermittency of the data is resolved.
e) PMU data from Satna: Powergrid confirmed, that work of OPGW is in progress and would be completed by Jan'15 end.
f) Sasan: Sasan informed that work would be completed by Jan'15 end
g) CGPL: CGPL stated that material will be available by Dec-14 and work would be completed by Jan'15 end.
h) APL Tirroda: APL Tirroda informed that a new order for 2nd channel has been given to TATA and work would be completed by 31-Jan'15
i) Nodes with single channel: PGCIL stated that the issue of 2nd channel for redundancy of communication channel from PGCIL stations would be resolved after completion of ULDC-2 project.

It was decided that in addition to above telemetry & communication from renewable would also be done for stations of 10 MW and above capacity.
The Sub-Committee noted as above.

9.13 ADMS(AUTOMATIC DEMAND MANAGEMENT SCHEME) IMPLEMENTATION AS PER SEC. 5.4.2 OF IEGC:

The format for reporting the progress of implementation of the ADMS in Western Region States was given as part of MoM of the 460th OCC meeting. Only MP, Gujarat and Maharashtra have submitted their detailed action plan for implementation of ADMS. Progress of ADMS implementation in Western Region is attached at Annexure 9.13. Constituents furnished the status as below :

State	Status	Target
Gujarat	Order placed	Mar-15
MP	Bids received	Apr-15 to Dec-15

MS Identification of feeders submitted status on 4.10.14

CS Formal approvals pending Report submitted in Dec-14

The latest status of LF in WR is as below:

State	FSP allotted	Status
Gujarat	M/S TESLA	Pilot Load Forecasting has initiated by M/S Tesla from 10.10.14 through online web based application and from 6/11/2014, revision through ftp access to Gujarat /Discom. However, again, some issues are addressed to the M/S TESLA. i.e. inappropriate sequence of Revision, improper Timing of revision etc. M/S TESLA is resolving the issue at their end. Meanwhile, accuracy are also ascertained on whatever available forecast data of M/S Tesla which found unsatisfactory especially during the festival of Diwali, cyclone threat, major gap are observed.
Maharashtra	IIT, MUMBAI	All details / data pertaining to the Pilot Load Forecasting have been provided by MH to IIT Mumbai. In response, IIT Mumbai is providing the forecast service to MH. The accuracy observed by Maharashtra are varies from 0.7 min to 14.18 & 15.44 max w.r.t inclusive load shedding & Without Load shedding subsequently. Reply from TATA-D:-Tata Power has already devloped Load Forcasting software with the help of IIT Mumbai. It is use at Tata Power. Reply from R-INFRA-D: -R-INFRA-D have already implemented the Day ahead demand forecast System for RInfra System demand. System Demand data is taken from AMR system whereas SCADA data is also available as backup. We have tied up with Vendor for supply of forecast & actual weather parameters. The Accuracy level achieved is 97.3% on annual basis (i.e. MAPE= 2.7%). Reply from BEST :- BEST is not using the Pilot Load Forecasting Project. Till date, BEST's Day Ahead Load Forecasting is being done Manually.
MP	M/S METEOLOGICA	As informed earlier, Madhya Pradesh has already awarded the Load Forecasting project to M/S L&T InfoTech. Hence, M/S Meteologica FSP, allotted to MP, are not providing Pilot Load Forecasting service to Madhya Pradesh.
Chhattisgarh	M/S SAS	M/SSAS FSP was considered to provide such pilot project of Chhattisgarh. During last WRPC meeting, CS has informed that M/S SAS FSP have not responded since long.On inquiry, SAS informed that since this being free pilot project, matter is put up to their higher authority for approval and they are analyzing on the basis of future scope/ business so looking to their non interest in this project, it is suggested that Chhattisgarh may contact M/S Meteologica for the Pilot Load forecasting for

		Chhattisgarh.
GOA	M/S MARCADOS	Till today, Goa has not declared their coordinator for Pilot Load Forecasting Project. Even after so many times various officers of GOA are contacted but not responded. Hence it is requested to pl take up matter with higher officers of GOA from WRPC end. Further Marcodos has now closed and so they have to be provided new forecasting company.
DD	IIT, GANDHINAGAR	All details / data pertaining to the Pilot Load Forecasting have been provided by DD to IIT Gandhinagar. Now, the response from IIT, Gandhinagar is awaited.
DNH	IIT, GANDHINAGAR	All details / data pertaining to the Pilot Load Forecasting have been provided by DD to IIT Gandhinagar. Now, the response from IIT, Gandhinagar is awaited.

Member Secretary, WRPC requested all the constituents to furnish the status of ADMS in prescribed format.

The Sub-Committee noted as above.

9.14 OUTAGE OF TIE BREAKER OF KORBA NTPC-II & SEONI BAY AT 400 KV BHILAI S/S.

With reference to item 8.6 of 463rd OCC agenda PGCIL (WRTS-1) had informed that work was under progress & the tie-breaker would be available by end of October 2014. But again in 464th and 465th OCC agenda PGCIL has informed that the tie-breaker would be available by end of November 2014.

PGCIL, representative informed that tie breaker has been charged on 5th December, 2014.

The Sub-Committee noted as above.

9.15NON AVAILABILITY OF BUS BAR PROTECTION AT 400 KV KORBA (WEST)

During 464th OCC, Korba(West) informed that they have procured the system and it will be commissioned by NOV 14. But in 465th OCC Chhattisgarh informed that work was under progress & the bus-bar protection would be available by the end of December 2014.

Matter was discussed & member Secretary WRPC stated that it is the matter of serious concern & requested CSPGCL to expedite it. He further requested all the utilities to submit the list of all 220 kV and above S/S where Bus bar protection is not available & suggested to discuss the issue in PCM seriously. CSPGCL representative

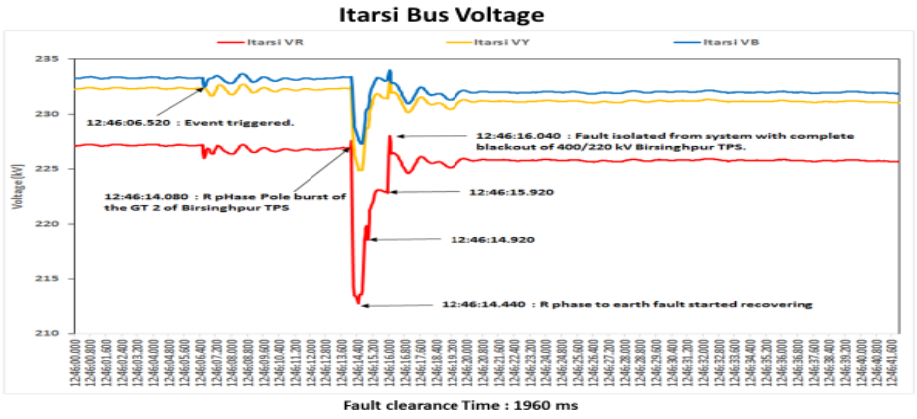
intimated that cable termination work at Korba extn is going on and work would be completed by March-15.

The Sub-Committee noted as above.

9.16 LACK OF BUS BAR PROTECTION FOR 220 KV BUS OF BIRSINGHPUR THERMAL POWER STATION CAUSING COMPLETE BLACKOUT OF 400 KV BIRSINGHPUR THERMAL STATION

On 13-11-2014 at 12:46 Hrs, Bus fault occurred on 220 kV Bus 2 due to bursting of R Phase circuit breaker pole of Unit 2 while synchronization. Non-availability of Bus bar protection on 220 kV Bus at 400/220 kV Birsinghpur sub-station led to tripping of five nos of 400kV and eight nos of 220kV elements as well as black out of Birsinghpur Station for 44 minutes and loss of 840 MW of generation. Fault cleared 1960ms. The Itarsi Bus voltage from PMU is attached indicating the delay in fault clearance.

Member may deliberate.



Director(T), MPPGCL informed that equipment order has been placed on 27th November to GE & will be implemented by June 2015.

The Sub-Committee noted as above.

ITEM NO. 10: DATE AND VENUE OF NEXT OCC MEETING

465thOCC reviewed the meeting roaster and finalized sheet is enclosed at Annexure-10. Accordingly it was proposed to host 467th OCC by BDTCL/JTCL on 13thJanuary, 2014. BDTCL requested for postponement due to engagement in line commissioning work. Therefore 467th OCC meeting would be held at WRPC Mumbai on 16th January, 2015.The 468th OCC will be hosted by EPTCL. Date & venue will be decided in the meeting. BDTCL representative agreed to host the 469th meeting in March 2015.

****

ANNEXURE-I

LIST OF PARTICIPANTS OF 466th OCC MEETING OF WRPC HELD ON 09.12.2014 AT WRPC, MUMBAI

Sl.No.	Organisation, Name & Designation	E-mail	Mobile
I	**WRPC**		
1	Shri S.D. Taksande, M.S.	ms-wrpc@nic.in	9820878384
2	Shri M.M. Dhakate, S.E.(O)	opc-wrpc@nic.in	9004087224
3	Shri L.K.S. Rathore, D.D.	lksr_2000@yahoo.com	9833371844
4	Shri A.C. Suresh, DD	acsuresh@yahoo.com	9969941273
II	**MSETCL / MSEDCL/MahaGenco**		
5	Shri D.J. Kolhe, E.E.	deepakkolhe@yahoo.com	9820981115
III	**MPPTCL / MPPGCL**		
6	Shri V. Nanavati, M.D.		
7	Shri A.K. Sankule, E.D.	edomg_mpeb@rediffmail.com	9425808500
8	Shri S.P. Soni, Dir(T.)		
9	Shri A.P. Bhairve, Dir(C.)		
10	Shri P.A.R. Bende, C.E.	parbende@gmail.com	9425805264
11	Shri D.C. Jain, C.E.	dcjain58@gmail.com	9425804922
12	Shri N.K. Jain, C.E.(MM)		
13	Shri M.L. Golash, Addl.C.E.	golash387@gmail.com	9425611211
14	Shri K.K. Prabhakar, S.E.	kkparbhakar@yahoo.co.in	9425805267
15	Shri P.K. Saxena, S.E.	segcc.mppgcl@gmail.com	9425806609
16	Shri P.C. Soni, S.E.(Engg.)		
17	Shri N. Mathur, S.E. (P & W)		
18	Shri Sanjay K. Mehta, E.E.	mehtasanjay67@yahoo.co.in	9425805017
19	Shri Jayant Augusty, E.E.	jwagasty@gmail.com	9425806822
20	Shri R.K. Patel, E.E.		
21	Shri R.S. Yadav, E.E. (Hydel)		
22	Shri V. Katiyar, E.E. (HR & A)		
23	Shri G. Dixit, A.E.	gee.mppgcl.com	9405806618
24	Shri Cinderella Felix, A.E.	cinderella.felix@gmail.com	9425802661
25	Shri A. Jain, A.E.		
IV	**CSPTCL / CSPGCL**		
26	Shri W.R. Wankhede, C.E.	waman5723@gmail.com	9425562412
27	Shri H.K. Deota, S.E.	hemantdeota@yahoo.com	9893150920
28	Shri G.P. Rai, E.E.	gp.rai@cseb.gov.in	9425227905
29	Shri Girish Gupta, E.E.	girishguptaji@gmail.com	9827115065
V	**GETCO / GSLDC/ GSECL**		
30	Shri B.B. Mehta, C.E.	bbm@gebmail.com	9879200736
VI	**WRLDC / POWERGRID**		
31	Shri P.Mukhopadhayay, G.M.	prithwishmukhopadhayay@posoco.in	9869438073
32	Smt. Sachala Mishra, A.G.M.		
33	Smt. Pushpa S., C.M.	pushpa_seshadri@hotmail.com	9869404482
VII	**POWERGRID REGION-I & II**		
34	Shri Abhinav Verma, D.G.M.	abhinav_verma@msn.com	9428504062
35	Shri Kuleshwar Sahu, A.G.M.	kuleshwars@gmail.com	9425294214
36	Shri V.B. Bhandarkar, Mgr.	vbhandarkar@powergridindia.com	9422303129
37	Shri D. Bruhananda, Mgr.	bruhanandeep@yahoo.com	9428504279
38	Shri Abhishek Kr. Gupta, Dy. Mgr.	abhishek_all@yahoo.com	9869404600

VIII	**NTPC**		
39	Shri P.B. Behere, G.M.	pbbehere@ntpc.co.in	9004497088
40	Shri S.K. Shrivastava, A.G.M.	sksrivastava09@ntpc.co.in	9425178069
41	Shri A.S. Pandey, A.G.M.	aspandey@ntpc.co.in	9425818534
41A	Shri A.K. Chandeliya, D.G.M.	akchandeliya@ntpc.co.in	9004497151
IX	**TATA POWER**		
42	Shri P.R. Gadave, A.G.M.	prgadave@tatapower.com	9223553341
43	Shri S.K. Sahoo, G H - operation	sushanta.sahoo@tatapower.com	9099006553
X	**APL**		
44	Shri C.S. Bobade, G.M.	chandrashekhar.bobade@adani.com	8980802255
45	Shri Anshul Garg, D.G.M.	anshul.garg@adani.com	8980802414
XI	**RINFRA**		
46	Shri Mukesh Kumar Sharma, G.M.	mukeshkumarsharma@relianceada.cor	7489939834
47	Shri Deepak Sankhe, D.G.M.	deepak.sankhe@relianceada.com	
48	Shri Vijay Chavan, Mgr.	vijay.chavan@relianceada.com	9320167746
XII	**KSK Mahanadi**		
49	Shri Ramakant Upadhyay	ramakantu@ksk.co.in	7869916080
XIII	**NSPCL**		
50	Shri Vinay Pathak, Supdt.	pathakvinay76@gmail.com	9425293581
XIV	**NPCIL**		
51	Shri Sanjeev Gadre, Sr. Opn. Eng.	sanjeevgadre1@gmail.com	9423982777
XV	**ESSAR**		
52	Shri Sarabjeet Singh, V.P. & Head	sarabjeet-singh@essar.com	7509570105
53	Shri Kamlesh Garg, Jt. G.M.	kamlesh.garg@essar.com	9879102849
54	Shri O.J. Saxena, Sr. Mgr.	osaxena@essar.com	9879101268
XVI	**STERLITE**		
55	Shri Sachin Deshpande, G.M.	sachin.deshpande@sterlite.com	8966903047
56	Nitu Bharti, Mgr.		
XVII	**JPL**		
57	Shri Mohan Kushwaha, A.G.M.	mohankushwaha@gmail.com	
XVIII	**NHDC**		
58	Shri Vinod Kumar Singh, Mgr.	vinodnhdc@rediffmail.com	9425952513
XIX	**RKM PPL**		
59	Shri N. Krishna Kumar, D.G.M.	krishnakumar.n@rkmpowergen.in	8435000264
60	Shri T. Rajesh Kumar, D.M.	rajeshkumart4@gmail.com	8435000119

अनुलग्नक **2.1**

माह नवम्बर **2014** में आवृत्ति के आंकड़ों का विवरण

(पश्चिम क्षेत्र भार प्रेषण केन्द्र की आवृत्ति रिपोर्ट के आधार पर)

FREQUENCY PARTICULARS DURING NOVEMBER 2014

(AS PER FREQUENCY REPORT OF WRLDC)

1. INTEGRATED OVER AN-HOUR
एक घंटे में समाकलित

1.1 MAXIMUM FREQUENCY अधिकतम आवृत्ति	50.19	Hz. BETWEEN	1900 Hrs & 2000 Hrs	Hrs. ON 17.11.2014
1.2 MINIMUM FREQUENCY न्यूनतम आवृत्ति	49.80	Hz. BETWEEN	0600 Hrs & 0700 Hrs	Hrs. ON 14.11.2014
1.3 AVERAGE FREQUENCY औसत आवृत्ति	50.00 Hz.			

2. INSTANTANEOUS तात्कालिक

2.1 MAXIMUM FREQUENCY अधिकतम आवृत्ति	50.42	Hz. AT 06:04:00	Hrs. ON 16.11.2014
2.2 MINIMUM FREQUENCY न्यूनतम आवृत्ति	49.58	Hz. AT 17:40:00 hrs	Hrs. ON 27.11.2014

3. %AGE OF TIME WHEN FREQUENCY WAS आवृत्ति का समय प्रतिशत में	NOVEMBER 2014	OCTOBER 2014	SEPTEMBER 2014
3.1 BELOW 48.5 Hz. 48.5 हट्ज के नीचे	0.00	0.00	0.00
3.2 BETWEEN 48.5 Hz. AND 48.8 Hz. 48.5 हट्ज और 48.8 हट्ज के बीच	0.00	0.00	0.00
3.3 BETWEEN 48.8 Hz. AND 49.2 Hz. 48.8 हट्ज और 49.2 हट्ज के बीच	0.00	0.00	0.00
3.4 BETWEEN 49.2 Hz. AND 49.5 Hz. 49.2 हट्ज और 49.5 हट्ज के बीच	0.00	0.00	0.06
3.5 BETWEEN 49.5 Hz. AND 49.7 Hz. 49.5 हट्ज और 49.7 हट्ज के बीच	0.41	1.12	1.60
3.6 BETWEEN 49.7 Hz. AND 49.9 Hz. 49.7 हट्ज और 50.2 हट्ज के बीच	16.08	24.43	26.47
3.7 BETWEEN 49.9 Hz. AND 50.05 Hz. 49.9 हट्ज और 50.05 हट्ज के बीच	53.60	52.94	55.70
3.8 BETWEEN 50.05 Hz. AND 51.5 Hz. 50.05 हट्ज और 51.5 हट्ज के बीच	29.90	21.52	16.17
3.9 ABOVE 51.5 Hz. 51.5 हट्ज के ऊपर	0.00	0.00	0.00
4.1 NO. OF TIMES FREQUENCY TOUCHED 48.80 Hz. आवृत्ति 48.80 हट्ज को छूही	0	0	0
4.2 NO. OF TIMES FREQUENCY TOUCHED 48.60 Hz. आवृत्ति 48.60 हट्ज को छूही	0	0	0
4.3 NO. OF TIMES FREQUENCY TOUCHED 51.00 Hz. आवृत्ति 51.00 हट्ज को छूही	0	0	0

ANNEXURE-2.3

Voltage Profile during the month of November 2014

दिनांक	इंदौर		इटारसी		कराड		धुले		असोज		कासोर		भिलाई		जेतपुर	
Date	Indore		Itarsi		Karad		Dhule		Asoj		Kasor		Bhilai		Jetpur	
	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम
	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv
1	414	**389**	413	389	429	429	429	388	419	402	428	418	415	**398**	411	395
2	418	401	420	402	427	411	430	408	420	404	422	415	418	401	**419**	402
3	420	401	420	402	428	412	427	405	420	401	424	413	418	400	416	401
4	419	392	419	392	429	429	433	379	420	403	426	419	417	402	409	393
5	418	390	419	390	433	418	430	**378**	417	402	426	418	418	402	409	391
6	421	391	420	390	429	403	433	383	420	403	424	418	416	403	411	393
7	419	394	419	393	432	411	431	390	420	405	426	422	417	404	409	391
8	421	395	419	396	433	405	430	393	420	401	428	421	419	405	408	391
9	417	399	417	398	432	410	429	391	418	406	426	420	421	408	407	389
10	420	398	**421**	397	430	402	429	394	421	402	428	411	420	405	418	399
11	420	401	419	399	430	402	432	404	421	405	424	**408**	420	405	410	393
12	419	393	416	393	431	**397**	432	387	418	**400**	425	420	419	406	410	390
13	420	396	418	394	433	408	433	390	418	402	425	420	419	408	407	**387**
14	420	396	418	394	436	418	434	394	417	402	424	420	419	408	408	393
15	419	396	419	395	439	413	431	405	420	404	429	421	419	412	408	394
16	418	395	416	395	**439**	411	429	400	421	408	424	420	422	414	411	395
17	420	391	415	389	437	413	431	400	421	406	424	420	423	407	410	395
18	417	392	413	389	435	411	430	397	419	405	424	419	419	406	408	395
19	419	397	414	396	436	413	432	399	420	402	424	419	419	412	411	395
20	419	396	415	394	437	412	430	399	421	404	426	420	420	408	412	394
21	420	397	419	396	437	410	**435**	397	420	402	426	421	422	409	406	393
22	419	395	417	393	434	411	432	397	419	403	**430**	421	420	409	406	391
23	420	394	419	393	436	413	434	396	**421**	404	427	422	421	410	408	392
24	420	493	417	392	436	413	429	397	420	402	427	421	422	407	407	392
25	419	391	416	**389**	437	413	429	396	419	404	427	421	423	408	406	392
26	420	394	417	392	437	412	429	394	419	402	428	422	423	410	408	391
27	**423**	399	420	396	436	412	431	394	420	403	428	422	423	409	408	392
28	420	399	416	396	436	412	430	397	421	402	428	422	423	408	407	391
29	419	398	414	394	437	409	430	395	419	402	426	422	422	408	406	392
30	420	396	417	390	437	412	432	393	420	406	427	423	**424**	408	407	395
	423	**389**	**421**	**389**	**439**	**397**	**435**	**378**	**421**	**400**	**430**	**408**	**424**	**398**	**419**	**387**

दिनांक	बिना		ग्वालियर		नागदा		खंडवा		सिपत		सिवनि		ग्वालियर		बिना	
Date	Bina		Gwalior		Nagda		Khandwa		Sipat		seoni		Gwalior		Bina	
	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम	अधिकतम	न्युनतम
	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv	Max. Kv	Min. Kv
1	416	398	407	391	423	393	423	394	789	752	775	**736**	783	755	786	756
2	420	403	412	393	**427**	403	428	405	759	742	782	752	796	765	796	766
3	420	399	410	394	425	401	426	409	758	**740**	784	743	792	761	794	763
4	420	398	409	392	426	393	429	**394**	789	752	787	747	790	761	795	762
5	421	396	408	390	426	395	428	396	789	752	785	741	785	751	798	753
6	420	399	410	388	426	394	429	397	789	752	789	748	792	754	799	757
7	419	402	409	396	424	398	427	400	789	752	788	759	791	761	797	767
8	420	399	410	396	424	396	428	403	789	752	786	759	792	762	797	766
9	417	405	413	395	421	398	426	403	789	752	781	755	795	765	792	774
10	419	398	409	391	424	407	427	401	766	747	785	753	787	755	796	758
11	417	404	409	394	424	401	425	402	768	750	784	755	788	758	795	766
12	416	399	408	392	422	393	427	397	789	752	777	748	787	757	791	764
13	418	395	409	390	423	394	428	400	789	752	782	745	789	753	795	756
14	417	395	412	390	423	396	430	402	765	752	783	748	787	756	794	754
15	411	402	412	398	422	395	**431**	404	789	752	790	758	796	766	781	764
16	417	398	408	398	421	396	425	404	789	752	783	753	786	755	791	760
17	414	**393**	407	391	423	**392**	428	400	789	752	780	750	787	747	786	**748**
18	414	396	406	390	421	393	426	399	764	746	781	748	784	754	786	756
19	415	401	407	393	423	398	427	403	761	749	783	755	785	759	788	763
20	421	396	412	393	423	396	427	402	789	752	781	753	795	756	796	752
21	419	400	412	397	423	396	429	402	789	752	787	753	**796**	765	798	770
22	417	395	412	**386**	423	394	427	401	761	748	781	755	787	**744**	792	753
23	419	398	**415**	400	424	394	430	401	789	752	786	754	794	765	797	764
24	416	397	414	393	423	393	427	400	789	752	784	754	794	757	796	761
25	416	397	413	393	421	393	424	399	789	752	789	754	796	760	794	762
26	415	397	409	392	423	395	426	399	765	750	787	755	790	756	792	758
27	**425**	405	410	394	423	399	430	404	769	748	787	756	790	757	**800**	761
28	417	401	411	394	423	397	426	403	**789**	752	**792**	760	795	765	787	761
29	416	400	409	395	419	396	423	399	789	752	788	753	788	761	793	765
30	417	395	410	392	423	394	428	395	789	752	787	756	793	755	795	756
	425	**393**	**415**	**386**	**427**	**392**	**431**	**394**	**789**	**740**	**792**	**736**	**796**	**744**	**800**	**748**

ANNEX -2.4

Under Frequency Operation in various Constituent System of Western Region during the month NOVEMBER 2014
(Compiled from the data received from the constituents)

Sl. No	Date	Gujarat		Chhattisgarh		Madhya Pradesh		Maharashtra	
		No. of Occasions	Max Load Relief at 49.2 Hz	No. of Occasions	Max Load Relief at 49.2 Hz	No. of Occasions	Max Load Relief at 49.2 Hz	No. of Occasions	Max Load Relief at 49.2 Hz
1	01-Nov-14	0	0	0	0	0	0	0	0
2	02-Nov-14	0	0	0	0	0	0	0	0
3	03-Nov-14	0	0	0	0	0	0	0	0
4	04-Nov-14	0	0	0	0	0	0	0	0
5	05-Nov-14	0	0	0	0	0	0	0	0
6	06-Nov-14	0	0	0	0	0	0	0	0
7	07-Nov-14	0	0	0	0	0	0	0	0
8	08-Nov-14	0	0	0	0	0	0	0	0
9	09-Nov-14	0	0	0	0	0	0	0	0
10	10-Nov-14	0	0	0	0	0	0	0	0
11	11-Nov-14	0	0	0	0	0	0	0	0
12	12-Nov-14	0	0	0	0	0	0	0	0
13	13-Nov-14	0	0	0	0	0	0	0	0
14	14-Nov-14	0	0	0	0	0	0	0	0
15	15-Nov-14	0	0	0	0	0	0	0	0
16	16-Nov-14	0	0	0	0	0	0		0
17	17-Nov-14	0	0	NIL		NIL		NIL	0
18	18-Nov-14	0	0	0	0	0	0	0	0
19	19-Nov-14	0	0	0	0	0	0	0	0
20	20-Nov-14	0	0	0	0	0	0	0	0
21	21-Nov-14	0	0	0	0	0	0	0	0
22	22-Nov-14	0	0	0	0	0	0	0	0
23	23-Nov-14	0	0	0	0	0	0	0	0
24	24-Nov-14	0	0	0	0	0	0	0	0
25	25-Nov-14	0	0	0	0	0	0	0	0
26	26-Nov-14	0	0	0	0	0	0	0	0
27	27-Nov-14	0	0	0	0	0	0	0	0
28	28-Nov-14	0	0	0	0	0	0	0	0
29	29-Nov-14	0	0	0	0	0	0	0	0
30	30-Nov-14	0	0	0	0	0	0	0	0
	Max	**0**	**0**	**0**	**0**	0	0.0	0	0
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Recommonded Load relief at 49.2 Hz / 49.0/48.8/48.6 Hz			***1025***		***91***		***490***		***851***

ANNEXURE 2.5

POWER CUT/RESTRICTIONS IN WESTERN REGION FOR THE MONTH OF NOVEMBER-2014

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) Only 8 Hrs. Power supply in staggered form in rotation of day & night is given to Ag. Single Phase supply 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 / पावंदियां , 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	तक To	
(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	शून्य Nil	शून्य Nil	शून्य Nil	शून्य Nil
2.Staggering of power supply	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)	01.11.2014	30.11.2014	23:31	23:01	23:16
2.1 Three-Phase Supply(Irrigation)	01.11.2014	30.11.2014	09:55	09:42	09:51
2.1 Three-Phase Supply(Mixed)	01.11.2014	30.11.2014	23:12	22:37	22:58

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.	01.11.2014	30.11.2014	23:56	23:25	23:48
3.2 District Head Qtrs.	01.11.2014	30.11.2014	23:57	23:45	23:53
3.3 Tehsil Head Qtrs.	01.11.2014	30.11.2014	23:49	23:20	23:41

ग : महाराष्ट्र Maharashtra

1 उध्योगों के लिये विद्युत कटौतियां / पावंदियां , 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
		From	To	
(a) Power Cuts/Restriction on HT/ LT Industries (b) Load Shedding From 01.11.14 to 30.11.14	शून्य Nil @ 0-1159 MW	शून्य Nil 00.00	शून्य Nil 24.00	शून्य Nil @ 5.4 MUs/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**

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	01.11.2014	30.11.2014	10:00	08:00	09:00
2.2 Single-Phase Supply	01.11.2014	30.11.2014	18:00	18:00	18:00

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 / 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)	पाबन्दी का समय Restriction Time		प्रति दिन कुल ऊर्जा कटौती Total Energy Cut (MUs /day)
		से From	तक To	
(A) Scheduled				
(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*	36.59 (Av) of 30days	17.00	23.00	0.220
(v)Urban/ Sub-Urban	00.00(Av)	-	-	-
(iv)Town feeders(C-1to C-6)	00.00 (Av)	-	-	-
(B) Un-Scheduled				
(a) Load Shedding	1.Rural 85.22(Av) for 13.62 Hrs.	-	-	0.049
	2.Town Feeders (C-1to C-6 & X) : 0.00(Av)		-	-
	3. HT Industries 87.12 (Av) for 39.10 Hrs.			0.002
Total Energy Cut/day				0.271
(b) Any other information 1.Weekly Off/staggering of power supply	1day (In a week as per consumer's option) 50MW(Av.)	-	-	0.039

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	01.11.2014 to 30.11.14, 6.00 Hrs (Power cut)		18.00		
2.2 Single-Phase Supply	-	-	-	-	-
2.3 Remarks/Note/	-	-	-	-	-

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

च : गोवा Goa: शून्य Nil

संलग्नकAnnex-2.6

Power System Operation Corporation Ltd.
(A wholly owned subsidiary company of POWERGRID)
Western Regional Load Despatch Centre, Mumbai

अनिवार्य युनिट आऊटेज का नवम्बर2014का विस्तारित ब्यौरा

Details of forced unit outages during the month ofNov.2014

अनु क्रमांक Sl.No	युनिट Unit	संघटक Constituent/IPP	क्षमता मेगावॉट Cap.MW	से From समय Time	दिनांक Date	से From समय Date	दिनांक	कारण Reason
1.	Essar-2	GSECL	172	12:12	22-Feb-13	Still out	Still out	Shortage of gas
2.	UTPS-2	GSECL	120	21:55	4-Oct-14	4:50	10-Nov-14	Turbine vibration high
3.	GPEC-1	GSECL	218	16:53	7-Oct-14	18:19	11-Nov-14	RSD
4.	GTPS-2	GSECL	120	20:20	10-Oct-14	Still out	Still out	RSD
5.	DGBP-2	GSECL	112	14:22	20-Oct-14	13:47	12-Nov-14	RSD
6.	GTPS-1	GSECL	120	5:36	22-Oct-14	Still out	Still out	Flame failure
7.	UTPS-1	GSECL	120	5:36	22-Oct-14	Still out	Still out	Flame failure
8.	UTRAN STG-II -1	GSECL	375	8:43	22-Oct-14	Still out	Still out	RSD
9.	GPEC-2	GSECL	218	19:33	1-Nov-14	18:00	11-Nov-14	RSD
10.	GPEC-3	GSECL	218	19:57	1-Nov-14	4:02	10-Nov-14	RSD
11.	ESSAR(Vadinar)-1	GSECL	600	17:02	2-Nov-14	16:58	7-Nov-14	Coal shortage
12.	WTPS-4	GSECL	210	19:49	7-Nov-14	5:50	13-Nov-14	RSD
13.	WTPS-6	GSECL	210	22:38	7-Nov-14	6:48	18-Nov-14	RSD
14.	SUGEN-2	GSECL	382	14:45	8-Nov-14	Still out	Still out	Electrical fault
15.	WTPS-5	GSECL	210	11:16	9-Nov-14	9:19	20-Nov-14	RSD
16.	UTPS-2	GSECL	120	15:04	10-Nov-14	Still out	Still out	RSD
17.	GPEC-1	GSECL	218	19:22	11-Nov-14	17:54	17-Nov-14	RSD
18.	GPEC-2	GSECL	218	19:37	11-Nov-14	17:30	17-Nov-14	RSD
19.	STPS-2	GSECL	120	11:00	12-Nov-14	19:20	17-Nov-14	RSD
20.	SLPP-4	GSECL	125	13:30	15-Nov-14	9:13	19-Nov-14	BTL

21.	GPEC-3	GSECL	218	19:52	19-Nov-14	Still out	Still out	RSD
22.	SLPP-1	GSECL	125	4:50	20-Nov-14	15:05	23-Nov-14	BTL
23.	DGBP-2	GSECL	112	8:31	21-Nov-14	15:52	1-Dec-14	RSD
24.	WTPS-3	GSECL	210	10:56	24-Nov-14	14:42	3-Dec-14	BTL
25.	ALTPS-1	GSECL	125	0:24	28-Nov-14	20:18	2-Dec-14	BTL
26.	SLPP-1	GSECL	125	21:50	29-Nov-14	Still out	Still out	Gt-3 tripped on differential protection
27.	APL-5	APL	660	12:51	17-Nov-14	0:19	21-Nov-14	BTL
28.	APL - 5	APL	660	19:13	28-Nov-14	Still out	Still out	ETL
29.	APL-7	APL	660	4:31	30-Nov-14	Still out	Still out	BTL
30.	Koradi-5	MSPGCL	200	10:30	17-Jun-14	Still out	Still out	Economy shutdown
31.	चंद्रपुर C'PUR-1	MSPGCL	210	7:15	28-Aug-14	Still out	Still out	Economy shutdown
32.	Bhusawal-2	MSPGCL	210	13:08	7-Sep-14	Still out	Still out	Economy shutdown
33.	PARLI-4	MSPGCL	210	10:50	13-Oct-14	Still out	Still out	Coal shortage
34.	URAN-6	MSPGCL	108	15:58	24-Oct-14	16:13	10-Nov-14	Gas shortage
35.	BSWL-3	MSPGCL	210	4:58	27-Oct-14	4:41	11-Nov-14	Bunker problem
36.	WPCL-1	MSPGCL	135	0:43	30-Oct-14	Still out	Still out	ESP belt damage
37.	INDIABULLS (A)-2	MSPGCL	270	16:16	30-Oct-14	Still out	Still out	Electrical protection
38.	JAIGAD-4	MSPGCL	300	5:53	1-Nov-14	18:09	6-Nov-14	Feed water pipe leakage
39.	WPCL-4	MSPGCL	135	0:19	1-Nov-14	Still out	Still out	Main steam drain leakage
40.	KHAPERKHEDA -5	MSPGCL	500	10:48	3-Nov-14	19:27	6-Nov-14	Electrical fault
41.	TIRORA-4	MSPGCL	660	0:07	8-Nov-14	7:39	11-Nov-14	Intermediate Hydel drain leakage
42.	URAN-5	MSPGCL	108	14:19	12-Nov-14	12:42	18-Nov-14	Gas shortage
43.	C'PUR-3	MSPGCL	210	21:02	12-Nov-14	Still out	Still out	Coal shortage
44.	URAN-7	MSPGCL	108	17:16	17-Nov-14	21:36	29-Nov-14	Gas shortage
45.	C'PUR-7	MSPGCL	500	4:55	18-Nov-14	18:26	19-Nov-14	High drum level
46.	URAN-8	MSPGCL	108	0:27	26-Nov-14	Still out	Still out	Gas shortage
47.	APML(TIRORA)-5	MSPGCL	660	20:12	26-Nov-14	Still out	Still out	Drain line leakages

48.	URAN-B0	MSPGCL	120	0:27	26-Nov-14	21:36	29-Nov-14	Outage of unit 7&8
49.	TATA-6	MSPGCL	500	21:10	21-Nov-14	Still out	Still out	Economy S/D
50.	TATA-8	TATA	250	22:55	9-Jan-14	19:51	16-Nov-14	H/T due to fire near turbine generator desk
51.	RGPPL-1B	RGPPL	320	23:00	31-Mar-14	Still out	Still out	Dry preservation
52.	RGPPL-3A	RGPPL	320	18:57	17-Apr-14	Ready	Ready	Less requisition
53.	RGPPL-1A	RGPPL	320	13:30	8-Jul-14	Ready	Ready	Less requisition
54.	RGPPL-2A	RGPPL	332	12:00	21-Jul-14	Still out	Still out	CW pump problem
55.	RGPPL-2B	RGPPL	332	13:30	1-Sep-14	Still out	Still out	Less requisition
56.	Amarkantak-4	MPPGCL	120	11:13	30-Apr-14	Still out	Still out	Electrical fault
57.	SATPURA - 11	MPPGCL	250	11:52	25-Oct-14	11:13	10-Nov-14	Flame failure
58.	SATPURA-6	MPPGCL	210	9:55	4-Nov-14	21:20	14-Nov-14	Clinker formation
59.	SATPURA-7	MPPGCL	210	17:05	9-Nov-14	1:45	12-Nov-14	Reheater tube leakage
60.	SGTPS-2	MPPGCL	210	10:15	13-Nov-14	13:44	17-Nov-14	Loss of excitation /Electrical fault
61.	SATPURA-10	MPPGCL	250	10:05	16-Nov-14	12:16	29-Nov-14	BTL
62.	SGTPS-1	MPPGCL	210	22:22	23-Nov-14	5:38	2-Dec-14	BTL
63.	SATPURA-9	MPPGCL	210	11:50	27-Nov-14	6:15	2-Dec-14	Clinker formation
64.	SATPURA-7	MPPGCL	210	18:42	30-Nov-14	19:15	3-Dec-14	Main stream valve leakage
65.	SATPURA-11	MPPGCL	250	14:02	30-Nov-14	Still out	Still out	ETL
66.	KORBA (E)-6	CSPGCL	120	21:30	27-Nov-14	22:45	1-Dec-14	Air heater problem
67.	JPL STAGE II-1	JPL	600	14:44	15-Oct-14	3:48	9-Nov-14	Ash evacuation problem
68.	JPL STAGE II-1	JPL	600	0:04	14-Nov-14	Still out	Still out	Ash evacuation problem/CHP problem
69.	ACBIL-1	ACBIL	135	4:18	6-Nov-14	20:15	10-Nov-14	Excitation problem
70.	ACBIL-1	ACBIL	135	6:45	22-Nov-14	Still out	Still out	BTL
71.	EMCO -2	EMCO	300	16:16	13-Nov-14	23:28	28-Nov-14	HP heater leakage
72.	Lanco-2	Lanco	300	12:20	21-Aug-13	Still out	Still out	Coal shortage
73.	DBPOWER-1	DBPOWER	600	9:53	24-Aug-14	Still out	Still out	BTL
74.	KSK Mahanadi-4	KSK	600	16:50	26-Aug-14	Still out	Still out	Testing and maintenance
75.	KSK MAHANADI-3	KSK	600	0:02	8-Nov-14	7:45	11-Nov-14	APH problem
76.	CGPL-30	TATA	830	4:45	1-Oct-14	9:22	7-Nov-14	Reheater problem
77.	Dhariwal-2	Dhariwal	300	1:24	1-Oct-14	Still out	Still out	Oil System Problem
78.	VANDANA-1	VANDANA	135	4:44	19-Oct-14	Still out	Still out	BTL

79.	SASAN-4	RELIANCE	660	14:20	28-Oct-14	6:01	4-Nov-14	Boiler separator temp high
80.	SASAN-3	RELIANCE	660	20:15	2-Nov-14	4:44	8-Nov-14	Condensate line leakages
81.	NSPCL-1	NSPCL	250	16:28	21-Oct-14	0:00	22-Nov-14	High vibrations
82.	KAWAS-2A	NTPC	164	12:13	14-Oct-14	7:01	18-Nov-14	Less requisition
83.	KAWAS-2B	NTPC	164	15:14	14-Oct-14	13:07	18-Oct-14	Less requisition
84.	MOUDA - II	NTPC	500	1:37	23-Oct-14	22:26	20-Nov-14	Low schedule
85.	GANDHAR-1	NTPC	144	9:05	23-Oct-14	6:48	14-Nov-14	Less requisition
86.	MOUDA - 1	NTPC	500	0:03	5-Nov-14	14:11	2-Dec-14	Low schedule
87.	KAWAS-1B	NTPC	164	15:45	9-Nov-14	5:57	12-Nov-14	Less requisition
88.	VSTPS - 5	NTPC	210	16:00	13-Nov-14	6:06	17-Nov-14	Coal shortage
89.	KAWAS-1A	NTPC	164	22:10	15-Nov-14	Still out	Still out	Less requisition
90.	GANDHAR -1	NTPC	219	19:34	16-Nov-14	4:44	2-Dec-14	Less requisition
91.	KAWAS-1B	NTPC	164	19:12	16-Nov-14	Still out	Still out	Less requisition
92.	KAWAS-2A	NTPC	109	19:01	21-Nov-14	14:31	1-Dec-14	Less requisition
93.	MOUDA - II	NTPC	500	0:00	24-Nov-14	Still out	Still out	Low schedule
94.	KAWAS-2B	NTPC	164	18:14	28-Nov-14	12:49	1-Dec-14	Less requisition

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

संलग्नकAnnex-2.7

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(पावरग्रिड की एक पूर्ण स्वामित्व वाली कंपनी)

पश्चिम क्षेत्रिय भार प्रेषण केन्द्र,मुम्बई

Power System Operation Corporation Ltd.

(A wholly owned subsidiary company of POWERGRID)

Western Regional Load DespatchCentre,Mumbai

नियोजित युनिट आऊटेज का नवम्बर2014 का विस्तारित ब्यौरा

Details of planned unit outages during the month of Nov.2014

अनु क्रमांक Sl.No	युनिट Unit	संघटक Constituent/IPP	क्षमता मेगावॉट Cap.MW	से From समय Time	दिनांक Date	से From समय Time	दिनांक Date	कारण Reason
1.	ALTPS-2	GSECL	125	1:55	1-Nov-14	16:12	22-Nov-14	AOH
2.	Torrent Power-D	Torrent Power	120	10:00	23-Oct-14	Still out	Still out	COH
3.	PARLI-3	MSPGCL	210	23:51	13-Feb-13	Still out	Still out	Water supply problem
4.	KORBA (E) EXTN-II	CSPGCL	250	23:28	28-Nov-14	Still out	Still out	AOH
5.	ACBIL-2	ACBIL	135	4:21	12-Nov-14	Still out	Still out	Annual maintenance work
6.	NSPCL-1	NSPCL	250	0:00	22-Nov-14	Still out	Still out	COH
7.	TAPS - 1	NPC	160	22:39	12-Oct-14	Still out	Still out	Refueling works
8.	KORBA - 3	NTPC	200	23:52	31-Oct-14	Still out	Still out	AOH

						Annex- 3.1
DETAILS OF MAINTENANCE PROGRAM OF GENERATING UNITS PROPOSED DURING DECEMBER 2014 AND JANUARY 2015						
S. No.	Unit	No.	Capacity	Outage as per Annual Maintenance Plan		Reason
			(MW)	से From	तक To	
1	**GUVNL**					
1	WTPS	4	210	11.12.14	31.12.14	AOH
2	AECO	F	121	13.12.14	27.12.14	Boiler annual maintenance
3	KLTPS	2	70	25.01.15	24.02.15	AOH
4	WTPS	1	210	05.01.15	04.02.15	AOH
5	APL	1	330	01.01.15	10.02.15	COH
2	**MPPGCL**					
			NIL			
3	**CSPGCL**					
3.1	Korba WEST	3	210	10-Jan-15	02-Dec-14	AOH
4	**MSPGCL**					
4.1	TATA	5	500	03.01.2015	06.02.2015	COH
4.2	Dahanu Reliance	2	250	08.12.14	18.12.14	FORCED OUTAGE /AOH
5	**Central Sector**					
5.1	KORBA KSTPS	6	500	21.01.2014	21.03.2015	Bllr,,HPT module Replacement, R&M works(ESP,DDCMS)
5.2	SASAN	5	660	20.01.15	30.01.15	BEARING OIL LEAKAGE
5.3	SASAN	4	660	01.02.15	15.02.15	CONDENSER CLEANING
5.4	SASAN	2	660	16.02.15	02.03.15	BEARING HIGH VIBRATION

Annexure-3.2-B

Outage Planning of Transmission elements during the month of -December-2014-January 2015

SN	KV	Line	From		To		Basis	Reason	System	Agency	Type
			Date	Time	Date	Time					
1	220	220 KV D/C line Korba(E) - SUHELA	15-Dec-14	8:00	16-Dec-14	18:00	Continuous	Crossing of 765 KV D/C Dharamjaygarh-Jabalpur Line(AP7-AP8)	CSPDCL	JTCL	CSPGCL/CSPTCL READY FOR THE GIVEN DATE ONLY
2	400	Rajgarh(Pgcil) - SSP CKT I	20-Dec-14	6.00	28-Dec-14	18.00	daily	Maintenance Work	PGCIL/MPPTCL	WR - II	R
3	400	Sipat-Raipur # 1&2	20-Dec-14	9:00	19-Jan-15	17:00	Daily	A/R Non auto mode for Online OPGW Stringing work	WRTS-I	PGCIL	R
4	400	Raipur - Durg PS 1&2	20-Dec-14	9:00	19-Jan-15	17:00	Daily	A/R Non auto mode for Online OPGW Stringing work	WRTS-I	PGCIL	C
5	765	Sipat - Bilaspur 1	20-Dec-14	9:00	19-Jan-15	17:00	Daily	A/R Non auto mode for Online OPGW Stringing work	WRTS-I	PGCIL	R
6	400	MCCPL Main Bay(416) at Bilaspur S/s	20-Dec-14	9:00	20-Dec-14	18:00	Daily	FOR AMP work	WRTS-I	PGCIL	R
7	765	765/400kV ICT-1 of Tamnar PS	20-Dec-14	10:00	26-Dec-14	18:00	Contir	GANTRY TOWER TH & BEAM ERECTION (TG & TH) OF M/s TRN BAYS	WRTS-I	PGCIL	C
8	400	400 KV JPL Ckt # 4 at Tamnar	20-Dec-14	10:00	5-Jan-15	18:00	Contir	G1 & G2 GANTRY TOWER BEAM ERECTION OF M/s TRN BAYS	JSPL	PGCIL	C
9	400	400kV Bhilai - BVT & Raipur - BVT - 1	20-Dec-14	7:00	19-Jan-15	18:00	Daily	A/R to be kept in non -auto mode for additional Earthing. Line will remain in service	WRTS-I	WRTS-I	
10	400	400kV Raipur - BVT - 2 & 3	20-Dec-14	7:00	19-Jan-15	18:00	Daily	A/R to be kept in non -auto mode for additional Earthing. Line will remain in service	WRTS-I	WRTS-1	
11	400	400kV B'vati-Parli-1 & 2	20-Dec-14	8:00	19-Jan-15	18:00	Daily	A/R to be kept in non -auto mode for additional Earthing. Line will remain in service.	WRTS-I	WRTS-I	
12	HVDC	Filter at (CWD DIA 50 Q50) at B'vati	20-Dec-14	9:00	20-Dec-14	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
13	765/4	Tie breaker of 765/400kv ICT-1 and B	20-Dec-14	8:00	21-Dec-14	18:00	Contir	Commissioning of 429-Tie Bay	WRTS-I	WRTS-I	
14	765	Wardha - II Switchable Line reactor at S	20-Dec-14	8:00	24-Dec-14	18:00	Daily	Commissioning of Fire fighting system	WRTS-I	WRTS-I	
15	765	Seoni- Bilaspur -I (Main bay 710)	20-Dec-14	8:00	20-Dec-14	18:00	Daily	AMP works (DCRM & tan delta of grading capacitors)	WRTS-I	WRTS-I	
16	400	400 KV Wardha- Parli Ckt-2	20-Dec-14	7:00	21-Dec-14	18:00	Continuous	Stringing Work of Broken Earth Wire B/w Span 387 to 390	WRTS-I	WRTS-I	
17	765	Bina # 1 Main bay - 815 at Jabalpur Pooling	20-Dec-14	08:00	20-Dec-14	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
18	400	Kansari (Zerda) -Bhinmal line	20-Dec-14	10:00	20-Dec-14	11:00	Daily	For collecting oil sampling of B phase bushing of line reactor. Line will be charged after isolation of reactor and without line reactor	PGCIL	WR-II	R
19	400	Kansar (Zerda)-Kankaroli line	20-Dec-14	12:00	20-Dec-14	15:00	Daily	For checking auto reclose function of distance protection relay.	PGCIL /GETCO	WR-II	R

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
20	220	Bhimasar-Morbi	20-Dec-14	08:00	21-Dec-14	18:00	Conti.	For crossing of 400 KV D/C Bhachau-Versana and 400 KV D/C Essar-Bhachau line. (Crossing Multi circuit Tower of GETCO with Multi circuit tower of PGCIL)	GETCO	WR-II	C
21	220	Bhimasar-Lalpur	20-Dec-14	08:00	21-Dec-14	18:00	Conti.	For crossing of 400 KV D/C Bhachau-Versana and 400 KV D/C Essar-Bhachau line. (Crossing Multi circuit Tower of GETCO with Multi circuit tower of PGCIL)	GETCO	WR-II	C
22	220	Bhimasar-Mansar circuit#1 &2	20-Dec-14	08:00	21-Dec-14	18:00	Conti.	For crossing of 400 KV D/C Bhachau-Versana and 400 KV D/C Essar-Bhachau line. (Crossing Multi circuit Tower of GETCO with Multi circuit tower of PGCIL)	GETCO	WR-II	C
23	400	315MVA ICT-2 at GIS Navsari	20-Dec-14	09:00	24-Dec-14	20:00	Conti.	SF6 Leakage attending in R & Y phase LA at GIS Navsari.	PGCIL	WR-II	C
24	765	Main Bay of 1000 MVA ICT-1 at Satna	20-Dec-14	09:00	20-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
25	400	Bus # 1 at Shujalpur	20-Dec-14	10:00	20-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
26	400	Shujalpur - Nagda # 2	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
27	400	Bhachau - Mundra # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
28	400	Gandhar - Navsari # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
29	400	Khandwa - Rajgarh # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
30	400	Indore - Nagda # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
31	400	Jabalpur - Jabalpur Pool # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
32	400	Khandwa - Dhule # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
33	400	Itarsi - Khandwa # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
34	220	Satna (PG) - Satna (MP)# 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
35	400	Dehgam - Ranchhodpura # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
36	400	Bhachau - Ranchodpura # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
37	400	Asoj - SSP # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
38	220	Navasari - Vav # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
39	765	Bina - Gwalior # 2	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
40	220	Gandhar - Haldarwa # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
41	220	Kawas - Dastan	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
42	220	Dastan - Navsari	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
43	220	Kawas - Haldarwa	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
44	220	Damoh - Damoh	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
45	400	Vadodara - Pirana # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
46	400	Asoj - Vadodara # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
47	400	SSP - Rajgarh # 1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
48	400	Vindhyachal - Vindhyachal Pooling CKT -1	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
49	765	Satna - Gwalior Ckt-I	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
50	400	Gwalior - Agra Ckt-I	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
51	400	Vapi - Kala	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
52	220	Khandwa - Chhegaon	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
53	220	Indore - Pithampur	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
54	220	Indore - Barwatha	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
55	220	Barwatha - Chhegaon	20-Dec-14	07:00	19-Jan-15	18:00	Daily	Online replacement of E/W with OPGW. A/R shall be kept in non auto mode	PGCIL	WR-II	C
56	400	Gandahr - Navsari Ckt. 1&2	20-Dec-14	08:00	19-Jan-15	18:00	Daily	PID testing of insulator strings. A/R shall be kept In non auto mode for both circuits.	PGCIL	WR-II	R
57	400	Navsari - Vapi & Navsari - Magarwada	20-Dec-14	08:00	19-Jan-15	18:00	Daily	PID testing of insulator strings. A/R shall be kept In non auto mode	PGCIL	WR-II	R
58	400	Satna - Bina Ckt. 1&2	20-Dec-14	08:00	19-Jan-15	18:00	Daily	PID testing of insulator strings. A/R shall be kept In non auto mode for both circuits.	PGCIL	WR-II	R
59	400	Nagda - Dehgam Ckt. 1&2	20-Dec-14	08:00	19-Jan-15	18:00	Daily	PID testing of insulator strings. A/R shall be kept In non auto mode for both circuits.	PGCIL	WR-II	R
60	400	Indore - Asoj Ckt 2	20-Dec-14	08:00	19-Jan-15	18:00	Daily	Replacement of defective insulator strings thorugh HOTLINE maintenance technieque and PID testing of insulator strings. A/R shall be kept In non auto mode	PGCIL	WR-II	R
61	220	Vapi - Khadoli & Vapi - Sayali	20-Dec-14	08:00	19-Jan-15	18:00	Daily	PID testing of insulator strings. A/R shall be kept In non auto mode	PGCIL	WR-II	R
62	220	Kawas-Vav 2	20-Dec-14	9:00	20-Dec-14	18:00	Daily	PM of bay equipment.	NTPC	NTPC	
63	400	Dhule-Khandwa Ckt.I	20-Dec-14	9:00	20-Dec-14	17:00	Daily	Q.M.work	MSETCL	MSETCL	
64	400	KSK-RKMPPL (Raipur - Raigarh Ckt 3)	20-Dec-14	8:00	20-Dec-14	18:00	Daily	Line relay panel Faulty BCU replacing. Protection interlock checking of 3&4th unit GT bay and maintenance	PGCIL	RKM	
65	400	RKMPPL-Raigarh (Raipur - Raigarh Ckt 3)	20-Dec-14	8:00	20-Dec-14	18:00	daily	Maintenance Work (fixing of ACSR Moose conductor repair sleeve)	PGCIL	RKM	
66	220	Ranasan - Dehgam (PG) - 1	20-Dec-14	7:00	20-Dec-14	19:00	Daily	Isolator replacement work	GETCO	GETCO	
67	765	765/400 ICT-1 of Kotra PS	20-Dec-14	8:00	20-Dec-14	22:00	Daily	For erection of Auxiliary Bus for Spare IC	WRTS-1	POWERGRI	C
68	765	765kV Dharamjaygarh-Jharsugda 2	20-Dec-14	8:00	21-Dec-14	21:00	Contir	For erection of Line Equipment of 765kV Jabalapur-IV ckt at Dharamjaygarh	WRTS-1	POWERGRI	C
69	400	400KV Aurangabad(PG)-Aurangabad(MSETCL) ckt-1	20-Dec-14	9:00	21-Dec-14	17:00	Conti.	Replacement of HCB Isolator & Bay upgradation work	WRTS-I	WRTS-I	C
70	220	220KV Badod-Kota Ckt	20-Dec-14	9:00	20-Dec-14	12:00	Daily	For making LILO of Badod-Modak Ckt at 220 KV S/s Bhanpura			
71	220	220KV Badod-Modak Ckt	20-Dec-14	13:00	20-Dec-14	16:00	Daily	For making LILO of Badod-Modak Ckt at 220 KV S/s Bhanpura			
72	765	765Kv Solapur-Raichur-2	20-Dec-14	8:00	20-Dec-14	16:00	daily	To attend hot spot and minor maintenanc	RSTCL	RSTCL	
73	400	315MVA ICT # 1 at Bhachau	20-Dec-14	10:00	20-Dec-14	14:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
74	400	JPL Extn 4 X600 Switch Yard	20-Dec-14	8:00	19-Jan-15	18:00	daily	Replacement of 400kV Defective CB interrupter [Power Flow will not be affected]	JPL	JPL	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
75	765/4	ICT#1 at Solapur	21-Dec-14	9:00	25-Dec-14	18:00	Daily	For fire fighting work and commissioning of spare ICT unit and AMP	WRTS-I	WRTS-I	
76	400	Khadka-BBLR	21-Dec-14	9:00	21-Dec-14	17:00	Daily	CT tan delta,Relay testing, CB DCRM Measurement & Routine Line maint.	MSETCL	MSETCL	
77	220	Kalmeshwar-Pandhurna Line	21-Dec-14	8:00	21-Dec-14	18:00	Daily	Crossing work of 765 kV S/C Koradi-Akola Line Ckt-II	MSETCL	MEGPTCL	C
78	765	Champa -1 LR (using as a Bus-Reactor) at Durg	21-Dec-14	9:00	25-Dec-14	18:00	Contir	for Erection of spare Reactor	WRTS-I	PGCIL	C
79	400	Bus # I at Pirana sub-station	21-Dec-14	09:00	21-Dec-14	18:00	Daily	AMP work	PGCIL	WR-II	R
80	400	Kalwa-Padgha-ll	21-Dec-14	8.00	21-Dec-14	18.00	Daily	Conversion of Single insulator string to Double suspension normal of insulator strings at road cross locations.	MSETCL	MSETCL	
81	220	220 KV D/C Sukha - Narsinghpur DCDS	21-Dec-14	8:00	22-Dec-14	18:00	Continuous	Crossing of 765 KV D/C Bhopal-Jabalpur Line	MPPTCL	BDTCL	
83	765	765 KV Wardha-Aurangabad Ckt-1 at Wardha	21-Dec-14	9:00	21-Dec-14	18:00	Daily	Replacement of NGR and completion of balance construction works. [Balance construction works]	WRTS-I	WRTS-I	
84	400	Raipur- Bhilai # 1	22-Dec-14	9:00	22-Dec-14	17:00	Daily	For NTMC Work	WRTS-I	PGCIL	R
85	400	V'CHAL-Jabalpur-1	22-Dec-14	7:30	22-Dec-14	8:00	Daily	AMP (line outage for short period)	NTPC	NTPC	
86	400	315MVA ICT-I T Mapusa	22-Dec-14	9:00	22-Dec-14	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
87	765/4	ICT-2 and 400kV Bus-2 at Aurangaba	22-Dec-14	8:00	22-Dec-14	18:00	Daily	Tightning of Clamps/connectors	WRTS-I	WRTS-I	
88	400	Bus Reactor at Aurangabad	22-Dec-14	8:00	24-Dec-14	18:00	Daily	FF work and commissioning of CSD	WRTS-I	WRTS-I	
89	765	Seoni - Wardha - II Line	22-Dec-14	8:00	22-Dec-14	18:00	Daily	Erection of Spare reactor bushing due to induction issue S/D required. [Crossing work of 765 kV S/C Koradi-Akola Line Ckt-II]	WRTS-I	WRTS-I /MEGPTCL	
90	765	Seoni -Bina Line	22-Dec-14	8:00	22-Dec-14	18:00	Daily	Erection of Spare reactor bushing due to induction issue S/D required.	WRTS-II	WRTS-I	
91	765	765kV Bus Reactor # 2 at Wardha	22-Dec-14	9:00	22-Dec-14	18:00	Daily	Balance construction works	WRTS-I	WRTS-I	
92	765	765/400 KV ICT-1 at Wardha SS	22-Dec-14	9:00	22-Dec-14	18:00	Daily	Replacement of Y-phase Bushing of 765/400 KV ICT-1 .	WRTS-I	WRTS-I	
93	765	Bina # 2 Main bay - 818 at Jabalpur Pooling	22-Dec-14	08:00	22-Dec-14	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
94	765	Bus 1 at Bina	22-Dec-14	09:00	22-Dec-14	18:00	Daily	For Bus AMP	PGCIL	WR-II	R
95	765	Gwalior - Satna # 2	22-Dec-14	10:00	22-Dec-14	18:00	Daily	SCADA TESTING at Gwalior S/S.	PGCIL	WR-II	C
96	765	1000 MVA ICT-1 Tie Bay (702) at Satna	22-Dec-14	09:00	23-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
97	400	400 KV Bus-2 (with Unit-20 Genrating Bay on Transfer Bus)	22-Dec-14	9:00	22-Dec-14	18:00	Daily	Unit 20 Bay Bus 2 Isolator and Bay CB Bus side Earth Switch Preventive Maintenance	TPL-SUGEN	TPL-SUGEN	R
98	400	SUGEN 400 KV Bus-2	22-Dec-14	9:00	27-Dec-14	18:00	Daily	Bays Bus 2 Isolators, Bay CB Bus side Earth Switch, Bus 2 CVT Bay Isolator & Earthswitch Preventive Maintenance	TPL-SUGEN	TPL-SUGEN	R
99	220	Kawas- Ichhapore 1	22-Dec-14	9:00	22-Dec-14	18:00	Daily	Pnematic Compressor Load test.	NTPC	NTPC	
100	220	Bhilad - Vapi (PG) - 1	22-Dec-14	9:00	22-Dec-14	18:00	Daily	PMM work		GETCO	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
101	400	DGEN 400 KV SWITCHYARD TRANSFER BUS	22-Dec-14	8:00	21-Jan-15	18:00	Conti	BUS MAINTENANCE, ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
102	220	Khandwa-Chhegaon-1	22-Dec-14	10:00	22-Dec-14	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
103	400	Bus # 1 at Bhachau	22-Dec-14	10:00	22-Dec-14	18:00	Daily	For busbar extension works for upcoming bays.	PGCIL	WR-II	C
104	400	Bus # 2 at Jabalpur Pooling Station	22-Dec-2014	09:00	22-Dec-14	18:00	Daily	Erection/Jumper with Isolators for 400KV Bay No.: 416 of Jhabua Power Bays	PGCIL	WRTS-II	C
105	765	1500MVA ICT # 1 at Jabalpur Pooling Station	22-Dec-2014	09:00	22-Dec-14	18:00	Daily	Erection of 765KV & 400KV Auxiliary Bus for Spare ICT Phase	PGCIL	WRTS-II	C
106	220	Ranasan - Dehgam (PG) - 2	22-Dec-2014	7:00	22-Dec-14	19:00	Daily	Isolator replacement work	GETCO	GETCO	
107	765	Bina-Jabalpur-II	22-Dec-14	08:00	23-Dec-14	18:00	Daily	For Installation & commissioning of CSD relay at Bina	PGCIL	WR-II	C
108	765	765/400 ICT-2 of Kotra PS	22-Dec-14	8:00	22-Dec-14	22:00	Daily	For erection of Auxiliary Bus for Spare IC	WRTS-1	POWERGRI	C
109	220K	Achalia Ukai (Thermal)DC line	22-Dec-14	8:00	22-Dec-14	18:00	Contir	Crossing of 765 KV Dhule Aurangabad lir	BDTCL	WR1	
110	765	ICT -1 at Sasan	22-Dec-2014	09:00	22-Dec-14	18:00	Daily	For Preventive Maintenance	Sasan	Sasan	C
111	400	315 MVA Xmer - IVAt 400 KV S/S INDORE	23-Dec-14	9.00	23-Dec-14	17.00	daily	Tan delta of Bushing	MPPTCL	MPPTCL	R
112	400	Korba-Bhatapara	23-Dec-14	8:00	23-12.2014	18:00		For 800 KV HVDC Champoa-Kurukshetra Line Crossing	WRTS-I	PGCIL	R
113	400	Sipat 400KV/132KV IBT#2 transformer Tie Bay-11	23-Dec-14	7:30	24-Dec-14	19:00	Conti nous	Annual Preventive maintenance (IBT#2 S/D not required)	NTPC	NTPC	
114	HVDC	HVDC Pole-1 at B'vati	23-Dec-14	9:00	24-Dec-14	18:00	Daily	Yealy outage	WRTS-I	WRTS-I	
115	400	315MVA ICT-II Mapusa	23-Dec-14	9:00	23-Dec-14	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
116	400	Akola-Aurangabad-2	23-Dec-14	8:00	23-Dec-14	18:00	Daily	commissioning of 50MVAR L/R at Aurangabad	WRTS-I	WRTS-I	
117	765	Aurangabad-Wardha - II	23-Dec-14	8:00	23-Dec-14	18:00	Daily	Line AMP works	WRTS-I	WRTS-I	
118	765	765 KV Bus-1 at Wardha SS	23-Dec-14	8:00	24-Dec-14	18:00	Conti nuou s	Extension of Bus-1 for Aurangabad-3 & 4 Ckt.	WRTS-I	WRTS-I	
119	400	Bay 414(Bus reactor & Parli-1 Tie Bay)	23-Dec-14	8:00	23-Dec-14	18:00	Daily	AMP at Parli S/s	WRTS-I	WRTS-I	
120	765	Bina # 1 Switchable Reactor Circuit breaker - 81552 at Jabalpur Pooling	23-Dec-14	08:00	23-Dec-14	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
121	765/ 400	ICT-1 at Gwalior	23-Dec-14	10:00	23-Dec-14	18:00	Daily	For OLTC TESTING	PGCIL	WR-II	R
122	765	Bus I at Indore PG	23-Dec-14	09:00	23-Dec-14	17:00	Cont.	Bus bar Integration for 714 bay at Indore PG.	PGCIL	WR-II	C
123	400	400 KV Bus-2 (with Unit-30 Genrating Bay on Transfer Bus) at Sugen	23-Dec-14	9:00	23-Dec-14	18:00	Daily	Unit 30 Bay Bus 2 Isolator and Bay CB Bus side Earth Switch Preventive Maintenance	TPL-SUGEN	TPL-SUGEN	R
124	400	Mouda Khaperkeda(2) - 2, Future bays-416,417 and 418 dia	23-Dec-14	9:00	24-Dec-14	18:00	conti	Annual PM	NTPC	NTPC	
125	220	Kawas-Ichhapore 2	23-Dec-14	9:00	23-Dec-14	18:00	Daily	Pnematic Compressor Load test.	NTPC	NTPC	
126	220	Bhilad - Vapi (PG) - 2	23-Dec-14	9:00	23-Dec-14	18:00	Daily	PMM work		GETCO	
127	400	Kansari - Vadavi - 1	23-Dec-14	8:00	23-Dec-14	18:00	Daily	Bay Maintenance work		GETCO	
128	220	Khandwa-Chhegaon-2	23-Dec-14	10:00	23-Dec-14	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
129	220	Kawas - Navsari (PG) Ckt.1	23-Dec-14	08:00	23-Dec-14	18:00	Daily	Attending hot spots	PGCIL	WR-II	R
130	400	Bus Section -1 at Padghe-Nagothane Line-1	23-Dec-2014	09:00	28-Dec-14	18:00	Conti	Bus conductor stringing	MSETCL	MSETCL	C

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
131	400	Solapur-Parli#2 Line	24-Dec-14	9:00	25-Dec-14	18:00	Daily	Erection work of LA, BPI and aux. bus of spare transformer unit.	WRTS-I	WRTS-I	
132	400	Seoni- Bhilai ckt	24-Dec-14	9.00	24-Dec-14	18.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
133	220	DAMOH PG - TIKAMGARH CKT	24-Dec-14	9.00	24-Dec-14	18.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
134	400	Raipur- Wardha-I	24-Dec-14	9:00	24-Dec-14	17:00	Daily	For NTMC Work	WRTS-I	PGCIL	R
135	765	Seoni- Bilaspur -I (Main bay 710) at Bila	24-Dec-14	8:00	24-Dec-14	18:00	Daily	AMP works (DCRM & tan delta of grading capacitors)	WRTS-I	WRTS-I	
136	400	400 KV Main CB (412-52) Wardha - Raipur-2 at Raipur	24-Dec-14	9:00	24-Dec-14	18:00	Daily	Pull Rod Replacement work Rescheduled	WRTS-I	WRTS-I	
137	HVDC	(CWD DIA 50 Q51) at B'vati	24-Dec-14	9:00	24-Dec-14	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
138	400	220KV Transfer Bus Couler Bay (CB152& 1CT) at Mapusa	24-Dec-14	9:00	24-Dec-14	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
139	765	Bina # 2 Switchable Reactor Circuit breaker - 81852 at Jabalpur Pooling	24-Dec-14	08:00	24-Dec-14	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
140	765	Bina-Jabalpur-I	24-Dec-14	08:00	25-Dec-14	18:00	Daily	For Installation & commissioning of CSD relay at Bina	PGCIL	WR-II	C
141	400	Bus # I at Dehgam sub-station	24-Dec-14	09:00	24-Dec-14	18:00	Daily	AMP work	PGCIL	WR-II	R
142	765	1000 MVA ICT-2 Tie Bay (705) at Satna	24-Dec-14	09:00	24-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
143	400	400 KV Bus-2 (with 400 KV ICT 1 Bay on Transfer Bus)	24-Dec-14	9:00	24-Dec-14	18:00	Daily	ICT 1 Bay Bus 2 Isolator of 400kV and Bay CB Bus side Earth Switch Preventive Maintenance	TPL-SUGEN	TPL-SUGEN	R
144	220	Kawas- Navsari 1	24-Dec-14	9:00	24-Dec-14	18:00	Daily	PM of bay equipment.	NTPC	NTPC	
145	400	Khadka-Deepnagar I	24-Dec-14	9.00	24-Dec-14	17.00	Daily	CT tan delta,Relay testing, CB DCRM Measurement & Routine Line maint.	MSETCL	MSETCL	
146	400	Kansari - Vadavi - 2	24-Dec-14	8:00	24-Dec-14	18:00	Daily	Bay Maintenance work		GETCO	
147	400	SSNL-Dhule-2	24-Dec-14	8:00	25-Dec-14	18:00	Daily	PMM work		GETCO	
148	220	Bhilad - Vapi (PG) - 3	24-Dec-14	9:00	24-Dec-14	18:00	Daily	PMM work		GETCO	
149	220	Khandwa-Omkareshwer	24-Dec-14	10:00	24-Dec-14	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
150	400	Vapi - Navsari	24-Dec-14	08:00	24-Dec-14	18:00	Daily	Completion of LILO of Vapi-Navasari at Magarwada	PGCIL	WR-II	C
151	400	Navsari GIS - Magarwada	24-Dec-14	08:00	24-Dec-14	18:00	Daily	Completion of LILO of Vapi-Navasari at Magarwada	PGCIL	WR-II	C
152	400	Vapi - Kala	24-Dec-14	08:00	24-Dec-14	18:00	Daily	Completion of LILO of Vapi-Navasari at Magarwada	PGCIL	WR-II	C
153	400	Kala - Magarwada	24-Dec-14	08:00	24-Dec-14	18:00	Daily	Completion of LILO of Vapi-Navasari at Magarwada	PGCIL	WR-II	C
154	220	Kawas - Navsari (PG) Ckt.2	24-Dec-14	08:00	24-Dec-14	18:00	Daily	Attending hot spots	PGCIL	WR-II	R
155	765	Bus # 2 at Jabalpur Pooling Station	24-Dec-2014	09:00	24-Dec-14	18:00	Daily	Erection of Isolators for Commissioning of 765KV Dharmjaygarh # 3 Bays	PGCIL	WRTS-II	C
156	765	765/400 ICT-3 of Kotra PS	24-Dec-14	8:00	24-Dec-14	22:00	Daily	For erection of Auxiliary Bus for Spare IC	WRTS-1	POWERGRID	C
157	220	220KV Badod-Kota Ckt	24-Dec-14	9:00	24-Dec-14	12:00	Daily	for erection of 2no. Tower below existing line			
158	765	Tiroda - Akola line 1	25-Dec-14	7:00	26-Dec-14	19:00	Contin	Temporary arrangement to be converted as per final arrangement to Charge 765kV Koradi Substation	MEGPTCL	MEGPTCL	C
159	765	Seoni- Bilaspur -II (Tie bay 717) at Bilas	25-Dec-14	8:00	26-Dec-14	18:00	Daily	AMP works (DCRM & tan delta of grading capacitors)	WRTS-I	WRTS-I	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
160	765	Wardha - I Switchable LR at Seoni	25-Dec-14	8:00	29-Dec-14	18:00	Daily	Commissioning of Fire fighting system	WRTS-I	WRTS-I	
161	400	karad-kolhapur-1	25-Dec-14	8:00	28-Dec-14	18:00	con	Isloator maintenance work	MSETCL	MSETCL	
162	765	ICT#2 at Solapur	25-Dec-14	9:00	29-Dec-14	18:00	Daily	For fire fighting work and commissioning of spare ICT unit and AMP	WRTS-I	WRTS-I	
163	400	Bus #II at Dehgam sub-station	25-Dec-14	09:00	25-Dec-14	18:00	Daily	AMP WORK	PGCIL	WR-II	R
164	400	400 kV D/C Jabalpur - Itarsi Transmission Line (Ckt- I & II)	25-Dec-14	8:00	26-Dec-14	18:00	Continuous	Crossing of 765 KV D/C Bhopal-Jabalpur Line	PGCIL	BDTCL	
165	220	Navsari (PG) - Navsari (GETCO) Ckt.1	25-Dec-14	08:00	25-Dec-14	18:00	Daily	Attending hot spots	PGCIL	WR-II	R
166	765	Bus # 2 at Jabalpur Pooling Station	25-Dec-2014	09:00	25-Dec-14	18:00	Daily	Erection of Isolators for Commissioning of 765KV Dharmjaygarh # 3 Bays	PGCIL	WRTS-II	C
167	765	Bus 2A at Sasan	25-Dec-2014	09:00	25-Dec-14	18:00	Daily	For Preventive Maintenance	Sasan	Sasan	C
168	400	V'CHAL-Jabalpur-1	25-Dec-14	16:00	25-Dec-14	17:00	Daily	AMP (line outage for short period)	NTPC	NTPC	
169	765	Durg- Wardha- Ckt-1	26-Dec-14	9:00	27-Dec-14	18:00	Contir	For erection of Bushing of Spare reactor	WRTS-I	PGCIL	C
170	400	220KV Bus Couler Bay at Mapusa	26-Dec-14	9:00	26-Dec-14	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
171	765/4	ICT-2 & Boisar-2 L/R at Aurangabad	26-Dec-14	8:00	27-Dec-14	18:00	Contir	Commissioning of 426-Tie Bay	WRTS-I	WRTS-I	
172	400	400 KV Main CB (415-52) Wardha - Raipur-1 Main Bay at Raipur	26-Dec-14	9:00	26-Dec-14	18:00	Daily	Pull Rod Replacement work Rescheduled	WRTS-I	WRTS-I	
173	400	Aurangabad 1 LR at Akola	26-Dec-14	10:00	26-Dec-14	18:00	Daily	For DGA of bushings	WRTS-I	WRTS-I	
174	HVDC	Bay --CWD DIA 50 Q52 at B'vati	26-Dec-14	9:00	26-Dec-14	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
175	400	KOLHAPUR - MAPUSA LINE -I	26-Dec-14	9:00	20-Jan-15	18:00	Daily	OPGW WORK	WRTS-I	WRTS-I	
176	765	Bina # 1 Tie bay - 814 at Jabalpur Pooling	26-Dec-14	08:00	26-Dec-14	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
177	765	Jabalpur - 1 Main Bay at Bina	26-Dec-14	09:00	27-Dec-14	18:00	Daily	For Bay Maintenance workwork	PGCIL	WR-II	R
178	220	Bus #I at Pirana sub-station	26-Dec-14	09:00	27-Dec-14	18:00	Daily	For aluminium tube connection under Bus #I FOR NEW 220kv BAY	PGCIL	WR-II	C
179	765	240 MVAr Bus Reactor at Satna	26-Dec-14	09:00	26-Dec-14	16:00	Daily	For Taking Spare Reactor into Service at Satna.	PGCIL	WR-II	C
180	400	400 KV Bus-2 (with 400 KV ICT 2 Bay on Transfer Bus)	26-Dec-14	9:00	26-Dec-14	18:00	Daily	ICT 2 Bay Bus 2 Isolator of 400kV and Bay CB Bus side Earth Switch Preventive Maintenance	TPL-SUGEN	TPL-SUGEN	R
181	220	Kawas-Navsari 2	26-Dec-14	9:00	26-Dec-14	18:00	Daily	PM of bay equipment.	NTPC	NTPC	
182	400	Akola-Nandgaonpeth	26-Dec-14	9.00	26-Dec-14	17.00	Daily	Disc string replacement,fixing of spacers,dampers,earthbond	MSETCL	MSETCL	
183	400	Padgha-HVDC (A/C) II	26-Dec-14	9.00	26-Dec-14	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
184	220	Bhilad - TAPS	26-Dec-14	9:00	26-Dec-14	18:00	Daily	PMM work		GETCO	
185	765	Bus Reactor # 1 at Bina PG	26-Dec-14	09:00	28-Dec-14	18:00	Cont.	For commissioning of 765kV spare 80 MVAR BTW make BUS REACTOR - II, as both reactors are connected to the same bay in parallel.	PGCIL	WR-II	C
186	220	Navsari (PG) - Navsari (GETCO) Ckt.2	26-Dec-14	08:00	26-Dec-14	18:00	Daily	Attending hot spots	PGCIL	WR-II	R

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
187	400	Bus # 2 at Jabalpur Pooling Station	26-Dec-2014	09:00	#########	18:00	Daily	Erection/Jumper with Isolators for 400KV Bay No.: 413 of Jhabua Power Bays	PGCIL	WRTS-II	C
188	765	765/400 ICT-4 of Kotra PS	26-Dec-14	8:00	26-Dec-14	22:00	Daily	For erection of Auxiliary Bus for Spare IC	WRTS-1	POWERGRII	C
189	400	BUS#2 at 400KV AC Substation Bhadrawati	26-Dec-14	9:00	26-Dec-14	18:00	Daily	Connection of Bus Bar Protection for New ICT Bay at Bhadrawati	WRTS-I	WRTS-I	C
190	220	220KV Badod-Modak Ckt	26-Dec-14	13:00	26-Dec-14	15:00	Daily	for erection of 2no. Tower below existing line			
191	400	400KV Aurangabad(PG)-Aurangabad(MSETCL) ckt-2	27-Dec-14	9:00	28-Dec-14	17:00	Conti.	Replacement of HCB Isolator & Bay upgradation work	WRTS-I	WRTS-I	C
192	220	PITHAMPUR - RAJGARH PG CKT - I	27-Dec-14	9.00	27-Dec-14	16.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
193	220	D/C Korba(E) - Budhipadhar (CSEB)	27-Dec-14	8:00	28-Dec-14	18:00	Contir	Construction of 765KV D/C Korba - Jabalpur transmission line and 765KV S/C Ranchi -Korba TL respectively	CSPTCL	PGCIL	C
194	765	Seoni- Bilaspur -I (Tie bay 711) AT Bila	27-Dec-14	8:00	27-Dec-14	18:00	Daily	AMP works (DCRM & tan delta of grading capacitors)	WRTS-I	WRTS-I	
195	400	400 KV Tie Bay (411-52) Raipur-2 Tie bay	27-Dec-14	9:00	27-Dec-14	18:00	Daily	Pull Rod Replacement work Rescheduled	WRTS-I	WRTS-I	
196	765	Bina # 2 Tie bay - 817 at Jabalpur Pooling	27-Dec-14	08:00	27-Dec-14	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
197	765	Gwalior-1 Reactor Bay (712R) at Satna	27-Dec-14	09:00	27-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
198	400	400 KV Bus-2 (with 400 KV ICT 3 Bay on Transfer Bus)	27-Dec-14	9:00	27-Dec-14	18:00	Daily	ICT 3 Bay Bus 2 Isolator of 400kV and Bay CB Bus side Earth Switch Preventive Maintenance	TPL-SUGEN	TPL-SUGEN	R
199	220	Kawas-Haldarva 1	27-Dec-14	9:00	27-Dec-14	18:00	Daily	PM of bay equipment.	NTPC	NTPC	
200	400	Khadka-Deepnagar-II	27-Dec-14	9.00	27-Dec-14	17.00	Daily	CT tan delta,Relay testing, CB DCRM Measurement & Routine Line maint.	MSETCL	MSETCL	
201	400	Dhule-Khandwa Ckt.II	27-Dec-14	9.00	27-Dec-14	17.00	Daily	Q.M.work	MSETCL	MSETCL	
202	400	WTPS - Dehgam	27-Dec-14	8:00	27-Dec-14	12:00	Daily	PMU work		GETCO	
203	220	Vapi - TAPS	27-Dec-14	9:00	27-Dec-14	18:00	Daily	PMM work		GETCO	
204	400	Bus # 2 at Jabalpur Pooling Station	27-Dec-2014	09:00	27-Dec-14	18:00	Daily	Erection/Jumper with Isolators for 400KV Bay No.: 413 of Jhabua Power Bays	PGCIL	WR-II	C
205	400	Mundra-Jetpur Circuit #2	27-Dec-14	08:00	27-Dec-14	18:00	Daily	For fixing of opened spacers	PGCIL	WR-II	R
206	400	Rajgarh (Pgcil)- Ssp CKT II	28-Dec-14	6.00	8-Jan-15	18.00	daily	Maintenance Work	PGCIL/MPPTCL	WR - II	R
207	220	Bus #I at Pirana sub-station	28-Dec-14	09:00	29-Dec-14	18:00	Daily	For aluminium tube connection under Bus #II FOR NEW 220KV BAY	PGCIL	WR-II	C
208	220	Kawas-Vav 1	28-Dec-14	9:00	28-Dec-14	18:00	Daily	PM of bay equipment.	NTPC	NTPC	
209	400	Kalwa-Talegaon	28-Dec-14	8.00	28-Dec-14	18.00	Daily	Conversion of Single insulator string to Double suspension normal of insulator strings at road cross locations.	MSETCL	MSETCL	
210	765	765 KV Bhopal - Indore line with reacto	28-Dec-14	8:00	29-Dec-14	21:00	Contir	Erection of wave trap and commissioning	BDTCL	WR2	
211	400	Mundra-Jetpur Circuit #1	28-Dec-14	08:00	28-Dec-14	18:00	Daily	For fixing of opened spacers	PGCIL	WR-II	R

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212	400	Padghe Bus Section -2 at Padghe-Nagothane Line-1	29-Dec-14	9.00	2-Jan-15	17.00	Cont.	For replacement of 400kV Bus Conductor span above HVDC-II & Nagothane-1(Bus -1 conductor replacement, 400kv Taraput line on TBC)	MSETCL	MSETCL	
213	400	TIE BAY OF RAJGARH - I & RAJGARH - II LINE AT 400 KV S/S NAGDA	29-Dec-14	9.00	29-Dec-14	17.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
214	220	DAMOH PG - SAGAR CKT	29-Dec-14	9.00	29-Dec-14	18.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
215	400	Korba-Bhilai-2	29-Dec-14	8:00	29-Dec-14	18:00	Daily	For 800 KV HVDC Champoa-Kurukshetra Line Crossing	WRTS-I	PGCIL	C
216	400	Bhilai - Bhadrawati at Khedamara S/S	29-Dec-14	9:00	29-Dec-14	17:00	Daily	For AMP Work	WRTS-I	PGCIL	R
217	765	Bus Reactor Main Bay(706) at Bilaspur S/s	29-Dec-14	9:00	30-Dec-14	18:00	Daily	FOR AMP work	WRTS-I	PGCIL	R
218	400	V'CHAL-Jabalpur-3	29-Dec-14	7:30	29-Jan-14	8:00	Contir	AMP (line outage for short period)	NTPC	NTPC	
219	400	Sipat 400KV Raipur 2 line	29-Dec-14	7:30	3-Jan-15	19:00	Continous	All burnt/jointed control cables replacement	NTPC	NTPC	
220	400	315MVA ICT-III at Mapusa	29-Dec-14	9:00	29-Dec-14	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
221	765	Bus-2 at Aurangabad	29-Dec-14	8:00	30-Dec-14	18:00	Contir	Commissioning of 708-Tie Bay	WRTS-I	WRTS-I	
222	765	Seoni - Bilaspur -II line	29-Dec-14	8:00	30-Dec-14	18:00	Daily	Line AMP works	WRTS-I	WRTS-I	
223	765	765 KV Bus-2 at Wardha SS	29-Dec-14	8:00	29-Dec-14	20:00	Daily	Extension of Bus-2 at Raipur 3 & 4 ckt.	WRTS-I	WRTS-I	
224	765	Jabalpur - 2 Main Bay at Bina	29-Dec-14	09:00	30-Dec-14	18:00	Daily	For Bay Maintenance workwork	PGCIL	WR-II	R
225	765	Gwalior-1 Reactor Bay (712R) at Satna	29-Dec-14	09:00	29-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
226	400	New Koyna-Dabhol ckt 2	29-Dec-14	8.30	29-Dec-14	17.30	Daily	Q.M.work	MSETCL	MSETCL	
227	765	765kV S/C Sewani - Bina Transmission line	29-Dec-14	8:00	30-Dec-14	18:00	Continuous	Crossing of 765 KV D/C Bhopal-Jabalpur Line	PGCIL	BDTCL	
228	400	UNIT - 51 GENERATOR TRANSFORMER at DGEN	29-Dec-14	8:00	30-Dec-14	18:00	Conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
229	220	Khandwa-Nepanagar	29-Dec-14	10:00	29-Dec-14	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
230	400	125MVAr Bus Reactor # 2 at Khandwa	29-Dec-14	09:00	30-Dec-14	18:00	Cont.	For post commissioning checks of reactor	PGCIL	WR-II	C
231	765	Bus # 2 at Jabalpur Pooling Station	29-Dec-2014	09:00	29-Dec-14	18:00	Daily	Erection of Isolators for Commissioning of 765KV Dharmjaygarh # 4 Bays	PGCIL	WRTS-II	C
232	220	PITHAMPUR - RAJGARH PG CKT - II	30-Dec-14	9.00	30-Dec-14	16.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
233	765	Seoni-Wardha Line Ckt-I	30-Dec-14	8:00	30-Dec-14	18:00	Daily	Crossing work of 765 kV S/C Koradi-Akola Line Ckt-II [AMP]	PGCIL	MEGPTCL /	C
234	400	400KV ICT-III Main Bay(404) at Mapusa	30-Dec-14	9:00	30-Dec-14	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
235	765	765 KV Wardha- Raipur Ckt-2	30-Dec-14	9:00	30-Dec-14	18:00	Daily	Construction work of erection of Auxilliary Spare Bus at Wardha	WRTS-I	WRTS-I	
236	765	BUS#1 at Solapur	30-Dec-14	9:00	30-Dec-14	18:00	Daily	AMP WORK	WRTS-I	WRTS-I	
237	220	206 Bay (Bus coupler Bay) at Pune	30-Dec-14	9:00	30-Dec-14	13:00	Daily	AMP	WRTS-I	WRTS-I	
238	400	63MAVr Bus Reactor at Navsari GIS	30-Dec-14	09:00	01-Jan-15	20:00	Conti.	SF6 Leakage attending in Y phase LA at GIS Navsari.	PGCIL	WR-II	R
239	765	Bus Reactor Main Bay (710) at Satna	30-Dec-14	09:00	30-Dec-14	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
240	765	Bus reactor 2 at Indore PG	30-Dec-14	09:00	30-Dec-14	17:00	Cont.	For CSD Commissioning in 711/712 bay at Indore PG.	PGCIL	WR-II	C
241	400	Talandge Main Bus-ll	30-Dec-14	9.00	31-Dec-14	17.00	Daily	1) Replacement of 'R' ph & 'Y' ph Pantagraph Isolators of 400 kv Main Bus – II (B-Bus) of ICT 2 HV.2) Attending Hotspots at 400Kv Bus-II Hangers.3) Insulators cleaning of 400Kv Bus II.	MSETCL	MSETCL	
242	765	Bus # 2 at Jabalpur Pooling Station	30-Dec-2014	09:00	31-Dec-14	18:00	cont.	Erection of 765kV 7CB Tower of 801 Jack Bus	PGCIL	WRTS-II	C
243	765	Bus 1A AT Sasan	30-Dec-2014	09:00	30-Dec-14	18:00	Daily	For Preventive Maintenance	Sasan	Sasan	C
244	400	ACBIL Tie Bay(415) at Bilaspur S/s	31-Dec-14	9:00	31-Dec-14	18:00	Daily	FOR AMP work	WRTS-I	PGCIL	R
245	765	Seoni - Bilaspur -I line	31-Dec-14	8:00	01-Jan-15	18:00	Daily	Line AMP works	WRTS-I	WRTS-I	
246	220	204 Bay (Transfer Bus Bay) at Pune	31-Dec-14	9:00	31-Dec-14	13:00	Daily	AMP	WRTS-I	WRTS-I	
247	400	Lamboti-Solapur PG	31-Dec-14	9.00	31-Dec-14	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
248	400	V'CHAL-Jabalpur-3	1-Jan-15	17:30	1-Jan-15	18:00	Contir	AMP (line outage for short period)	NTPC	NTPC	
249	765	Bus # 2 at Jabalpur Pooling Station	1-Jan-15	09:00	2-Jan-2015	18:00	cont.	Erection of Conductor String etc. for 765kV 7CB Tower of 801 Jack Bus	PGCIL	WRTS-II	C
250	765	ICT#1 Main Bay(724) at Bilaspur S/s	1-Jan-15	9:00	2-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
251	HVDC	CWD DIA 20 Q50 at B'vati	1-Jan-15	9:00	1-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
252	400	400 KV Wardha - Parli CKT I &II	1-Jan-15	8:00	15-Jan-15	18:00	Daily	Additional earthing work (Autoreclosed to Non Automode)	WRTS-I	WRTS-I	
253	400	Vadavi-Bhachau 1	1-Jan-15	8:00	1-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
254	400	400 KV DGEN-NAVSARI LINE - 2	1-Jan-15	8:00	2-Jan-15	18:00	conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
255	400	Khandwa-Itarsi-1	1-Jan-15	10:00	1-Jan-15	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
256	HVDC	Bay ---CWD DIA 20 Q52 at B'vati	2-Jan-15	9:00	2-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
257	765	Padghe-1 L/Reactor at Aurangabad	02-Jan-15	8:00	05-Jan-15	18:00	Daily	FF work and 1-ph Isolator operation and interlock checking	WRTS-I	WRTS-I	
258	765	Bus Reactor (Main bay 713) at Seoni	2-Jan-15	8:00	03-Jan-15	18:00	Daily	AMP works (DCRM & tan delta of grading capacitors)	WRTS-I	WRTS-I	
259	400	Solpaur-Kolhapur# 1 & 2 Line	02-Jan-15	9:00	03-Jan-15	18:00	Daily	Stringging work of 400Kv NTPC line	WRTS-I	WRTS-I	
260	400	ICT#I at Pirana Sub-Station	2-Jan-15	09:00	02-Jan-15	15:00	Daily	AMP work, all precommissioning checks will be carried out	PGCIL	WR-II	R
261	400	500 MVA ICT-3 & 220 KV BUS- II at Navsari GIS	2-Jan-15	09:00	04-Jan-15	20:00	Cont.	SF6 Leakage attending in 220 KV bus-II Y phase at GIS Navsari.	PGCIL	WR-II	C
262	765	Satna-Bina Line#1 Reactor at Satna	2-Jan-15	09:00	02-Jan-15	16:00	Daily	For Taking Spare Reactor into Service at Satna.	PGCIL	WR-II	C
263	765	Jabalpur -2 / Gwalior- 3 Tie Bay at Bina	2-Jan-15	09:00	03-Jan-15	18:00	Daily	For Bay Maintenance workwork	PGCIL	WR-II	R
264	400	Bhusawal-Akola	2-Jan-15	9.00	2-Jan-15	17.00	Daily	Disc string replacement,fixing of spacers,dampers,earthbond	MSETCL	MSETCL	
265	400	Kalwa-Khargar	2-Jan-15	9.00	2-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
266	400	400 KV Hadala-Amreli	2-Jan-15	7:00	2-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
267	400	Khandwa-Dhule-1	2-Jan-15	10:00	2-Jan-15	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
268	400	Bus Reactor at Sasan	2-Jan-2015	09:00	2-Jan-2015	18:00	Daily	For Preventive Maintenance	Sasan	Sasan	C

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
269	400	HVDC-1 interconnector CB 252 at B'vati	3-Jan-15	9:00	3-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
270	765	765 KV Seoni-1 Main Bay-704 bay at Bilaspur	03-Jan-15	9:00	03-Jan-15	18:00	Daily	AMP work of Main Bay	WRTS-I	WRTS-I	
271	765 KV	BUS#2 at Solapur	03-Jan-15	9:00	03-Jan-15	18:00	Daily	AMP WORK	WRTS-I	WRTS-I	
272	400	Aurangabad 2 LR at Akola	03-Jan-15	10:00	03-Jan-15	18:00	Daily	For DGA of bushings	WRTS-I	WRTS-I	
273	400 KV	BVT- Dhariwal & Dhariwal- BVT 400 KV D/C Tr. Line	03-Jan-15	11:00	03-Jan-15	15:00	four hours	To attened/ tightening work of bolts/ jumpers connections on Wave traps of both lines at Dhariwal 400 KV s/s.	WRTS-I	RPG	
274	400 KV	BVT- Dhariwal & Dhariwal- BVT 400 KV D/C Tr. Line	03-Jan-15	9:00	18-Jan-15	17:30	Daily	No outage of line required. Hot line maintenance of newly constructed 15.5 KM transmission line will be done. Only Auto reclosure of lines to kept off during maintenance period.	WRTS-I	RPG	
275	400	Indore -Asoj Ckt. 3	3-Jan-15	09:00	03-Jan-15	18:00	Daily	For re-stringing of conductor theft by miscreants [Distance Relay Checking for bay no 715 which is presently out but meant for 765 kV indore-Vadodara line with switchable reactor.]	PGCIL	WR-II	R
276	220	Bus # 1 at Dehgam sub-station	3-Jan-15	09:00	03-Jan-15	18:00	Daily	AMP WORK	PGCIL	WR-II	R
277	765	Sasan-Satna Line#1	3-Jan-15	10:00	03-Jan-15	14:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
278	400	Dhule-Babhleswar ckt 1	3-Jan-15	9.00	3-Jan-15	17.00	Daily	Q.M.work	MSETCL	MSETCL	
279	400	Vadavi-Bhachau 2	3-Jan-15	8:00	3-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
280	400	400 KV Hadala-Amreli	3-Jan-15	7:00	3-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
281	400	Kosamba- Ukai- 2	3-Jan-15	8:00	4-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
282	400	400 KV D/C Korba-Raipur 3&4	03-Jan-15	8:00	04-Jan-15	18:00	Continuous	Crossing of 765 KV D/C Dharamjaygarh-Jabalpur Line(AP64-AP65)	PGCIL	JTCL	
283	400	Khandwa-Dhule-2	3-Jan-15	10:00	3-Jan-15	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
284	220	Bus # 2 at Dehgam sub-station	4-Jan-15	09:00	04-Jan-15	18:00	Daily	AMP WORK	PGCIL	WR-II	R
285	400	Pirana - Asoj	4-Jan-15	09:00	05-Jan-15	18:00	Daily	For re-stringing of conductor theft by miscreants	PGCIL	WR-II	C
286	400	Mundra HVDC AC filter Bank#1	4-Jan-15	8:00	5-Jan-15	18:00	Daily	AMP	ADANI	ADANI	
287	400	Koradi-Bhilai -S/c	5-Jan-15	9:00	9-Jan-15	18:00	Continous	for tower shifting	WRTS-I	WRTS-I	C
288	220	Kawas-Navsari 1	5-Jan-15	9:00	8-Jan-15	18:00	Continous	Refrofitting work of Distance protection in Channel 1 and replacement of LBB Protection.	NTPC	NTPC	
289	765	Seoni#1 Main Bay (704) at Bilaspur S/s	5-Jan-15	9:00	6-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
290	400	Bhilai - Korba(NTPC #2) at Khedamara	5-Jan-15	9:00	5-Jan-15	17:00	Daily	For AMP Work	WRTS-I	PGCIL	R
291	400	Vindhyachal-Satna-1	5-Jan-15	07:30 hr	6-Jan-15	17:30 H	Contir	For Major Over Hauling of 400 KV main Circuit Breaker	NTPC	NTPC	
292	400	Vindhyachal-Satna-1 LR at V'chal	5-Jan-15	07:30 hr	8-Jan-15	17.30 H	Contir	AMP (Line outage not required)	NTPC	NTPC	
293	400	400kV B'vati Chandrapur-1 line	5-Jan-15	9:00	5-Jan-15	18:00	Conti	Yealy AMP at GCR C'Pur	WRTS-I	MSETCL	
294	765	765 KV Seoni-2 Main Bay -701 bay	05-Jan-15	9:00	05-Jan-15	18:00	Daily	AMP work of Main Bay	WRTS-I	WRTS-I	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
295	765	Raichur#1 LR at Solapur	05-Jan-15	9:00	06-Jan-15	18:00	Daily	Fire Fighting and AMP	WRTS-I	WRTS-I	
296	400	ICT # 3 at Pune	05-Jan-15	9:00	05-Jan-15	13:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
297	765	Sasan #1 Main Bay (706) at Satna	5-Jan-15	09:00	06-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
298	765	1500 MVA ICT - II at Indore	5-Jan-15	09:00	08-Jan-15	17:00	Cont.	For Spare ICT Commissioning, Integration of Protection & Control for 33 KV Tertiary at Indore PG.	PGCIL	WR-II	C
299	765	Gwalior- 3 Main Bay at Bina	5-Jan-15	09:00	06-Jan-15	16:00	Daily	For Bay Maintenance workwork	PGCIL	WR-II	R
300	400	Bhusawal-Aurangabad	5-Jan-15	9.00	5-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
301	400	Karad-Kolhapur Ckt II	5-Jan-15	9.00	5-Jan-15	17.00	Daily	Annual maintenance work,	MSETCL	MSETCL	
302	400	SSNL-Dhule-1	5-Jan-15	8:00	7-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
303	400	Kosamba- Ukai- 3	5-Jan-15	8:00	6-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
304	400	400 KV Hadala-Amreli	5-Jan-15	7:00	5-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
305	400	400 KV DGEN-NAVSARI LINE - 1	5-Jan-15	8:00	6-Jan-15	18:00	conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
306	400	Khandwa-Itarsi-2	5-Jan-15	10:00	5-Jan-15	15:00	Daily	NTAMC Work	PGCIL	WR-II	C
307	400	Bus Reactor # 1 (Main & Tie Bay) at Jabalpur Pooling Station	5-Jan-2015	09:00	5-Jan-2015	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
308	400	Katni- Damoh ckt	6-Jan-15	9.00	6-Jan-15	18.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
309	400	D/C Korba - Khedamara (CSEB) line	6-Jan-15	8:00	7-Jan-15	18:00	Contir	Construction of 765KV D/C Korba - Jabalpur transmission line and 765KV S/C Ranchi -Korba TL respectively	WRTS-I	PGCIL	C
310	765	765/400 ICT-1 of Tamnar PS	6-Jan-15	10:00	15-Jan-15	18:00	Contir	GANTRY TOWER TG & BEAM ERECTION (TG & TH) for bay extension work of M/s TRN BAYS	WRTS-I	PGCIL	C
311	400	Sipat 400KV/132KV IBT#2 transformer Tie Bay-10	6-Jan-15	7:30	7-Jan-15	19:00	Conti nous	Annual Preventive maintenance (IBT#2 S/D not required)	NTPC	NTPC	
312	400	400kV B'vati-Chandrapur-2 line	6-Jan-15	9:00	6-Jan-15	18:00	Daily	Yealy AMP at GCR C'Pur	WRTS-I	MSETCL	
313	400	400KV ICT-III Tie Bay (405) at Mapusa	06-Jan-15	9:00	06-Jan-15	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
314	765	Padghe-2 L/Reactor at Aurangabad	06-Jan-15	8:00	09-Jan-15	18:00	Daily	FF work and 1-ph Isolator operation and interlock checking	WRTS-I	WRTS-I	
315	400	Tarapur- Padghe I	06-Jan-15	8:00	6-Jan-15	17:00	Daily	insulator replacement	WRTS-I	WRTS-I	
316	765	765 KV Wardha-Aurangabad Ckt-2 at Wardha	06-Jan-15	9:00	06-Jan-15	18:00	Daily	Balance construction works	WRTS-I	WRTS-I	
317	400	400 KV Akola-1 Main bay at Wardha ss	06-Jan-15	9:00	06-Jan-15	18:00	Daily	AMP work of Main Bay	WRTS-I	WRTS-I	
318	400	Indore - Asoj Ckt.3	6-Jan-15	09:00	06-Jan-15	18:00	Daily	Jumpering / Bunching for charging of uncharged portion of line in Multi circuit towers to prevent theft.	PGCIL	WR-II	C
319	400	Pirana - Asoj	6-Jan-15	09:00	06-Jan-15	18:00	Daily	Jumpering / Bunching for charging of uncharged portion of line in Multi circuit towers to prevent theft.	PGCIL	WR-II	C
320	765	240MVAR, Bus Reactor #2 at Jabalpur Pooling	6-Jan-15	08:00	06-Jan-15	18:00	Daily	AMP OF Bus reactor &associted bay quipment	PGCIL	WR-II	R
321	765	SATNA - 1 MAIN BAY 713 at Gwalior	6-Jan-15	10:00	07-Jan-15	18:00	Daily	AMP WORKS	PGCIL	WR-II	R
322	400	Nagda - Dehgam # 1 LR at Nagda	6-Jan-15	10:00	6-Jan-15	18:00	Daily	For Annual maintenance work of LR at Nagda. Line may be be charged after taking LR out of service.	PGCIL	WR-II	R

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
323	500kV	Padgha HVDC Pole-I	6-Jan-15	8.00	7-Jan-15	18.00	Cont.	Replacement of insulating oil of Diverter switches of On-load tap changers of Converter transformers.	MSETCL	MSETCL	
324	220	Ranasan-Dehgam (PG) line - 1	6-Jan-15	8:00	6-Jan-15	18:00	Daily	Replacement of Isolator	GETCO	GETCO	
325	220	I'pore-Kawas-1	6-Jan-15	8:00	6-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
326	400	Bus # 2 at Bhachau	6-Jan-15	10:00	7-Jan-15	18:00	Cont.	For busbar extension works for upcoming bays.	PGCIL	WR-II	C
327	765	1500MVA ICT # 1 (Main & Tie Bay) at Jabalpur Pooling Station	6-Jan-2015	09:00	6-Jan-2015	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
328	765	Bus 2B at Sasan	6-Jan-2015	09:00	6-Jan-2015	18:00	Daily	For Preventive Maintenance	Sasan	Sasan	C
329	400	Parli-Parli Ckt#1 alongwith Bus#1 at MSETCL Girawali with TBC free	6-Jan-15	8:00	6-Jan-15	18:00	Daily	For replacement & alignment work of PG Isolator of Bus#1 and TBC bus.	MSETCL	WRTS-I	
330	400	Mundra HVDC AC filter Bank#2	6-Jan-15	8:00	7-Jan-15	18:00	Daily	AMP	ADANI	ADANI	
331	400	400 KV Hadala-Amreli	7-Jan-15	7:00	7-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
332	765	Seoni#1 Tie Bay (705) at Bilaspur S/s	7-Jan-15	9:00	8-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
333	400	Korba-Bhilai-1	7-Jan-15	8:00	7-Jan-15	18:00	Daily	For 800 KV HVDC Champoa-Kurukshetra Line Crossing	WRTS-I	PGCIL	C
334	400	Bus Reactor Main bay CB 952 at B'vati	7-Jan-15	9:00	7-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
335	220 KV	220KV Mapusa - Ponda Line	07-Jan-15	9:00	07-Jan-15	18:00	Daily	AMP WORKS	GOA	WRTS-I	
336	400	Tarapur- Padghe II	07-Jan-15	8:00	7-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
337	765	765/400 KV AT-1 at Seoni	07-Jan-15	8:00	08-Jan-15	18:00	Continous	Inspection of isolator with M/s Coleme as per instruction of CC and Spare transformer shall taken in sevice	WRTS-I	WRTS-I	
338	400	ICT#1at Solapur	07-Jan-15	9:00	07-Jan-15	18:00	Daily	Fire Fighting and AMP	WRTS-I	WRTS-I	
339	220	208 Bay (220KV Talegaon Urse Line # 2) presently line does not exist	07-Jan-15	8:00	07-Jan-15	13:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
340	765	240MVAR Bus reactor # 2 Main bay - 804 at Jabalpur Pooling	7-Jan-15	08:00	07-Jan-15	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
341	220	Kakrapar- Vav Ckt I	7-Jan-15	09:00	07-Jan-15	15:00	Daily	AMP of bay equipment	PGCIL	WR-II	R
342	765	Sasan #2 Main Bay (707) at Satna	7-Jan-15	09:00	08-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
343	400	Nagda - Dehgam # 2 LR at Nagda	7-Jan-15	10:00	7-Jan-15	18:00	Daily	For Annual maintenance work of LR at Nagda. Line may be be charged after taking LR out of service.	PGCIL	WR-II	R
344	765	Jabalpur - 1 Tie Bay at Bina	7-Jan-15	09:00	08-Jan-15	18:00	Daily	For Bay Maintenance workwork	PGCIL	WR-II	R
345	400	Karad-Jaigad II	7-Jan-15	9.00	7-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
346	220	I'pore-Kawas-2	7-Jan-15	8:00	7-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
347	220	Navsari - Nasik - 1	7-Jan-15	9:00	10-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
348	220	Haldarva - Jhanor - 1 (NTPC)	7-Jan-15	8:00	7-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
349	400	UNIT - 52 GENERATOR TRANSFORMER	7-Jan-15	8:00	8-Jan-15	18:00	conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
350	765	1500MVA ICT # 2 (Main & Tie Bay) at Jabalpur Pooling Station	7-Jan-2015	09:00	7-Jan-2015	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
351	400	Parli-Parli Ckt#2 alongwith Bus#2 at MSETCL Girawali with TBC free	7-Jan-15	8:00	7-Jan-15	18:00	Daily	For replacement & alignment work of PG Isolator of Bus#2 and TBC bus.	MSETCL	WRTS-I	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
352	220	207 Bay (220KV Talegaon MSETCL Line # 2)	08-Jan-15	9:00	08-Jan-15	13:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
353	400	Bhilai - Raipur #1 Line at Khedamara S	8-Jan-15	9:00	8-Jan-15	17:00	Daily	For attanding HOT Spot	WRTS-I	PGCIL	R
354	765	Sipat 765KV Bus sectionilser Bay-17 (Bus sectionalizer between bus 2 &4)	8-Jan-15	7:30	9-Jan-15	19:00	Continous	CB DCRM to be done in front of Alstom representative	NTPC	NTPC	
355	HVDC	HVDC West Bus-2 at B'vati	8-Jan-15	9:00	8-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
356	220 KV	220KV Mapusa - Amona Line	08-Jan-15	9:00	08-Jan-15	18:00	Daily	AMP WORKS	GOA	WRTS-I	
357	400	Tarapur- Padghe I	8-Jan-15	8:00	8-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
358	765	Bay 717 Tie Bay of Raichur#1 & Bus Reactor at Solapur	08-Jan-15	9:00	08-Jan-15	18:00	Daily	CT replacement and AMP	WRTS-I	WRTS-I	
359	220	209 Bay (220KV ICT# 3 SIDE BAY) at Mapusa	08-Jan-15	9:00	08-Jan-15	13:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
360	400	Gandhar - Navsari Ckt.1	8-Jan-15	08:00	10-Jan-15	18:00	Daily	Replacement of porcelain insulator strings with polymer insulators	PGCIL	WR-II	C
361	765	240MVAR Bus reactor # 2 Tie Bay - 805 at Jabalpur Pooling	8-Jan-15	08:00	08-Jan-15	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
362	765	SATNA-1 BINA-2 Tie bay 714 at Gwalior	8-Jan-15	10:00	09-Jan-15	18:00	Daily	AMP WORKS	PGCIL	WR-II	R
363	220	Kakrapar -Vav Ckt II	8-Jan-15	09:00	08-Jan-15	15:00	Daily	AMP of bay equipment	PGCIL	WR-II	R
364	220	Ranasan-Dehgam (PG) line - 2	8-Jan-15	8:00	8-Jan-15	18:00	Daily	Replacement of Isolator	GETCO	GETCO	
365	400	400 KV Hadala-Amreli	8-Jan-15	7:00	8-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
366	400	400KV Chorania-Hadala	8-Jan-15	8:00	8-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
367	765	Bus Reactor # 2 (Main & Tie Bay) at Jabalpur Pooling Station	8-Jan-2015	09:00	8-Jan-2015	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
368	220	220Kv Badod-Modak	08-Jan-15	9:00	08-Jan	17:00		schedule maintence			
369	220	Kawas-Navsari 2	9-Jan-15	9:00	12-Jan-15	17:00	0	Refrofitting work of Distance protection in Channel 1 and replacement of LBB Protection.	NTPC	NTPC	
370	765	Seoni#2 Main Bay (707) at Bilaspur S/s	9-Jan-15	9:00	10-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
371	HVDC	HVDC CWC-1 filter bus at B'vati	9-Jan-15	9:00	9-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
372	400	Tarapur- Padghe II	9-Jan-15	8:00	9-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
373	765	765/400 KV AT-2 at Seoni	09-Jan-15	8:00	10-Jan-15	18:00	Daily	Inspection of isolator with M/s Coleme as per instruction of CC	WRTS-I	WRTS-I	
374	765 KV	Bay 706 ICT#2 Main Bay at Solapur	09-Jan-15	9:00	09-Jan-15	18:00	Daily	CT replacement and AMP	WRTS-I	WRTS-I	
375	220	210 Bay (220KV Talegaon chakan Line # 1 Bay) presently line does not exist	09-Jan-15	9:00	09-Jan-15	13:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
376	765	1500MVA ICT # 2 Main Bay - 806 at Jabalpur Pooling	9-Jan-15	08:00	09-Jan-15	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
377	765	Sasan #2 Tie Bay (708) at Satna	9-Jan-15	09:00	10-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
378	400	Akola-Wardha I	9-Jan-15	9.00	9-Jan-15	17.00	Daily	Q.M.work	MSETCL	MSETCL	
379	400	Deepnagar-Aurangabad I	9-Jan-15	9.00	9-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
380	500kV	Padgha HVDC Pole-II	9-Jan-15	8.00	10-Jan-15	18.00	Cont.	Replacement of insulating oil of Diverter switches of On-load tap changers of Converter transformers.	MSETCL	MSETCL	
381	400	Asoj - SSP	9-Jan-15	8:00	10-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
382	220	Haldarva - Jhanor - 2 (NTPC)	9-Jan-15	8:00	9-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
383	400	400 KV Hadala-Amreli	9-Jan-15	7:00	9-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
384	220	220 KV D/C KORBA - Mopka	09-Jan-15	8:00	10-Jan-15	18:00	Conti	Crossing of 765 KV D/C Dharamjaygarh-Jabalpur Line(AP34-AP35)	CSPDCL	JTCL	
385	400	400 / 220 KV ICT - 1 at DGEN	9-Jan-15	8:00	10-Jan-15	18:00	Conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
386	765	JBP - Dharmjaygarh Reactor Line # 1 Reactor at Jabalpur Pooling Station	9-Jan-2015	09:00	9-Jan-2015	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
387	400	315 MVA ICT 1 at Seoni	10-Jan-15	8:00	10-Jan-15	17:00	daily	AMP work	WRTS-I	WRTS-I	
388	400	400KV Kolhapur - Mapusa Line -I	10-Jan-15	9:00	14-Jan-15	18:00	Daily	The shutdown which was approved from 13.09.2014 to 17.09.2014 could not be availed due to mansoon season extended	WRTS-I	WRTS-I	
389	765	Bus-1 at Aurangabad	10-Jan-15	8:00	13-Jan-15	18:00	Daily	Fixing of spacers	WRTS-I	WRTS-I	
390	400	Tarapur- Padghe I	10-Jan-15	8:00	10-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
391	765 KV	Bay 716 Main Bay Rachur#1 at Solapur	10-Jan-15	9:00	10-Jan-15	18:00	Daily	CT replacement and AMP	WRTS-I	WRTS-I	
392	220	211 Bay (220KV Talegaon chakan Line # 2 Bay) at Talegaon presently line does not exist	10-Jan-15	9:00	10-Jan-15	13:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
393	765	Dharamjaygarh # 1 main Bay - 807 at Jabalpur Pooling	10-Jan-15	08:00	10-Jan-15	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
394	400	Dhule-S'Sarovar I	10-Jan-15	9.00	10-Jan-15	17.00	Daily	Q.M.work	MSETCL	MSETCL	
395	400	400 KV Hadala-Amreli	10-Jan-15	7:00	10-Jan-15	17:00	Daily	Tan Delta & PMM work	GETCO	GETCO	
396	765	JBP - BINA # 3 Line Reactors (Main & Tie Bay) at Jabalpur Pooling Station	10-Jan-2015	09:00	10-Jan-15	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
397	400	Tarapur- Padghe II	11-Jan-15	8:00	11-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
398	400	Gandhar - Navsari Ckt.2	11-Jan-15	08:00	13-Jan-15	18:00	Daily	Replacement of porcelain insulator strings with polymer insulators	PGCIL	WR-II	C
399	400	Bus Reactor # 2 (Main & Tie Bay) at Jabalpur Pooling Station	11-Jan-2015	09:00	11-Jan-15	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
400	400	Bhachau -Vadavi Circuit #1&2	12-Jan-15	08:00	18-Jan-15	18:00	Conti.	Shifting of towers to maintain clearance for SSNL canal crossing (Loc. 26-33 & 78-84).	PGCIL	WR-II	C
401	220	MALANPUR - AURAIYA CKT	12-Jan-15	9.00	13-Jan-15	17.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
402	765	Sipat#1 Main Bay (709) at Bilaspur S/s	12-Jan-15	9:00	13-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
403	400	Raipur - Tamnaar- I With L/R	12-Jan-15	9:00	12-Jan-15	17:00	Daily	For L/R Bushing Replacemet (B - Phase)	JSPL	PGCIL	R
404	400	Tie Transformer#3 AT Korba	12-Jan-15	07:30 hr	26-Jan-15	17:30 H	Contir	No S/D reqd only shifting of Main breaker to TBC needs to be carried out	NTPC	NTPC	
405	400	Sipat 400KV Ranchi -1 line	12-Jan-15	7:30	17-Jan-15	19:00	Continous	All burnt/jointed control cables replacement	NTPC	NTPC	
406	HVDC	HVDC CWC-2 filter bus at B'vati	12-Jan-15	9:00	12-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
407	220	220KV Ponda Main Bay (CB 252) at Mapusa	12-Jan-15	9:00	12-Jan-15	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
408	765	Bus reactor at Seoni	12-Jan-15	8:00	14-Jan-15	18:00	Continuous	Spare reactor shall taken in service	WRTS-1	WRTS-I	
409	400	400 KV Main Bay (406) at Wardha Wardha-Parli # ckt-1	12-Jan-15	8:00	12-Jan-15	18:00	Daily	Pull Rod Replacement work Rescheduled	WRTS-I	WRTS-I	
410	765	Dharamjaygarh # 1 Tie Bay (808) & Future bay (809) at Jabalpur Pooling	12-Jan-15	08:00	12-Jan-15	20:00	Daily	AMP OF BAY Equipment	PGCIL	WR-II	R
411	765	Bina - 2 MAIN BAY 718 at Gwalior	12-Jan-15	10:00	13-Jan-15	18:00	Daily	AMP WORKS	PGCIL	WR-II	R
412	765	Bina #1 Main Bay (703) at Satna	12-Jan-15	09:00	13-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
413	400	Indore Asoj#3	12-Jan-15	09:00	13-Jan-15	17:00	Cont.	For testing of proection transfer in TBC for Asoj #3 bay at Indore MPPTCL.	PGCIL	WR-II	C
414	400	New Koyna-Karad ckt 1	12-Jan-15	8.30	12-Jan-15	17.30	Daily	Q.M.work	MSETCL	MSETCL	
415	400	SSNL-Dhule-2	12-Jan-15	8:00	14-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
416	220	Vapi - Vapi (PG)	12-Jan-15	9:00	12-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
417	400	400 KV Amreli-Jetpur 2	12-Jan-15	8:00	12-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
418	400	400 / 220 KV ICT - 2	12-Jan-15	8:00	13-Jan-15	18:00	TWO DAYS CONTINUOUS	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
419	765	Bus Reactor # 1 (Main & Tie Bay) at Jabalpur Pooling Station	12-Jan-2015	09:00	12-Jan-15	18:00	cont.	Installation & Commissioning of CSD Relay	PGCIL	WR-II	C
420	220	DAMOH PGCIL I/C - II	13-Jan-15	9.00	13-Jan-15	18.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
421	220	Kawas-Vav 1	13-Jan-15	9:00	15-Jan-15	0:00	daily	Refrofitting work of Distance protection in Channel 1 and replacement of LBB Protection.	NTPC	NTPC	
422	400	V'CHAL-Satna-1	13-Jan-15	07:30 hr	13-Jan-14	17:30 H	Daily	Erection of Breaker after O/H.	NTPC	NTPC	
423	400 KV	400KV Bhilai-1 main breaker CB1552	13-Jan-15	9:00	13-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
424	220	220KV Amona Main Bay (CB 352) at Mapusa	13-Jan-15	9:00	13-Jan-15	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
425	400	Boisar - Padghe	13-Jan-15	8:00	13-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
426	400 KV	Karad Line Reactor at Solapur	13-Jan-15	9:00	13-Jan-15	18:00	Daily	Fire fighting work	WRTS-I	WRTS-I	
427	400	Mundra-Limbdi Circuit #1	13-Jan-15	08:00	13-Jan-15	18:00	Daily	For fixing of opened spacers	PGCIL	WR-II	R
428	220	MEHGAON - AURAIYA CKT	14-Jan-15	9.00	15-Jan-15	17.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
429	220	ANOOPUR - KOTMIKALA CKT - I	14-Jan-15	10.00	14-Jan-15	17.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
430	400	Raipur- Korba #4 Old Chandarpur #3 at Raipur S/s	14-Jan-15	9:00	14-Jan-15	17:00	Daily	AMP Work	WRTS-I	PGCIL	R
431	765	Dharmjaygarh line Main Bay(716) at Bil	14-Jan-15	9:00	15-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
432	400	400KV Bhilai-1 & Raipur-3 tie bay CB1452 at Raipur	14-Jan-15	9:00	14-Jan-15	18:00	Daily	Yealy AMP	WRTS-I	WRTS-I	
433	220	220KV ICT-II Main Bay (CB 452) at Mapusa	14-Jan-15	9:00	14-Jan-15	18:00	Daily	AMP WORKS	WRTS-I	WRTS-I	
434	400	Boisar - Padghe	14-Jan-15	8:00	14-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
435	400	400 KV Main Bay (409) at Wardha Wardha-Parli # ckt-1	14-Jan-15	9:00	14-Jan-15	18:00	Daily	Pull Rod Replacement work Rescheduled	WRTS-I	WRTS-I	
436	400	Mundra-Limbdi Circuit #2	14-Jan-15	08:00	14-Jan-15	18:00	Daily	For fixing of opened spacers	PGCIL	WR-II	R
437	400	ISP - Nagda ckt	15-Jan-15	9.00	15-Jan-15	18.00	daily	Maintenance Work Of line &Tie bay at 400 kv s/s Nagda	MPPTCL	MPPTCL	R
438	220	SEONI PG - CHHINDWARA CKT- I	15-Jan-15	9.00	15-Jan-15	18.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
439	400	Korba-Vihdyachal -2	15-Jan-15	07:30 hr	17-01-2015	17:30 H	Contir	For Breaker, CT and Line reacgtor testing	NTPC	NTPC	
440	400	KOLHAPUR - MAPUSA LINE -II	15-Jan-15	9:00	19-Jan-15	18:00	Daily	The shutdown which was approved from 18.09.2014 to 22.09.2014 could not be availed due to mansoon season extended .	WRTS-I	WRTS-I	
441	400	Boisar - Padghe	15-Jan-15	8:00	15-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
442	400	Navsari - Vapi	15-Jan-15	08:00	16-Jan-15	18:00	Daily	Replacement of porcelain insulator strings with polymer insulators	PGCIL	WR-II	C
443	400	315 ICT # 3 at Gwalior	15-Jan-15	10:00	15-Jan-15	16:00	Daily	AMP WORKS	PGCIL	WR-II	R
444	765	Bina #1 Reactor Bay (703R) at Satna	15-Jan-15	09:00	16-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
445	400	Indore - Indore ckt#2	15-Jan-15	09:00	16-Jan-15	17:00	Cont.	For testing of proection transfer in TBC for Indore #2 bay at Indore MPPTCL.	PGCIL	WR-II	C
446	400	Lonikand-Chakan	15-Jan-15	9.00	15-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
447	400	UNIT - 53 GENERATOR TRANSFORMER	15-Jan-15	8:00	16-Jan-15	18:00	conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
448	400	315 MVA ICT 2 at Boisar SS	16-Jan-15	8:00	18-Jan-15	18:00	Daily	For replacement of bushings (2 nos.)	WRTS-I	WRTS-I	
449	220	ANOOPUR - KOTMIKALA CKT - I I	16-Jan-15	10.00	16-Jan-15	17.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
450	220	BINA (MPPTCL) -BINA(PGCIL) CKT	16-Jan-15	9.00	16-Jan-15	17.00	daily	Maintenance Work	MPPTCL	MPPTCL	R
451	220	Kawas-Vav 2	16-Jan-15	0:00	19-Jan-15	0:00	daily	Refrofitting work of Distance protection in Channel 1 and replacement of LBB Protection.	NTPC	NTPC	
452	765	ICT#3 Tie Bay (717) at Bilaspur S/s	16-Jan-15	9:00	17-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
453	400	V'CHAL-Satna-2	16-Jan-15	07:30 hr	17-Jan-15	17:30 H	Contir	For Major Over Hauling of 400 KV main Circuit Breaker	NTPC	NTPC	
454	400	V'CHAL-Satna-2 LR at V'Chal	16-Jan-15	07:30 hr	19-Jan-15	17.30 H	Contir	AMP (Line outage not required)	NTPC	NTPC	
455	400	Vapi- Boisar	16-Jan-15	8:00	16-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
456	400	BUS#1 at Solapur	16-Jan-15	9:00	16-Jan-15	18:00	Daily	AMP and erection work of NTPC bays	WRTS-I	WRTS-I	
457	400	400 KV Wardha - Akola CKT I &II	16-Jan-15	8:00	31-Jan-15	18:00	Daily	Additional earthing work (Autoreclosed to Non Automode)	WRTS-I	WRTS-I	
458	400	Vindhyachal - Jabalpur Ckt.1&2	16-Jan-15	08:00	17-Jan-15	20:00	Conti .	Crossing of 765kV Vindhyachal (Pooling) - Satna line	PGCIL	WR-II	C
459	765	Bus # 1 at Jabalpur Pooling	16-Jan-15	08:00	17-Jan-15	20:00	Daily	AMP OF 765KV BUS #1 & ASSOCIATED BAY Equipment	PGCIL	WR-II	R
460	400	125 Bus Reactor -1 at Gwalior	16-Jan-15	10:00	16-Jan-15	15:00	Daily	AMP WORKS	PGCIL	WR-II	R

Outage Planning of Transmission elements during the month of -December-2014-January 2015											
461	400	315MVA ICT - I at Vapi	16-Jan-15	09:00	16-Jan-15	17:00	Daily	AMP of ICT and replacement of 220kV Isolator arms.	PGCIL	WR-II	C
462	400	Aurangabad Main Bus-ll & along with BBLR line	16-Jan-15	8.00	16-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
463	400	Koradi-Nandgaonpeth	16-Jan-15	8.00	16-Jan-15	17.00	Daily	Disc string replacement,fixing of spacers,dampers,earthbond	MSETCL	MSETCL	
464	400	Padgha-Talegaon	16-Jan-15	9.00	16-Jan-15	17.00	Daily	Q.M.work.	MSETCL	MSETCL	
465	400	Raipur - Tamnaar- II With L/R	17-Jan-15	9:00	17-Jan-15	17:00	Daily	AMP Work	JSPL	PGCIL	R
466	400	Akola-Aurangabad-1	17-Jan-15	8:00	18-Jan-15	18:00	Continuos	commissioning of 50MVAR L/R at Aurangabad	WRTS-I	WRTS-I	
467	400	Vapi- boisar	17-Jan-15	8:00	17-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
468	765	765 KV Wardha- Raipur Ckt-1	17-Jan-15	9:00	17-Jan-15	18:00	Daily	Construction work of erection of Auxilliary Spare Bus	WRTS-I	WRTS-I	
469	400	BUS#2 at Solapur	17-Jan-15	9:00	17-Jan-15	18:00	Daily	AMP and erection work of NTPC bays	WRTS-I	WRTS-I	
470	400	Navsari - Magarwada	17-Jan-15	08:00	18-Jan-15	18:00	Daily	Replacement of porcelain insulator strings with polymer insulators	PGCIL	WR-II	C
471	765	Bina # 2 Main Bay (709) at Satna	17-Jan-15	09:00	17-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
472	400	Dhule-S'Sarovar II	17-Jan-15	9.00	17-Jan-15	17.00	Daily	Q.M.work	MSETCL	MSETCL	
473	220	Vapi - TAPS	17-Jan-15	9:00	17-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
474	400	400kV Chorania Hadala	17-Jan-15	7:00	17-Jan-15	17:00	Daily	PMM work	GETCO	GETCO	
475	220	220KV Mapusa Thivim Line -I	18-Jan-15	9:00	18-Jan-15	18:00	Daily	AMP WORKS	GOA	WRTS-I	
476	400	Vapi- boisar	18-Jan-15	8:00	18-Jan-15	17:00	Daily	Insulator replacement	WRTS-I	WRTS-I	
477	765	ICT#3 Main Bay (718) at Bilaspur s/s	19-Jan-15	9:00	20-Jan-15	18:00	Daily	For AMP work	WRTS-I	PGCIL	R
478	400	Sipat-Raipur 3	19-Jan-15	8:00	19-Jan-15	18:00	Daily	For 800 KV HVDC Champoa-Kurukshetra Line Crossing	WRTS-I	PGCIL	C
479	220	220KV Mapusa Thivim Line -2	19-Jan-15	9:00	19-Jan-15	18:00	Daily	AMP WORKS	GOA	WRTS-I	
480	765	Seoni- Bina Tie bay 726	19-Jan-15	8:00	20-Jan-15	18:00	Daily	Replacement of reactor breaker coils as per instruction of CC.	WRTS-II	WRTS-I	
481	765	Bus # 2 at Jabalpur Pooling	19-Jan-15	08:00	20-Jan-15	20:00	Daily	AMP OF 765KV BUS #1 & ASSOCIATED BAY Equipment	PGCIL	WR-II	R
482	765	Bina # 2 Reactor Bay (709R) at Satna	19-Jan-15	09:00	19-Jan-15	18:00	Daily	For Annual maintenance work	PGCIL	WR-II	R
483	400	315MVA ICT - II at Vapi	19-Jan-15	09:00	19-Jan-15	17:00	Daily	AMP of ICT and replacement of 220kV Isolator arms.	PGCIL	WR-II	C
484	400	Jhanor ICT-1	19-Jan-15	0:00	24-Jan-15	0:00	conti	Annual Bay Maintenance	NTPC	NTPC	
485	400	New Koyna-Karad ckt 2	19-Jan-15	8.30	19-Jan-15	17.30	Daily	Q.M.work	MSETCL	MSETCL	
486	400	SSP - Rajgarh - 1	19-Jan-15	8:00	20-Jan-15	18:00	Daily	PMM work	GETCO	GETCO	
487	400	400 / 220 KV ICT - 3	19-Jan-15	8:00	20-Jan-15	18:00	conti	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
488	400	BUS TRANSFER at DGEN	20-Jan-15	8:00	20-Jan-15	18:00	dail	BUS ISOLATOR STEM AND JAW REPLACEMENT	TEL - DGEN	TEL - DGEN	
	Taps-Borival now Taps-Boisar from 27-Nov-14 it will be restoted back by 25-jan-15										

अनुलग्नक 3.3

दिसम्बर 2014 और जनवरी 2015 माह के लिये अपेक्षित मांग एवं ऊर्जा की आवश्यकता

ANTICIPATED DEMAND AND ENERGY REQUIREMENT FOR DECEMBER 2014 AND JANUARY 2015

राज्य	State	मांग DEMAND मेगावाट (MW)		ऊर्जा की आवश्यकता ENERGY REQUIREMENT मिलियन युनिटस (MUs)	
		दिसम्बर 2014 DECEMBER 2014	जनवरी 2015 JANUARY 2015	दिसम्बर 2014 DECEMBER 2014	जनवरी 2015 JANUARY 2015
1 गुजरात	**GUJARAT**				
सीमित	RESTRICTED	12900	12200	8250	8200
असीमित	UNRESTRICTED	12940	12240	8260	8210
2 मध्य प्रदेश	**MADHYA PRADESH**				
सीमित	RESTRICTED	10594	10600	6990	7000
असीमित	UNRESTRICTED	10594	10600	6990	7000
3 छत्तीसगढ़	**CHHATISGARH**				
सीमित	RESTRICTED	3160	3240	1693	1790
असीमित	UNRESTRICTED	3170	3280	1717	1819
4 महाराष्ट्र	**MAHARASHTRA**				
सीमित	RESTRICTED	19550	20450	12500	12700
असीमित	UNRESTRICTED	19600	20500	12550	12750
5 गोवा	**GOA**				
सीमित	RESTRICTED	410	405	295	290
असीमित	UNRESTRICTED	425	415	300	300
6 दमन दीव	**DD**				
सीमित	RESTRICTED	320	305	210	215
असीमित	UNRESTRICTED	325	310	215	220
7 डी एन एच	**DNH**				
सीमित	RESTRICTED	630	620	420	425
असीमित	UNRESTRICTED	635	625	425	430
8 पश्चिम क्षेत्र	**WESTERN REGION**				
सीमित	RESTRICTED	44716	44957	27100	27250
असीमित	UNRESTRICTED	44834	46125	27500	27850

अनुलग्नक 4.1

माह नवम्बर 2014

ACTUAL GENERATION & AVALABILITY FOR NOVEMBER 2014

क्रमांक Sr. No.	स्टेशन का नाम Station Name	Actual वास्तविक ऊर्जा Energy (Gwh)	चरम Peak (Mw)	Auxillary Consumption (Gwh)
क (A)	**गुजरात GUJARAT**			
	जलीय HYDRO			
1.	उकई Ukai - 1	20.81	75	
	उकई Ukai - 2	19.18	75	
	उकई Ukai - 3	6.04	75	
	उकई Ukai - 4	0.00	0	
	उकई Ukai (Total)	**46.02**	**152**	**0.000**
2.	उकई एल वी सी एच Ukai LBCH - 1	1.79	3	
	उकई एल वी सी एच Ukai LBCH - 2	0.00	0	
	उकई एल बी सी एच Ukai LBCH (Total)	**1.79**	**3**	**0.022**
3.	कडाना Kadana - 1	3.79	63	0.003
	कडाना Kadana - 2	0.00	0	0.000
	कडाना Kadana - 3	1.31	60	
	कडाना Kadana - 4	3.74	62	0.000
	कडाना Kadana (Total)	**8.84**	**61**	**0.003**
4.	पनम PANAM & Madhuban Dam 1 & 2	5.01	10	0.018
6.	**कुल जलीय TOTAL(H)**	**61.66**	**225**	**0.363**
	तापीय THERMAL			
1	टोरेन्ट पावर लिमिटेड यूनिट सी	34.63	61	3.542
2	टोरेन्ट पावर लिमिटेड यूनिट डी	0.00	0	0.408
3	टोरेन्ट पावर लिमिटेड यूनिट ई	81.34	124	6.606
4	टोरेन्ट पावर लिमिटेड यूनिट एफ	83.40	124	7.397
5	टोरेन्ट पावर लिमिटेड यूनिट जी टी 1	0.00	0	
6	टोरेन्ट पावर लिमिटेड यूनिट जी टी 2	0.00	0	
7	टोरेन्ट पावर लिमिटेड यूनिट एस टी जी	0.00	0	
8	धुवरन तापीय Dhuvaran - 5	0.00	0	0.000
9	धुवरन तापीय Dhuvaran - 6	0.00	0	0.000
10	धुवरन तापीय Dhuvaran - GT 1	0.00	0	0.794
11	धुवरन तापीय Dhuvaran - GT 2	0.00	0	1.164
12	धुवरन तापीय Dhuvaran - STG	65.65	102	
13	उकाई युनिट 1 Ukai -1	0.00	0	0.155
14	उकाई युनिट 2 Ukai -2	0.39	52	0.610
15	उकाई युनिट 3 Ukai -3	115.95	200	11.019
16	उकाई युनिट 4 Ukai -4	117.60	202	11.636
17	उकाई युनिट 5 Ukai -5	116.26	212	10.749
18	उकाई युनिट 6 Ukai -6	245.06	506	19.875
19	गांधीनगर 1 Gandhinagar - 1	0.00	0	0.098
20	गांधीनगर 2 Gandhinagar - 2	0.00	0	0.096
21	गांधीनगर 3 Gandhinagar - 3	119.33	215	11.403
22	गांधीनगर 4 Gandhinagar - 4	120.48	212	12.775
23	गांधीनगर 5 Gandhinagar - 5	126.62	212	12.763
24	वणकवोरी 1 Wanakbori - 1	106.91	208	0.000
25	वाणकवोरी 2 Wanakbori - 2	116.22	211	
26	वाणकवोरी 3 Wanakbori - 3	92.09	209	
27	वाणकवोरी 4 Wanakbori - 4	76.12	210	
28	वाणकवोरी 5 Wanakbori - 5	69.91	210	
29	वाणकवोरी 6 Wanakbori - 6	65.30	210	
30	वाणकवोरी 7 Wanakbori - 7	119.03	211	
31	उत्तरन Utran GT 1	0.00	0	0.222
32	उत्तरन Utran GT 2	0.00	0	0.000
33	उत्तरन UTRAN - GT- 3	0.00	0	0.000
34	उत्तरन UTRAN - GT-4	1.93	192	0.665
35	उत्तरन UTRAN - STG-I	0.00	0	0.000
36	उत्तरन UTRAN - STG-II	1.63	126	0.000

क्रमांक Sr. No.	स्टेशन का नाम Station Name	Actual वास्तविक ऊर्जा Energy (Gwh)	चरम Peak (Mw)	Auxillary Consumption (Gwh)

37	सिक्का Sikka - 1	62.63	113	7.448
38	सिक्का Sikka - 2	53.41	117	5.940
39	कच्छ लिग्नाईट Kutch Lignite - 1	44.21	71	8.583
40	कच्छ लिग्नाईट Kutch Lignite - 2	43.29	70	
41	कच्छ लिग्नाईट Kutch Lignite - 3	3.90	64	
42	कच्छ लिग्नाईट Kutch Lignite - 4	19.62	65	5.297
43	सूरत लिग्नाईट Surat Lignite - 1	67.75	130	6.726
44	सूरत लिग्नाईट Surat Lignite - 2	78.13	130	8.104
45	सूरत लिग्नाईट Surat Lignite - 3	71.72	129	7.684
46	सूरत लिग्नाईट Surat Lignite - 4	70.21	129	7.330
47	एक्रीमोटा लिग्नाईट Akrimota Lignite - 1	56.55	103	8.583
48	एक्रीमोटा लिग्नाईट Akrimota Lignite - 2	19.08	106	
49	जी आई पी सी एल GIPCL GT - 1	6.85	33	0.000
50	जी आई पी सी एल GIPCL GT - 2	16.71	32	
51	जी आई पी सी एल GIPCL GT - 3	10.76	32	
52	जी आई पी सी एल GIPCL ST - 1	17.21	42	
53	जी आई पी सी एल GIPCL GT - 4	0.64	68	0.000
54	जी आई पी सी एल GIPCL ST - 2	0.32	40	
55	ई एस एस ए आर ESSAR GT - 1	0.00	0	0.213
56	ई एस एस ए आर ESSAR GT - 2	0.00	0	
57	ई एस एस ए आर ESSAR GT - 3	0.00	0	
58	ई एस एस ए आर ESSAR STG	0.00	0	
59	जी पी ई सी GPEC GT - 1	0.95	147	0.036
60	जी पी ई सी GPEC GT - 2	3.66	152	0.314
61	जी पी ई सी GPEC GT - 3	14.26	149	0.219
62	जी पी ई सी GPEC STG	6.08	150	
63	जी एस ई जी GSEG GT - 1	3.15	50	0.881
64	जी एस ई जी GSEG GT - 2	10.06	47	
65	जी एस ई जी GSEG STG	6.94	42	
66	Sugen (GT 1 + GT 2)	157.97	338	7.205
67	सीपीपी से आयात Imp from CPP+MUNDRA	2761.59	3836	
	कुल तापीय Total (T)	**5536.28**	**12671**	389.017
	कुल जलीय+तापीय Total (H+T)	**5597.93**	**12889**	389.380
	विंड इनर्जी Wind Energy	**347.79**		
	कुल जलीय+तापीय+हवा Total (H+T+Wind)	**5945.72**	**13424**	
	विनिमय Exchanges	**2705.56**		
	सीमित ऊर्जा मांग Restricted Energy Req.	**8651.28**		
ख (B)	**MADHYA PRADESH**			
	जलीय HYDRO			
1	चम्बल परि Chambal Pr.(50%share)	75.66	230	
1.1	गांधी सागर Gandhi Sagar	25.05	115	0.080
1.2	राणा प्रताप सगर R.P.Sagar	74.65	172	0.040
1.3	जवाहर सगर Jawahar Sagar	51.61	172	0.020
2	पेन्च Pench	47.21	165	0.090
3	बारगी Bargi	48.28	93	0.190
4	बारगी Bargi (LBCH)	1.12	5	
5	बनसागर टोन्स Bansagar-1 (Tons)	70.61	308	0.230
6	बनसागर Bansagar-2 (Deolondh)	0.00	0	
7	बनसागर Bansagar-3 (Silpara)	7.79	28	0.040
8	बनसागर Bansagar-4 (Zinaha)	10.47	22	0.040
9	मेडीखेडा Medikheda	18.43	63	
10	विरसिंघपुर Birsingpur	0.95	20	0.020
11	टावा Tawa	0.00	0	
12	राजघाट Rajghat	13.21	21	0.120
13	Omkareshwar	103.71	380	.
14	इंदिरा सागर Indira Sagar	244.55	1010	1.022
	कुल जलीय TOTAL(H) MPPGCL	594.78	2267	1.269
		Actual वास्तविक		
क्रमांक	स्टेशन का नाम	ऊर्जा	चरम	Auxillary
Sr.	Station Name	Energy	Peak	Consumption
No.		(Gwh)	(Mw)	(Gwh)
	तापीय THERMAL			
1	अमरकंटक II AMK II Unit -1	56.16	85	19.630
2	अमरकंटक II AMK II Unit -2	0.00	0	
3	अमरकंटक III AMK III Unit -5	148.34	218	0

4	सतपुरा I Satpura-I(60%Share)	0.00	0	0.000
5	सतपुरा II Satpura-II Unit 6	68.87	190	16.580
6	सतपुरा II Satpura-II Unit 7	97.82	190	
7	सतपुरा II Satpura-II Unit 8	116.90	196	19.960
8	सतपुरा II Satpura-II Unit 9	96.70	190	
9	सतपुरा III Satpura-III Unit 10	55.27	216	16.510
10	सतपुरा III Satpura-III Unit 11	73.52	175	15.670
11	एसजीटीपीएस 1 SGTPS Unit - 1	73.52	175	15.670
12	एसजीटीपीएस 2 SGTPS Unit - 2	83.20	180	
13	एसजीटीपीएस 3 SGTPS Unit - 3	105.12	178	15.710
14	एसजीटीपीएस 4 SGTPS Unit - 4	106.28	186	
15	एसजीटीपीएस 5 SGTPS Unit - 5	269.74	510	
16	SSTPS	236.10	474	19.290
	कुल तापीय Total (T)	1361.81	3111	146.720
	कुल जलीय+तापीय Total (H+T)	1956.59	5796	147.989
	Injection from WIND	103.23	0	
	कुल जलीय+तापीय + विंड Total (H+T+WIND)	2059.82	5796	
	विनिमय Exchanges	2957.87		
	सीमित ऊर्जा मांग Rest. En. Req.	5017.69		
ग (C)	**CHHATTISGARH**			
	जलीय HYDRO			
1	हसदेव बांगो Hasdeo Bango	11.08	120	0.060
2	Gangrel	0.55	10	0.010
3	Mini Micro KWB	0.00	7	
	कुल जलीय TOTAL(H) CSEB	11.63	137	0.070
	तापीय THERMAL			
1	कोरबा (पू) Korba (E) Unit-1	27.64	38	9.800
2	कोरबा (पू) Korba (E) Unit-2	27.64	40	
3	कोरबा (पू) Korba (E) Unit-3	27.64	38	
4	कोरबा (पू) Korba (E) Unit-4	27.84	41	
5	कोरबा (पू) Korba (E) Unit -5	36.85	120	22.860
6	कोरबा (पू) Korba (E) Unit -6	66.82	120	
7	कोरबा (प) Korba (W) Unit -1	116.93	210	27.360
8	कोरबा (प) Korba (W) Unit -2	116.93	210	
9	कोरबा (प) Korba (W) Unit -3	116.93	210	23.570
10	कोरबा (प) Korba (W) Unit -4	116.93	210	
11	KORBA(EB) Extn - 1	176.44	255	13.250
12	KORBA(EB) Extn - 2	163.18	254	12.530
	कुल तापीय Total (T)	1391.16	1902	113.400
13	वालको से आयात BALCO Import	0.00	0	
14	जिन्दल से आयात JINDAL Import	0.00	0	
	कुल तापीय Total (T+IPP)	1391.16	1902	
	कुल जलीय+तापीय Total (H+T)	1402.79	2039	113.470
	विनिमय Exchanges	416.72	0	
	सीमित ऊर्जा मांग Rest. En. Req.	1819.51	2039	
घ (D)	**MAHARASHTRA**			
	जलीय HYDRO			
1	कोयना 1और 2 Koyna 1 & 2	64.81	530	0.792
2	कोयना III Koyna III	19.67	320	
3	कोयना IV Koyna IV	21.05	1120	
4	कोयना डीपीएच Koyna DPH	6.69	10	
5	टाटा जलीय TATA Hydro	100.14	471	2.625
6	वैतरणा Vaitarna	29.75	61	
7	एलदारी Eldari	6.65	0	
8	भटगर और वीर Bhatgar & Vir	0.00	4	
9	पैठान Paithan	2.23	55	
10	तिलारी Tillari	10.59	65	
11	भीरा टेल रेस Bhira Tail Race	5.56	82	
12	घटघर Ghatghar	17.67	310	
13	अन्य छोटे जलीय Small Hydro (others)	36.38	0	
	कुल जलीय TOTAL(H)	324.06	137	3.417
		Actual वास्तविक		
कमांक	स्टेशन का नाम	ऊर्जा	चरम	Auxillary
Sr.	Station Name	Energy	Peak	Consumption
No.		(Gwh)	(Mw)	(Gwh)
	तापीय THERMAL			

3	नासिक 3 Nasik Unit -3	123.40	205	
4	नासिक 4 Nasik Unit -4	113.17	194	
5	नासिक 5 Nasik Unit -5	108.42	195	
6	ट्राम्बे 4 Trombay Unit -4	0.00	0	
7	ट्राम्बे 5 Trombay Unit -5	295.43	501	
8	ट्राम्बे 6 Trombay Unit -6	78.16	198	
9	ट्राम्बे 8 Trombay Unit -8	58.03	254	
10	ट्राम्बे 7अ गैस Trombay -7A (Gas)	74.56	128	2.748
11	ट्राम्बे 7ब Trombay -7B (WHR)	45.20	70	
12	कोराडी 5 Koradi Unit -5	0.00	0	
13	कोराडी 6 Koradi Unit -6	94.17	173	
14	कोराडी 7 Koradi Unit -7	108.41	185	
15	भुसावल 2 Bhusawal Unit -2	0.00	0	
16	भुसावल 3 Bhusawal Unit -3	66.72	170	
17	भुसावल 4 Bhusawal Unit -4	232.40	505	
18	भुसावल 4 Bhusawal Unit -5	219.89	500	
19	पारली 3 Parli Unit -3	0.00	0	
20	पारली 4 Parli Unit -4	0.00	0	
21	पारली 5 Parli Unit -5	107.09	169	
22	पारली 6 Parli Unit -6	140.19	250	
23	पारली 7 Parli Unit -7	139.65	250	
24	खापरखेड़ा 1 Khaperkheda Unit -1	113.70	200	
25	खापरखेड़ा 2 Khaperkheda Unit -2	109.80	185	
26	खापरखेड़ा 3 Khaperkheda Unit -3	123.69	214	
27	खापरखेड़ा 4 Khaperkheda Unit -4	122.86	215	
28	खापरखेड़ा 5 Khaperkheda Unit -5	257.54	505	
30	पारस Paras-3	140.28	256	
31	पारस Paras-4	137.46	244	
32	उरन Uran (Gas)	182.50	554	
33	उरन Uran (WHR)	98.33	0	5.862
34	चंदपुर 1 Chandrapur Unit -1	0.00	158	
35	चंदपुर 2 Chandrapur Unit -2	96.85	171	
36	चंदपुर 3 Chandrapur Unit -3	42.49	204	
37	चंदपुर 4 Chandrapur Unit - 4	122.53	460	
38	चंदपुर 5 Chandrapur Unit -5	259.11	430	
39	चंदपुर 6 Chandrapur Unit -6	249.55	452	
40	चंदपुर 7 Chandrapur Unit -7	228.28	0	
41	डहाणू 1 Dahanu Unit-1	173.81	250	15.594
42	डहाणू 2 Dahanu Unit-2	185.13	250	15.613
43	CPP	3155.19	4071.00	
44	RGPPL Share	0.00	0	
	कुल तापीय Total (T)	7804.00	11669	349.519
	MAH. Wind + Solar Generation	204.51	0	
	कुल जलीय +तापीय Total (H+T+Wind)	8332.57	13751	392.753
TOT	विनिमय Exchanges	4478.00		
	सीमित ऊर्जा मांग Rest. En. Req.	12810.57		
च (E)	**गोवा GOA**			
	आई पी पी रिलायंस IPP Reliance	16.33	16	
	विनिमय Exchanges	350.10		
	सीमित ऊर्जा मांग Rest. En. Req.	366.42	421	
छ (F)	**दमन और दीव DAMAN & DIU**	168.52	298	
ज (G)	**दादरा नगर हवेली DNH**	441.20	636	
	कुल DD &DNH (T)	609.72	933	
		Actual वास्तविक		
कमांक	स्टेशन का नाम	ऊर्जा	चरम	Auxillary
Sr.	Station Name	Energy	Peak	Consumption
No.		(Gwh)	(Mw)	(Gwh)
(H)	**केंद्रीय क्षेत्र Central Sector**			
1.	**एन पी सी N.P.C.**			
1.1	तारापुर 1 TAPS Unit -1	0.00	0	9.840
1.2	तारापुर 2 TAPS Unit -2	112.41	160	
1.3	तारापुर 3 TAPS Unit -3	391.59	545	70.400
1.4	तारापुर 4 TAPS Unit -4	355.02	500	
1.5	काकरापर 1 KAPS Unit -1	163.12	545	30.717
1.6	काकरापर 2 KAPS Unit -2	147.53	500	
	कुल एन पी सी NPC Total	1169.67	2250	
2.	**एन टी पी सी N.T.P.C.**			

2.1	कोरवा एसटीपीएस 1 KSTPS Unit-1	146.84	215	
2.2	कोरवा एसटीपीएस 2 KSTPS Unit-2	145.16	213	
2.3	कोरवा एसटीपीएस 3 KSTPS Unit-3	0.00	0	
2.4	कोरवा एसटीपीएस 4 KSTPS Unit-4	320.86	510	
2.5	कोरवा एसटीपीएस 5 KSTPS Unit-5	342.03	514	
2.6	कोरवा एसटीपीएस 6 KSTPS Unit-6	336.02	513	
2.7	कोरवा एसटीपीएस 7 KSTPS Unit-7	325.74	515	
	कुल कोरवा KSTPS Total	1616.64	2217	102.675
2.7	विन्ध एसटीपीएस 1 VSTPS Unit-1	133.21	214	
2.8	विन्ध एसटीपीएस 2 VSTPS Unit-2	131.28	213	
2.9	विन्ध एसटीपीएस 3 VSTPS Unit-3	130.09	215	
2.10	विन्ध एसटीपीएस 4 VSTPS Unit-4	130.68	216	
2.11	विन्ध एसटीपीएस 5 VSTPS Unit-5	114.73	212	
2.12	विन्ध एसटीपीएस 6 VSTPS Unit-6	132.00	215	
2.13	विन्ध एसटीपीएस 7 VSTPS Unit-7	314.94	511	
2.14	विन्ध एसटीपीएस 8 VSTPS Unit-8	316.08	514	
2.15	विन्ध एसटीपीएस 9 VSTPS Unit-9	313.20	513	
2.16	विन्ध एसटीपीएस 10 VSTPS Unit-10	311.72	512	
2.17	विन्ध एसटीपीएस 11 VSTPS Unit-11	302.98	514	
	कुल विन्धयाचल VSTPS Total	2656.79	#REF!	171.83
3.1	सीपत -1 -SIPAT-1	435.79	664.00	
3.2	सीपत -2 -SIPAT-2	463.79	667.00	
3.3	सीपत -3 -SIPAT-3	436.18	514.00	
3.4	सीपत -4 -SIPAT-4	343.78	512.00	
3.5	सीपत -5 SIPAT-5	325.62	514.00	
	कुल सीपत -SIPAT TOTAL	2005.16	2539.00	103.46
4.1	कवास गैस 1ए Kawas GT-1A	31.81	108	
4.2	कवास गैस 1बी Kawas GT-1B	27.92	105	
4.3	कवास एसटी 1सी Kawas ST-1C	32.82	118	
4.4	कवास गैस 2ए Kawas GT-2A	5.07	107	
4.5	कवास गैस 2बी Kawas GT-2B	15.03	106	
4.6	कवास एसटी 2सी Kawas ST-2C	9.00	119	
	कुल कवास KGPS Total	121.64	384	3.749
5.1	गंधार गैस 1 Gandhar GT-1	5.95	141	
5.2	गंधार गैस 2 Gandhar GT-2	38.04	147	
5.3	गंधार गैस 3 Gandhar GT-3	17.32	142	
5.4	गंधार एसटी 4 Gandhar ST-4	33.77	159	
	कुल गंधार GGPS Total	95.09	348	2.825
6.1	मौदा 1 Mauda -1	22.81	523	0.000
6.2	मौदा 2 Mauda -2	21.33	334	0.000
	कुल मौदा MAUDA Total	44.14	523	9.284
6.1	RGPPL Block I	0.00	0	
6.2	RGPPL Block II	0.00	0	
6.3	RGPPL Block III	0.00	0	
	RGPPL TOTAL	0.00	31	0.000
7.1	एस एस पी SSP RBPH - 1	2.70	187	
7.2	एस एस पी SSP RBPH - 2	10.50	187	
7.3	एस एस पी SSP RBPH - 3	0.00	0	
7.4	एस एस पी SSP RBPH - 4	14.83	187	
7.5	एस एस पी SSP RBPH - 5	22.73	187	
7.6	एस एस पी SSP RBPH - 6	21.67	188	
7.7	एस एस पी SSP CHPH - 1	14.82	36	
7.8	एस एस पी SSP CHPH - 2	17.22	35	
7.9	एस एस पी SSP CHPH - 3	14.43	38	
7.10	एस एस पी SSP CHPH - 4	12.85	37	
7.11	एस एस पी SSP CHPH - 5	13.67	35	
	कुल एस एस पी SSP Total	145.41	1117	1.454
8.1	कुल पेंच Pench Total	47.21	165	0.090
8.2	Jindal Injection	589.74	0	
8.3	Amarkantak Lanco	195.64	0	
(I)	**पश्चिमी क्षेत्र WESTERN REGION**			
	ग्रोस उत्पादन Gross generation	26444.34		
(J)	उपलब्धता Availability	25898.82		
	नेट विनिमय Net Exchanges	-2545.79		
	उपलब्ध ऊर्जा Energy Availability	23353.03		

माह नवम्बर 2014 के दौरान चरम मांग - योजनाबध्द बनाम वास्तविक

अनुलग्नक 4.2

PEAK DEMAND - SCHEDULE VS ACTUAL FOR NOVEMBER 2014

ANNEX-4.2

राज्य	State	Anticipated अपेक्षित (MW)	वास्तविक Actual (MW) आपूर्ति Catered	UNSCH LS	FC	SCH LS	कुल Total	दिनांक Date	समय Time	आवृत्ति Frequency
गुजरात	***GUJARAT***									
पंजीकृत	Registered		13424	-	-	-	13424	14.11.14	1900	50.08
सीमित	Restricted	12900								
असीमित	Unrestricted	12940	13424	0	-38	0	13386	14.11.14	1900	50.08
न्यूनतम पंजीकृत मांग	Min. Registered Demand		9872				9872	25.11.14	2400	50.11
मध्य प्रदेश	***MADHYA PRADESH***									
पंजीकृत	Registered		9832	-	-	-	9832	28.11.14	0900	50.07
सीमित	Restricted	10594								
असीमित	Unrestricted	10594	9832	0	-20	0	9812	28.11.14	0900	50.07
न्यूनतम पंजीकृत मांग	Min. Registered Demand		6689				6689	01.11.14	21:00	
छत्तीसगढ़	***CHHATTISGARH***									
पंजीकृत	Registered		3078				3078	21.11.14	18:00	49.99
सीमित	Restricted	3160								
असीमित	Unrestricted	3070	3030	208.97	1	0	3240	30.11.14	1800	49.99
न्यूनतम पंजीकृत मांग	Min. Registered Demand		2247				2247	03.11.14	1400	50.13
महाराष्ट्र	***MAHARASHTRA***									
पंजीकृत	Registered		19629	-	-	-	19629	12.11.14	1200	50.03
सीमित	Restricted	19600								
असीमित	Unrestricted	19650	19629	861	-21	0	20469	12.11.14	1200	50.03
न्यूनतम पंजीकृत मांग	Min. Registered Demand		13143				13143	17.11.14	04:00	50.03
गोवा	****GOA***									
पंजीकृत	Registered	410	421		-	-	421	10.11.14	1945	50.07
असीमित	Unrestricted	410	421	2	-1.03	-	422	10.11.14	1945	50.07
न्यूनतम पंजीकृत मांग	Min. Registered Demand		251				251	02.11.14	1800	49.84
एस्सार	***ESSAR(ESIL)***									
पंजीकृत	Registered		476		-	-	476	14.11.14	2100	50.06
असीमित	Unrestricted		476	0	0	-	476	14.11.14	2100	50.06
न्यूनतम पंजीकृत मांग	Min. Registered Demand									
दमन एवं दीव	***DD***									
पंजीकृत	Registered		331		-	-	331	16.11.14	2000	50.04
असीमित	Unrestricted		331	0	0	-	331	16.11.14	2000	50.04
न्यूनतम पंजीकृत मांग	Min. Registered Demand									
दादरा व न हवेली	***DNH***									
पंजीकृत	Registered		671		-	-	671	03.11.14	2000	50.02
असीमित	Unrestricted		671	0	0	-	671	03.11.14	2000	50.02
न्यूनतम पंजीकृत मांग	Min. Registered Demand		402				402	03.10.14		
पश्चिम क्षेत्र	***WESTERN REGION***									
पंजीकृत	Registered		44549	-	-	-	44549	10.11.14	1500	49.87
सीमित	Restricted	45609								
असीमित	Unrestricted	45633	44549	628	203	0	45380	10.11.14	1500	49.87
न्यूनतम पंजीकृत मांग	Min. Registered Demand		34624				34624	17.11.14	0400	50.05

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.

माह नवम्बर 2014

Nov-14

अनु.क्र.	समांतर/वृतीय प्रचालन	PARALLEL / RADIAL OPERATION	TOTAL OPERATING HOURS
1	एचवीडीसी बॅक टु बॅक लिंक	HVDC back-to back link(WR-NR)	
2	एचवीडीसी बॅक टु बॅक लिंक	HVDC back-to back link(WR-SR)	720:00:00
	टाई लाईन	TIE LINE	
1	765 केवी सिवनी से वर्धा-I	765kV Soni to Wardha	689:58:00
2	765 केवी सिवनी से वर्धा-II	765kV Seoni to Wardha	621:55:00
3	400 केवी भिलाई से कोराडी	400kV Bhilai to Koradi	720:00:00
4	400 केवी भिलाई से भद्रावती	400kV Bhilai to Bhadravati	720:00:00
5	400 केवी रायपुर से भद्रावती -I	400kV Raipur to Bhadravati-I	711:15:00
6	400 केवी रायपुर से भद्रावती –II	400kV Raipur to Bhadravati-II	720:00:00
7	400 केवी रायपुर से भद्रावती –III	400kV Raipur to Bhadravati-III	720:00:00
8	400 केवी सातपुरा से कोराडी	400kV Satpura to Koradi	720:00:00
9	400 केवी खंडवा से धुले-I	400kV Khandwa-Dhule-I	718:48:00
10	400 केवी खंडवा से धुले-II	400kV Khandwa-Dhule-II	712:58:00
11	400 केवी इंदौर से असोज-I	400kV Indore to Asoj-I	720:00:00
12	400 केवी इंदौर से असोज-II	400kV Indore to Asoj-II	720:00:00
13	400 केवी इंदौर से असोज-III	400kV Indore to Asoj-III	718:24:00
14	400 केवी कोल्हापुर से मापुसा-I	400kV Kolhapur-Mapusa-I	519:19:00
15	400 केवी कोल्हापुर से मापुसा-II	400kV Kolhapur-Mapusa-II	477:24:00
16	400 केवी वापी से बोईसर	400kV Vapi-Boisar	720:00:00
17	400 केवी रायगढ़ से स्टरलाइट-I	400kV Raigarh to Sterlight-I	720:00:00
18	400 केवी रायगढ़ से स्टरलाइट-II	400kV Raigarh to Sterlight -II	720:00:00
19	400 केवी रायगढ़ से झरसुगुडा-I	400kV Raigarh to Jharsuguda-I	497:45:00
20	400 केवी रायगढ़ से झरसुगुडा-II	400kV Raigarh to Jharsuguda-II	720:00:00
21	400 केवी नागदा से देहगाम-I	400kV Nagda to Dehgam	720:00:00
22	400 केवी नागदा से देहगाम-II	400kV Nagda to Dehgam	720:00:00
23	400 केवी रायपुर से वर्धा–I	400kV Raipur to Wardha-I	685:00:00
24	400 केवी रायपुर से वर्धा–II	400kV Raipur to Wardha-II	709:04:00
25	220 केवी कोरबा पूर्व से बुद्धिपादर-III	220kV K(E) to Budhipadar-III	720:00:00

माह नवम्बर 2014 के दौरान पात्रता, शिड्यूल, घटकों द्वारा केंद्रीय क्षेत्र के स्टेशनों से डावल और विनिमयों का विवरण

DETAILS OF ENTITLEMENT/SCHEDULE/DRAWAL BY THE CONSTITUENTS FROM CENTRAL SECTOR STATIONS AND EXCHANGES FOR THE MONTH OF NOVEMBER 2014

(पक्षेविग्र द्वारा जारी क्षेत्रीय ऊर्जा लेखा के आधार पर)

1 केंद्रीय स्टेशनों / समर्पित केंद्रीय स्टेशनों / संयुक्त निजी स्टेशनों की घोषित क्षमता (वस पर) और लाभार्थियों की पात्रता

1 Declared Capcity (ex-bus) of Central Gen. Stns/Dedicated CG Stns/Jointly owned Stns & entitlement of beneficieries (MUs)

		घोषित क्षमता	गुऊविनिलि	मपविउकं	छगविवो	मगविउकं	गोवा	दमन दीव	दा न ह	एचवीडीसी + एचडब्ल्युवी	कुल
(अ) केंद्रीय विजलीघर	A. Central Gen. Stns.	Dec. Cap.	GUVNL	MPPGCL	CSEB	MSPGCL	GOA	DD	DNH	HVDC+HWB	TOTAL
कोरवा एसटीपीएस	Korba STPS	1205.834	206.715	281.861	122.778	384.172	121.814	28.342	30.941		1205.834
कोरवा एसटीपीएस -III	Korba STPS-III	306.639	58.875	48.059	92.559	82.895	3.341	3.692	14.071		306.639
विन्ध एसटीपीएस I	Vindhyachal STPS-I	797.400	145.557	283.963	1.482	292.098	23.368	8.447	27.940	14.543	797.399
विन्ध एसटीपीएस II	Vindhyachal STPS-II	664.761	158.878	214.339	1.229	238.016	8.939	6.190	22.325		664.760
विन्ध एसटीपीएस III	Vindhyachal STPS-III	683.641	181.848	170.519	73.047	203.073	7.827	7.732	24.328		683.641
विन्ध एसटीपीएस IV	Vindhyachal STPS-IV	644.942	154.735	185.809	41.534	209.201	8.535	8.197	30.312		644.942
कवास गैस	Kawas GPP	463.622	132.120	99.029	0.000	144.351	8.748	21.933	57.397		463.622
गंधार गैस	Gandhar GPP	456.552	164.595	81.387	0.000	139.150	8.781	21.788	40.801		456.552
सीपत	Sipat	1986.116	541.846	357.850	317.588	607.985	23.605	23.698	82.238		1986.116
काकरापार	Kakrapar APS*	278.232	79.043	70.351	0.000	95.179	9.785	5.246	8.089	10.539	278.232
तारापुर 3 और 4	Tarapur APS 3&4*	675.917	171.483	144.790	30.040	274.583	7.887	7.992	27.235		675.917
(ब) समर्पित केंद्रीय विजलीघर	B. Dedicated CG Stations			* Actual injection		* वास्तविक इन्जेक्शन					
इंदिरा सागर	Indira Sagar*	245.570		245.570							245.570
(स) संयुक्त निजी स्टेशन	C. Jointly owned Stations										
तारापुर 1 और 2	Tarapur APS 1&2*	102.947	51.474	0.000	0.000	51.474	0.000	0.000	0.000		102.947
एसएसपी	SSP*	141.608	22.657	80.717	0.000	38.234	0.000	0.000	0.000		141.608
पेन्च	Pench*	46.746		31.164	0.000	15.582	0.000	0.000	0.000		46.746
कुल (इं सागर को छोड़ कर)	Total (excl. Indira Sagar)	13279.721	3447.309	2715.489	758.419	3578.860	241.747	199.295	465.627	1872.973	13279.719
	* Actual injection										

2 केंद्रीय स्टेशनों / समर्पित केंद्रीय स्टेशनों / संयुक्त निजी स्टेशनों की उत्पादन शेड्यूल और लाभार्थियों की डावल शेड्यूल

2 Generation Schedule (ex-bus) of Central Gen. Stations/Dedicated CG Stations/Jointly owned Stations & schedule of benificieries (MUs)

		शेड्यूल	गुऊविनिलि	मपविउकं	छगविवो	मगविउकं	गोवा	दमन दीव	दा न ह	एचवीडीसी+ एचडब्ल्युवी	कुल
(अ) केंद्रीय विजलीघर	A. Central Gen. Stns.	Schedule	GUVNL	MPPGCL	CSEB	MSPGCL	GOA	DD	DNH	HVDC+HWB / Outside region(NR & SR)	TOTAL
कोरवा एसटीपीएस	Korba STPS	1204.696	206.715	281.058	122.778	384.172	121.814	28.342	30.941		1204.696
कोरवा एसटीपीएस -III $	Korba STPS-III $	305.408	58.875	48.059	92.063	82.895	3.341	3.692	13.336		305.408
विन्ध एसटीपीएस I	Vindhyachal STPS-I	682.365	94.148	276.047	1.482	242.893	14.981	8.447	29.930	14.436	682.365
विन्ध एसटीपीएस II	Vindhyachal STPS-II	591.093	119.253	211.162	1.229	207.314	8.939	6.190	22.325		591.093
विन्ध एसटीपीएस III	Vindhyachal STPS- III	597.062	147.757	165.505	42.382	185.634	7.827	7.732	25.130		597.062
विन्ध एसटीपीएस IV	Vindhyachal STPS- IV	591.833	149.016	183.340	19.957	191.602	8.535	8.288	24.474		591.833
कवास गैस	Kawas GPP**	117.955	27.125	35.773	0.000	34.772	5.062	2.682	12.516	0.000	117.955
गंधार गैस	Gandhar GPP**	93.565	20.972	28.769	0.000	36.913	3.935	0.700	2.253	0.000	93.565
सीपत	Sipat	1917.249	544.261	354.391	253.617	604.959	23.605	23.698	81.633		1917.249
काकरापार	Kakrapar APS*	278.232	79.043	70.351	0.000	95.179	9.785	5.246	8.089	10.539	278.232
तारापुर 3 और 4	Tarapur APS 3&4*	675.917	171.483	144.790	30.040	274.583	7.887	7.992	27.235		675.917
(ब) समर्पित केंद्रीय विजलीघर	B. Dedicated CG Stations										
इंदिरा सागर	Indira Sagar*	245.570		245.570							245.570
			15.095		**RPPC(NVVNL)**	**0.000**					
			KAWAS(RLNG)			**0.000**					
			GANDHAR(RLNG)			**0.000**					
(स) संयुक्त निजी स्टेशन	C. Jointly owned Stations			* Actual injection		* वास्तविक इन्जेक्शन					
तारापुर 1 और 2	Tarapur APS 1&2*	102.947	51.474	0.000	0.000	51.474	0.000	0.000	0.000		102.947
एसएसपी	SSP*	141.608	22.657	80.717	0.000	38.234	0.000	0.000	0.000		141.608
पेन्च	Pench*	46.746	0.000	31.164	0.000	15.582	0.000	0.000	0.000		46.746
कुल इं सागर को छोड़ कर	Total (excl. Ind. Sagar)	11485.174	2923.018	2460.119	589.715	2923.527	215.711	145.972	349.733	1877.379	11485.174
	* Actual injection										

Note:- $ These Scheduled Transactions are done by WRLDC under STOA.

3 अंतरक्षेत्रीय विनिमयों / द्विपक्षीय विनमयों की शेड्यूल (मि युनिट्स)

3 Schedule for interregional exchanges/bilateral exchanges (MUs)

			शेड्यूल	गुऊविनिलि	मपविउकं	छगविवो	मगविउकं	गोवा	दमन दीव	दा न ह	एचवीडीसी	कुल
क्षेत्र / राज्य		Region/State	Schedule	GUVNL	MPPGCL	CSEB	MSPGCL	GOA	DD	DNH	HVDC	TOTAL
क	पूर्वी क्षेत्र के रास्ते	Import SDLs through ER	528.485									
	आयात शेड्यूल	Indian Energy Exchange (WR to ER)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		134.592
		Power Exchange of India (ER to WR)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		1.103
		ER (NTPC)		28.117	40.169	8.009	48.106	0.000	1.316	2.025		127.743
		DVC to MPPTCL (Long Term Open Access)		0.000	211.719	0.000	0.000	0.000	0.000	0.000		211.719
		Hirakud to CSEB		0.000	0.000	1.310	0.000	0.000	0.000	0.000		1.310
		APL1 GUVNL to BIHAR (AEL)		-111.825	0.000	0.000	0.000	0.000	0.000	0.000		-111.825
		APL3 GUVNL to BIHAR (AEL)		-19.346	0.000	0.000	0.000	0.000	0.000	0.000		-19.346
		STERLITE to BALCO (BALCO)		0.000	0.000	64.590	0.000	0.000	0.000	0.000		64.590
		STERLITE to ESIL_WR (PTC LTD)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		22.195
		STERLITE to ESIL_WR (PXIL)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		12.000
		STERLITE to ESIL MSEB (PTC LTD)		0.000	0.000	0.000	2.208	0.000	0.000	0.000		2.208

		STERLITE to GOA (PTC LTD)		0.000	0.000	0.000	0.000	15.470	0.000	0.000		15.470
		ADHUNIK to INDOFIL MSEB (MPPL)		0.000	0.000	0.000	0.046	0.000	0.000	0.000		0.046
		WBSEB to MPPMCL MPSEB (PTC LTD)		0.000	21.488	0.000	0.000	0.000	0.000	0.000		21.488
		ACBIL to MANIPUR (KISPL)		0.000	0.000	-13.985	0.000	0.000	0.000	0.000		-13.985
		ADHUNIK to STL MSEB (MANIKARAN)		0.000	0.000	0.000	0.193	0.000	0.000	0.000		0.193
		ADHUNIK to SHENDRA MSEB (MANIKARAN)		0.000	0.000	0.000	0.024	0.000	0.000	0.000		0.024
		STERLITE to TPC MSEB (PTC LTD)		0.000	0.000	0.000	43.020	0.000	0.000	0.000		43.020
		MPPMCL MPSEB to WBSEB (PTC LTD)		0.000	-0.600	0.000	0.000	0.000	0.000	0.000		-0.600
		BARH II TO MPSEB		0.000	16.539	0.000	0.000	0.000	0.000	0.000		16.539
			शेड्यूल	गुऊविनिलि	मपविउकं	छरविवो	मराविउकं	गोवा	दमन दीव	दा न ह	एचवीडीसी	कुल
	क्षेत्र / राज्य	Region/State	Schedule	GUVNL	MPPGCL	CSEB	MSPGCL	GOA	DD	DNH	HVDC	TOTAL
ख	दक्षिण क्षेत्र के रास्ते	Import SDLs through SR	0.809									
	आयात शेड्यूल	Indian Energy Exchange (SR to WR)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
		Power Exchange of India (SR to WR)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
		RSTPS-SR to GOA (WHEELING)		0.000	0.000	0.000	0.000	0.809	0.000	0.000		0.809
ग	उत्तरी क्षेत्र के रास्ते	Import SDLs through NR	271.280									
	आयात शेड्यूल	Indian Energy Exchange (NR to WR)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		-322.605
		Power Exchange of India (NR to WR)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		7.962
		Rihand (Hydro) to MPPTCL (Long Term Open Access)		0.000	0.922	0.000	0.000	0.000	0.000	0.000		0.922
		Matathilla (Hydro) to MPPTCL (Long Term Open Access)		0.000	3.869	0.000	0.000	0.000	0.000	0.000		3.869
		APL2 GUVNL to ASEB (IEXL)		-0.060	0.000	0.000	0.000	0.000	0.000	0.000		-0.060
		MPPMCL MPSEB to ASEB (IEXL)		0.000	-0.140	0.000	0.000	0.000	0.000	0.000		-0.140
		APL2 GUVNL to BSES YM (DTL)-NR (IEXL)		0.000	-0.180	0.000	0.000	0.000	0.000	0.000		-0.180
		GMR KAMALANGA to ESIL_WR (PXIL)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
		NDMC(DTL) to ESIL_WR (PXIL)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
		APL2 GUVNL to GACJ RAJ (IEXL)		-0.062	0.000	0.000	0.000	0.000	0.000	0.000		-0.062
		BLAPPL MPSEB to GACJ RAJ (IEXL)		0.000	-0.054	0.000	0.000	0.000	0.000	0.000		-0.054
		BSES_RAJ to MPPMCL MPSEB (MPPL)		0.000	54.769	0.000	0.000	0.000	0.000	0.000		54.769
		BSES YM (DTL)-NR to MPPMCL MPSEB (MPPL)		0.000	24.000	0.000	0.000	0.000	0.000	0.000		24.000
		HARIYANA to MPPMCL MPSEB (MPPMCL MPSEB)		0.000	110.822	0.000	0.000	0.000	0.000	0.000		110.822
		NDPL(DTL)-NR to MPPMCL MPSEB (PTC LTD)		0.000	0.720	0.000	0.000	0.000	0.000	0.000		0.720
		PSEB-NR to MPPMCL MPSEB (MPPMCL MPSEB)		0.000	125.550	0.000	0.000	0.000	0.000	0.000		125.550
		TPDL_DTL to MPPMCL MPSEB (MPPL)		0.000	50.400	0.000	0.000	0.000	0.000	0.000		50.400
		TPDL_DTL to MPPMCL MPSEB (PTC LTD)		0.000	16.560	0.000	0.000	0.000	0.000	0.000		16.560
		WBSEB to MPPMCL MPSEB (PTC LTD)		0.000	105.692	0.000	0.000	0.000	0.000	0.000		105.692
		JPL to NPCL (KISPL)		0.000	0.000	-5.632	0.000	0.000	0.000	0.000		-5.632
		ADHUNIK to VFL MPSEB (TPTCL)		0.000	0.459	0.000	0.000	0.000	0.000	0.000		0.459
		MPPMCL MPSEB to WBSEB (IEXL)		0.000	-0.575	0.000	0.000	0.000	0.000	0.000		-0.575
		MPSEB TO CHAMERA 3		0.000	-0.895	0.000	0.000	0.000	0.000	0.000		-0.895
		MPSEB TOKOTESHWAR		0.000	-1.648	0.000	0.000	0.000	0.000	0.000		-1.648
		MPSEB TO PARBATI-3		0.000	-0.357	0.000	0.000	0.000	0.000	0.000		-0.357
		MPSEB TOTEHRI		0.000	-0.357	0.000	0.000	0.000	0.000	0.000		-0.357
		MP TO BTPS NR		0.000	102.120	0.000	0.000	0.000	0.000	0.000		102.120
घ	द्विपक्षीय शेड्यूल्स	Exchanges within WR										
		Mundra APL to Gujarat (LTOA)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
		JPL to ARVIND GUVNL (MPPL)		4.320	0.000	0.000	0.000	0.000	0.000	0.000		4.320
		JPL to AIGL MSEB (AIGL MSEB)		0.000	0.000	0.000	1.145	0.000	0.000	0.000		1.145
		JPL to ARPIPL MSEB (ARPIPL MSEB)		0.000	0.000	0.000	0.842	0.000	0.000	0.000		0.842
		JPL to ACCIL MSEB (ACCIL MSEB)		0.000	0.000	0.000	2.297	0.000	0.000	0.000		2.297
		JPL to ARVIND MSEB (ARVIND MSEB)		0.000	0.000	0.000	2.851	0.000	0.000	0.000		2.851
		JPL to BEST MSEB (JSW PTL)		0.000	0.000	0.000	2.400	0.000	0.000	0.000		2.400
		JPL to BEST MSEB (KISPL)		0.000	0.000	0.000	19.005	0.000	0.000	0.000		19.005
		JPL to BOSCH MSEB (BOSCH MSEB)		0.000	0.000	0.000	3.345	0.000	0.000	0.000		3.345
		JPL to BCSIL MSEB (BCSIL MSEB)		0.000	0.000	0.000	0.710	0.000	0.000	0.000		0.710
		JPL to BHL MSEB (JPL)		0.000	0.000	0.000	0.311	0.000	0.000	0.000		0.311
		ACBIL to CSEB (CSPTRDCL CSEB)		0.000	0.000	2.943	0.000	0.000	0.000	0.000		2.943
		JPL-II to CSEB (CSPTRDCL CSEB)		0.000	0.000	8.726	0.000	0.000	0.000	0.000		8.726
		JPL to CLASSIC MSEB (CLASSIC MSEB)		0.000	0.000	0.000	1.267	0.000	0.000	0.000		1.267
		JPL to CIPLA MSEB (CIPLA MSEB)		0.000	0.000	0.000	0.749	0.000	0.000	0.000		0.749
		JPL to CEAT MSEB (MPPL)		0.000	0.000	0.000	3.233	0.000	0.000	0.000		3.233
		APL2 GUVNL to CHLM GUVNL (AEL)		2.030	0.000	0.000	0.000	0.000	0.000	0.000		2.030
		JPL to DNL MSEB (DNL MSEB)		0.000	0.000	0.000	1.094	0.000	0.000	0.000		1.094
		JPL to ETLC MSEB (ETLC MSEB)		0.000	0.000	0.000	0.710	0.000	0.000	0.000		0.710
		JPL to ETLT MSEB (ETLT MSEB)		0.000	0.000	0.000	0.710	0.000	0.000	0.000		0.710
		EMCO to ESIL_WR (PXIL)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.135
		JPL to ETLW MSEB (ETLW MSEB)		0.000	0.000	0.000	1.048	0.000	0.000	0.000		1.048
		JPL to ETLB MSEB (ETLB MSEB)		0.000	0.000	0.000	0.842	0.000	0.000	0.000		0.842
		JPL to EILR MSEB (MPPL)		0.000	0.000	0.000	1.426	0.000	0.000	0.000		1.426
		JPL to ETLK MSEB (ETLK MSEB)		0.000	0.000	0.000	0.697	0.000	0.000	0.000		0.697
		JPL to EXIDE MSEB (EXIDE MSEB)		0.000	0.000	0.000	1.248	0.000	0.000	0.000		1.248
		JPL to EIPL MSEB (EIPL MSEB)		0.000	0.000	0.000	1.029	0.000	0.000	0.000		1.029
		JPL to EXIDE2 MSEB (EXIDE2 MSEB)		0.000	0.000	0.000	1.112	0.000	0.000	0.000		1.112
		JPL to FBML MSEB (FBML MSEB)		0.000	0.000	0.000	0.732	0.000	0.000	0.000		0.732

		JPL to GSL MSEB (GSL MSEB)		0.000	0.000	0.000	0.842	0.000	0.000	0.000		0.842
		EMCO to GCEL (EMCO)		0.000	0.000	2.595	0.000	0.000	0.000	0.000		2.595
		JPL to GODREJ MSEB (GODREJ MSEB)		0.000	0.000	0.000	0.842	0.000	0.000	0.000		0.842
		JCFPL GUVNL to SOLAR GOA (NVVNL)		-0.917	0.000	0.000	0.000	0.917	0.000	0.000		0.000
		JPL to GIPL MSEB (MPPL)		0.000	0.000	0.000	4.066	0.000	0.000	0.000		4.066
		JPL to HINDMOUDA MSEB (HINDMOUDA MSEB)		0.000	0.000	0.000	2.170	0.000	0.000	0.000		2.170
		HINDAHEJ GUVNL to HINDTALOJ MSEB (HINDTALOJ MSEB)		-1.534	0.000	0.000	1.534	0.000	0.000	0.000		0.000
		JPL to HNGIL MSEB (HNGIL MSEB)		0.000	0.000	0.000	5.364	0.000	0.000	0.000		5.364
		JPL to HRJIL MSEB (SCL)		0.000	0.000	0.000	2.095	0.000	0.000	0.000		2.095
		JPL to INDOFIL MSEB (MPPL)		0.000	0.000	0.000	1.029	0.000	0.000	0.000		1.029
		JPL to JRSW MSEB (JRSW MSEB)		0.000	0.000	0.000	0.834	0.000	0.000	0.000		0.834
		JPL to JBRL MSEB (JPL)		0.000	0.000	0.000	0.343	0.000	0.000	0.000		0.343
		JPL to KFIL MSEB (KFIL MSEB)		0.000	0.000	0.000	1.344	0.000	0.000	0.000		1.344
		JPL to KMLT MSEB (KMLT MSEB)		0.000	0.000	0.000	0.799	0.000	0.000	0.000		0.799
		APL2 GUVNL to LSLA GUVNL (AEL)		1.356	0.000	0.000	0.000	0.000	0.000	0.000		1.356
		APL2 GUVNL to MSEB (AEL)		-3.911	0.000	0.000	3.911	0.000	0.000	0.000		0.000
		APL3 GUVNL to MSEB (AEL)		-0.650	0.000	0.000	0.650	0.000	0.000	0.000		0.000
		JPL-II to MSEB (JSW PTL)		0.000	0.000	0.000	4.080	0.000	0.000	0.000		4.080
		MPSEB to MSEB (MPSEB)		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
		EMCO TO MSEB		0.000	0.000	0.000	132.771	0.000	0.000	0.000		132.771
		JNSTPP TO MP		0.000	120.999	0.000	0.000	0.000	0.000	0.000		120.999
		EMCO TO DNH		0.000	0.000	0.000	0.000	0.000	0.000	102.060		102.060
		MP TO TORRENT		19.537	-19.537	0.000	0.000	0.000	0.000	0.000		0.000
		LANCO TO MP		0.000	179.680	0.000	0.000	0.000	0.000	0.000		179.680
		NSPCL to DD (DD)		0.000	0.000	0.000	0.000	0.000	6.597	0.000		6.597
		IEE		57.502	33.890	-688.028	173.526	0.055	29.838	0.000		-185.736
		PEI		6.983	1.907	0.000	0.000	0.000	0.000	0.000		10.797
च	कुल आयात	Total Import	1670.865	119.845	1222.274	88.173	478.600	17.250	37.751	104.085		1670.865
	कुल निर्यात	Total Export	876.292	138.304	30.343	707.645	0.000	0.000	0.000	0.000		876.292
	नेट आयात / निर्यात	Net Imp. (+)/Exp. (-)	794.574	-18.459	1191.931	-619.472	478.600	17.250	37.751	104.085		794.574
4	अंतरक्षेत्रीय और द्विपक्षीय विनमयों की शिड्यूल मिलाकर कुल पात्रता	Total Entitlement incl. IR and bi-lateral exchange schedule	कुल	गुजविनिलि	मपविउकं	छगविवो	मगविउकं	गोवा	दमन दीव	दा न ह	एचवीडीसी	कुल
			Total	GUVNL	MPPGCL	CSEB	MSPGCL	GOA	DD	DNH	HVDC	TOTAL
			14074.295	3428.849	3907.420	138.947	4057.460	258.997	237.046	569.712	14.543	14074.293
5	की कुल शिड्यूल	Total Sdl. incl. IR/ bi-lateral exch. Sdl.	12279.748	2904.559	3652.049	-29.757	3402.127	232.962	183.723	453.818	14.436	12279.748
6	विना क्षति के कुल डावल	Total Drl excl. Tr. Loss	11643.742	2838.067	3008.379	416.718	4478.000	291.911	168.520	441.203	0.944	11643.742
7	क्षति मिलाकर कुल डावल	Total Drl incl. Tr. Loss	11678.850	2705.560	3008.379	416.718	4478.000	291.911	168.520	441.203	0.947	11511.238
8	प्रणाली में कुल पूल क्षति	Pooled loss in WR System										35.107
9	क्षेत्र स्टेशनों से		कोरबा	विन्ध 1 और 2	विन्ध 3	कवास	गंधार	काकरापार	तारापुर	एसएसपी	पेन्च	कुल
	वास्तविक इन्जेक्शन	Actual Inj. - WR Stns.	KSTPS	VSTPS-1& 2	VSTPS-3	KGPS	GGPS	KAPS	TAPS	SSP	PENCH	TOTAL
	(मि युनिट्स)	(MUs)	1513.960	2484.960	0.000	117.890	92.260	278.232	778.864	141.608	46.746	14684.850
			उ क्षेत्र आ	उक्षे को नि	उ क्षे नेट	द क्षे आ	द क्षे निर्यात	द क्षे नेट	पू क्षे आ	पू क्षे निर्यात	पू क्षे नेट	कुल नेट
10	वास्तविक अंतरक्षेत्रीय	**Actual IR Exchanges ***	NR Imp	NR Exp	NR Net	SR Imp	SR Exp	SR Net	ER Imp	ER Exp	ER Net	Total Net
	विनिमय (मि युनिट्स)	(MUs)	0.000	0.000	-2279.000	0.000	0.000	-1016.000	0.000	0.000	289.000	-3006.000
11	अंतरक्षेत्रीय विनिमय	IR Exchange Schedule	NRI sdl	NRE sdl	Net NR sdl	SRI sdl	SREsdl	Net SR sdl	ERI sdl	ERE sdl	Net ER sdl	Net WR sdl
	शिड्यूल (मि युनिट्स)	(MUs)	**271.280**	**77.541**	**193.740**	**0.809**	**937.059**	**-936.250**	**522.485**	**77.080**	**445.405**	**-297.106**

माह नवम्बर 2014 के अंतर्राज्यीय / अंतरक्षेत्रीय विनिमयों का विवरण **अनुलग्नक 4.6**

DETAILS OF INTERSTATE/INTER-REGIONAL EXCHANGES FOR THE MONTH OF NOVEMBER 2014 **Annex-4.6**

कमांक	From/ To	गुऊविनिलि	मपविउकलि	छराविबो	मराविउकलि	गोवा	दमन दीव	दा न ह	इस्सार	उ क्षेत्र	द क्षेत्र	पू क्षेत्र	पश्चिम क्षेत्र	कुल
A	Interstate/Inter-regional Schedules included in ISGS	GUVNL	MPPGCL	CSEB	MSPGCL	GOA	DD	DNH	ESIL	NR	SR	ER	WR	TOTAL
1	गुऊविनिलि GUVNL				1.534	0.917								2.451
2	मपविउकलि MPPGCL	19.537												19.537
3	छराविबो CSEB													0.000
4	मराविउकं लि MSPGCL													0.000
5	गोवा GOA													0.000
6	दा न ह DNH													0.000
7	कोरबा KORBA-III													0.000
8	जिंदल पावर JPL	4.320		8.725	72.602									85.647
9	अडानी पावर APL	3.386			4.561									7.947
10	ESSAR MAHAN													0.000
11	JAYPEE													
12	लेनको Lanco -Pathadi		179.680											179.680
13	एसीबीआईएल -ACBIL			2.942										2.942
14	KSK MAHANADI													
15	JNSTPP(NIGRIE)		120.999											
16	DB POWER													
17	VANDANA													
18	EMCO			2.594	132.771			102.060	0.135					
19	ESIL													
20	एन एस पी सी एल NSPCL						6.597							6.597
21	उत्तरी क्षेत्र N.Region (WR end)												0.000	0.000
22	दक्षिणी क्षेत्र S. Region (S. Bus)												0.000	0.000
23	पूर्वी क्षेत्र E. Region (WR end)												360.372	360.372
24	प क्षेत्र W.Region (WR end)									1961.644	928.011	24.183		2913.838
25	एनटीपीसी NTPC Injection													6110.770
26	एनपीसी NPC Injection													1057.096
27	Total ISGS drawal from the Grid incl. interregional/ bi-lateral exchange	2705.560	3008.379	416.718	4478.000	291.911	168.520	441.203						
B	Interstate/IR Exchanges not included in ISGS													
20	कर्नाटक Karnataka					58.184								58.184
21	यूपीपीसीएल UPPCL		0.000											0.000
22	आरवीपीएनएल RVPNL		-57.1											-57.100
23	UPPCL (Excess Drawn From Rajghat		6.590											6.590
24	कोटा उज्जैन Kota - Ujjain		0.000											0.000
25	कुल ब Total B (13 to 17)	0.000	-50.510	0.000	0.000	58.184	0.000	0.000						7.674
C	निवल विनिमय Net Exchange (12+18)	2705.560	2957.869	416.718	4478.000	350.095	168.520	441.203						11517.965
D	कुल आयात Total Imp. by WR													368.046
E	कुल निर्यात Total Export by WR													2913.838
F	निवल विनिमय Net Exchange (D-E)													-2545.792
G	**प क्षेत्र द्वारा वीलड ऊर्जा Energy wheeled by WR**													
26	पू क्षेत्र से द क्षेत्र को निर्यात ER export to SR										0.000			0.000
27	द क्षेत्र से उ क्षेत्र को निर्यात पूक्षे पक्षे से होकर SR export to NR via ER/WR									0.000				0.000
28	द क्षेत्र से उ क्षेत्र को निर्यात पक्षे से होकर SR export to NR via WR									0.000				0.000
29	पू क्षेत्र से उ क्षेत्र को निर्यात पक्षे से होकर श्R export to NR via WR									0.000				0.000
30	उ क्षेत्र से द क्षेत्र को निर्यात पक्षे से होकर NR export to SR via WR										0.000			0.000
31	पू क्षेत्र से द क्षेत्र को निर्यात पक्षे से होकर ER export to SR via WR										0.000			0.000
32	पू क्षेत्र से द क्षेत्र को निर्यात उक्षे पक्षे से होकर ER export to SR via NR/WR									0.000	0.000			0.000
33	उपू क्षेत्र से उ क्षेत्र को निर्यात पक्षे से होकर NER export to NR via WR									0.000				0.000

अनुलग्नक **4.7**
Annex-4.7

माह नवम्बर 2014 के अंत में पश्चिम क्षेत्र के मुख्य जलाशयों के स्तर
LEVEL OF MAJOR RESERVOIRS IN WESTERN REGION AT THE END OF MONTH OF NOVEMBER 2014

कमांक 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	101.25	396.61	261.11	655.99
1.2	पिछले वर्ष इस माह के अनुरूप आंकड़ें Corresponding Figure of the month Last Year	104.00	399.21	259.79	654.86

Annexure - 5

List of Grid Disturbances and Grid incidents (GD/GI) in Nov-2014 : Western Region						
Sr. No.	**Details of incident (Elements / Generation Tripped)**	**Owner Utility**	**Date**	**Time**	**Effect (Loss of generation/ Load), if any**	**Category as per Standards**
1	Black out at 400/220 kV Birsingpur S/s	MPPTCL	13-Nov-14	12:46	Gen Loss: 840 MW	GD-1
2	Bus fault at 220 kV Amona	Goa	16-Nov-14	11:15	Not Known	GI-1
3	Black out at 220 kV Omkareshwar S/S	MPPTCL	11-Nov-14	20:57	Nil	GD-1
4	Multiple tripping at 400 kV Amreli s/s	GETCO	30-Nov-14	7:52	Load Loss: 7 MW	GI-2
5	Blackout at 220 kV Annupur ,132 kV Amarakanatak TPS due to tripping of 132 kV VSTPS-Waidhan 1 & 2	MPPTCL	21-Nov-14	17:41	Load Loss: 171 MW	GD-1
6	Three Phase fault on 220 kV Kalwa-Colorchem line near to Kalwa resulting in severe load loss in Maharashtra	MSETCL	29/11/2014	15:28	Load Loss : 740 MW	GI-1

Annexure-6

S.Nos	Lines/ICTs/Event	Date and Time	Reason	DR/EL Submission pending
1	765 kV Satna-Gwalior 1	06-11-2014 21:13	R Phase to Earth Fault	PGCIL WR-2
2	400 kV Indore-Asoj 3	11-11-2014 20:57	DT at Indore end	GETCO ,PGCIL WR-2
3	765 kV Wardha-Aurangabad 2	12-11-2014 00:01	R Phase to Earth Fault	PGCIL WR-1
4	400 kV Karad-Kolhapur 2 & 400 kV Karad-Jaigad 1	13-11-2014 16:55	Tripped on O/V	MSETCL
5	400 kV Karad-Kolhapur 1	13-11-2014 18:31	Tripped on O/V	MSETCL
6	765 kV Seoni-Wardha 2	15-11-2014 21:24	Tripped on O/V	PGCIL WR-1
7	Grid Event of 220 kV Amona	16-11-2014 11:15	Bus fault	Goa
8	400 kV Sipat-Raipur III	16-11-2014 13:29	Tripped at Sipat end	NTPC, PGCIL Chhattisgarh
9	400 kV Asoj- Choronia & 400 kV SSP-Asoj	16-11-2014 17:47	B phase to Earth Fault	GETCO, NCA
10	400 kV Indore(PG)-Indore(MP)	17-11-2014 15:38	Tripped from Indore (PG) End only	PGCIL WR-2
11	765 kV Seoni –Bilaspur 1	21-11-2014 18:21	Tripped during testing	PGCIL Chhattisgarh
12	400 kV CGPL –Jetpur 2	22-11-2014 18:37	R-Y Fault	PGCIL WR-2 , CGPL
13	400 kV Dehgam-Wanakbori	23-11-2014 02:01	Y phase to Earth Fault	GETCO, PGCIL WR-2
14	400 kV Vindhyachal-Jabalpur 2	23-11-2014 20:03	Y Phase to Earth Fault	NTPC, PGCIL WR-2

S.Nos	Lines/ICTs/Event	Date and Time	Reason	DR/EL Submission pending
15	765 kV Seoni-Wardha 2	25-11-2014 13:59	Tripped on O/V	PGCIL WR-1
16	765 kV Seoni-Wardha 2	26-11-2014 17:02	Tripped on O/V	PGCIL WR-1

The following DR/EL details of Oct 14 still pending, in spite of assurance in 465th OCC.

Sl. No	Details of incident (Elements / Generation Tripped)	Owner Utility	Date	Time	Category as per Standards	DR /EL Receipt Status
1	Bus fault at Badod due to Y ph CT burst	MPPTCL	06-Oct-14	19:09	GI-1	No
2	Tripping of Satna-JP-Nigrie line 2 on Fault and 400/220 kV ICT-1 at Satna on Backup O/C protection	WRTS-2 (PG),	01-Oct-14	10:34	GI-2	Incomplete details by PG

Annexure-7.2

S No.	Name of the line	Agency	Target Completion Date
1	765 kV Tirora- Akola2 ckt-2	MEGPTL	Mar 2014
2	765 kV Akola2-Ektuni ckt1	MEGPTL	Mar 2014
3	765 kV Akola2-Ektuni ckt2	MEGPTL	Mar 2014
4	765 kV Ektuni-Aurangabad_PG ckt-1	MSETCL	Mar 2014
5	765 kV Ektuni-Aurangabad_PG ckt-2	MSETCL	Mar 2014
6	2x1500 MVA 765/400 kV, ICTs at Ektuni	MSETCL	Mar 2014
7	400 kV Taptithanda-Bableshwar D/C	MSETCL	Mar 2014
8	400 kV Bableshwar-Kudus D/C (Quad)	MSETCL	Mar 2014
9	400 kV IEPL-Warora D/C	MSETCL	Mar 2014
10	LILO of 400 kV Chandrapur-Parli at Nanded	MSETCL	Mar 2015
11	400 kV Dhule_MH-Dhule_PG	BDTCL	Oct 2014
12	400/220 kV, 500 MVA ICT at Boiser	POWERGRID	Nov 2014
13	765 kV Pune_GIS-Solapur	POWERGRID	
14	LILO of both circuits of Aurangabad – Pune 400 kV D/c line at Pune 765/400 kV GIS	POWERGRID	
15	LILO of both circuits of Parli– Pune 400 kV D/c line at Pune 765/400 kV GIS	POWERGRID	
16	400 kV DGEN-Vadodara D/C	POWERGRID	
17	765 kV Aurangabad-Solapur ckt-1	POWERGRID	Nov 2015
18	765 kV Aurangabad-Solapur ckt-2	POWERGRID	Nov 2015

ANNEXURE-8.1

Sl No	Power Station	Installed Cap. (MW)	Unit Type	Black Start Source	Capacity	DG set Test report sent to WRLDC (Y/N)
GUJARAT						
1	Ukai (H)	4 x 75	Hydro	Diesel	500 kVA	N
2	Mini Hydro	2 x 2.5	Hydro	Diesel	50 KW	N
3	Kadana	4 x 60	Hydro	Diesel	500 KVA	N
4	Dhuvaran	1 x 107 (68+39) + 1 x 112 (72+40)	Gas	Diesel	2x800 KVA	DG set expected by Jan 2015
5	GIPCL-II	1x104+1x56	Gas / Steam	Diesel	500 kVA	N
6	GPEC(CLPIPL)	3x138+1x241	Gas	Diesel	3000 kVA	N
7	Sugen	3x382.5 MW	Gas	Diesel	2x6MVA	N
8	AECo (Gas)	2x32.5(GT)+35(ST)	Gas	Diesel	500KVA	N
Madhya Pradesh						
9	Gandhisagar	5 x 23	Hydro	DG set	100 kVA	Y
10	Birsinghpur	1 x 20	Hydro	DC Battery bank	220 Volt DC Battery	N
11	Pench	2 x 80	Hydro	DG set	250 kVA	Y
12	Bargi	2 x 45	Hydro	DG set	250 kVA	Y
13	Tons	3 x 105	Hydro	DG set	250 kVA	Y
14	Indira Sagar	8x125	Hydro	DG set	2x1000 KVA	N
15	Omkareswar	8x65	Hydro	DG set	2x2010	N
16	Medikheda	3x20	Hydro	DG set	250 KVA	Y
17	Rajghat	3x15	Hydro	DG Set	250 KVA	Y
Chhatisgarh						
18	Hasdeo Bango	3 x 40	Hydro	DG Set	250 kVA	N
19	Korba(E)-phse-I	Power plant retired but Black start DG set available and on-load trial is reported to be carried out regularly		DG Set	1500 kW(3.3kV)	N
Maharashtra						
20	Koyna I & II	4 x 65 4 x 75	Hydro	House generator	2 MVA	Y
21	KDPH	2 x20	Hydro	DG set	310 KW	N
22	Eldari	3 x 7.5	Hydro	DG set	6 KW	N
23	Uran (Gas)	4 x 60 (GT) + 4x108 (GT)+ 2x120 WHR	Gas	DG set	4 MW PH1:412kVA PH2:450kVA WH:520kVA	Y
24	RGPPL	Block 1: 640MW+Block 2: 663.54MW+Block 3: 663.54MW	Gas	Gas Turbine (Frame-6)	35 MW (Under testing): Details to be provided by RGPPL.	N

Sl No	Power Station	Installed Cap. (MW)	Unit Type	Black Start Source	Capacity	DG set Test report sent to WRLDC (Y/N)
25	Ghatghar	2x125	Hydro	DG set	1x1250 kVA	N
26	Khopoli	3x24+2x12	Hydro	DC Governor & bearing oil pumps	DC power (self-start)	Y
27	Bhivpuri	3 x 24 + 2 x 1.5 +2x12	Hydro	DC Governor & bearing	-do-	Y
28	Bhira	6 x 25	Hydro	1 No.of 500 KVA house generator with water turbine	500 kVA	Y
29	Bhira PSS	1 x 150	Hydro	DG set	500 kVA	Y
30	Trombay	1 x 120 1 x 60	Gas Turbine Steam Turbine	DG Set	2.5 MW	Y
NTPC						
31	Kawas	4 x 106 2 x 116	Gas	Diesel	2850 KW	**Y**
32	Gandhar	3 x 144 + 1x225	Gas	Diesel	2975 KW	Y
NCA						
33	SSP(RBPH & CHPH)	6x200+5*50	Hydro	Diesel	2x1000kVA	**Y**

FEATURE	CBIP MANUAL 274 & 296	CEA GUIDELINES	WRLDC GUIDELINES 104 TH MEETING	MPPTCL PRACTICE	PGCIL
SCHEME	PU	PU	PUP	PU	PU
ZONE-1	80%	80%	80%	80%	80%
ZONE-1	INSTAN.	INSTAN.	INSTAN.	INSTAN.	INSTAN.
ZONE-2	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS	120% OR 100%+50 % OF NEXT SHORTEST LINE	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS ON
ZONE-2	300 ms	350 ms	300 ms	300 ms	300
ZONE-3	120% OF PROTECTED LINE+100% OF LONGEST	120% OF PROTECTED LINE+100% OF LONGEST	120% OF PROTECTED LINE+100 % OF	120% OF PROTECTED LINE+100 % OF	120% OF PROTECTED LINE+100% OF LONGEST
ZONE-3 TIME	Zone-3 timer should be set so as to provide discrimination with the operating time of relays provided in subsequent	1000 ms	500 ms	700 ms	1000 ms

MADHYA PRADESH POWER TRANSMISSION COMPANY LIMITED
STATE LOAD DESPATCH CENTRE
NAYAGAON, RAMPUR, JABALPUR 482008
Telephone: (0761) 2702740/2660240 Fax: (0761) 2664343 e-mail sldcmpjbp@yahoo.com

आई एस ओ : 9001-2008
ISO: 9001-2008

No.07-05/RPC-18/4200 Jabalpur, dtd: 02.12.2014

To

The Suptdg. Engineer (Opn.),
WRPC, F-3, MIDC Area,
Andheri (E), Mumbai-400093. **Fax: 022-28370193**

Sub: Agenda points for 466th OCC Meeting of WRPC.

...

Sir,

Following Agenda Points of SLDC, MPPTCL may please be included for discussions in the 466th Operation & Coordination Committee Meeting of WRPC.

1. DPR SETTING GUIDELINES FOR 400 KV LINES – DPR settings adopted by MPPTCL and PGCIL 400 kV transmission lines as well as settings recommended by CBIP, CEA and WRLDC are given below:-

FEATURE	CBIP MANUAL 274 & 296	CEA GUIDELINES	WRLDC GUIDELINES 104 TH MEETING RECOMMENTATIONS	MPPTCL PRACTICE	PGCIL
SCHEME	PUP	PUP	PUP	PUP	PUP
ZONE-1	80%	80%	80%	80%	80%
ZONE-1 TIME	INSTAN.	INSTAN.	INSTAN.	INSTAN.	INSTAN.
ZONE-2	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS ON LINE LENGTHS)	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS ON LINE LENGTHS)	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS ON LINE LENGTHS)	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS ON LINE LENGTHS)	120% OR 100%+50% OF NEXT SHORTEST LINE (DEPENDS ON LINE LENGTHS)
ZONE-2 TIME	300 ms	350 ms	300 ms	300 ms	300 ms
ZONE-3	120% OF PROTECTED LINE+100% OF LONGEST LINE OF NEXT SECTION	120% OF PROTECTED LINE+100% OF LONGEST LINE OF NEXT SECTION	120% OF PROTECTED LINE+100% OF LONGEST LINE OF NEXT SECTION	120% OF PROTECTED LINE+100% OF LONGEST LINE OF NEXT SECTION	120% OF PROTECTED LINE+100% OF LONGEST LINE OF NEXT SECTION
ZONE-3 TIME	Zone-3 timer should be set so as to provide discrimination with the operating time of relays provided in subsequent sections with which Zone-3 reach of relay being set overlaps.	1000 ms	500 ms	700 ms	1000 ms

To minimize the fault clearing time in 3rd Zone, which is rare, the time setting adopted in MP is 700 ms and the backup O/C, E/F setting kept beyond 700 ms - 1000 ms for other end bus fault where bus protection is not provided whereas settings adopted by PGCIL are not consistent with that of MPPTCL. Fault clearing time for both the ends should be same for reliable system operation.

Matter of inconsistency in Zone-3 time settings adopted by MPPTCL and PGCIL may be discussed in next 466th OCC meeting of WRPC to arrive at common consensus with regard to DPR settings adopted by various transmission utilities of Western Region.

2. Provision of Auto-reclosure facility on 220 kV Badod-Kota and Badod-Modak end by Rajasthan -

WRLDC is repeatedly notifying violation of Protection Standard in case of tripping of 220 kV Badod-Modak and 220 kV Badod-Kota line on single phase to earth fault. MP SLDC has intimated WRLDC several times that two nos. PUNCOM make PLCC cabinets with protection couplers for 220 kV Badod-Kota and Badod-Modak lines have already been provided at 220 kV sub-station, Badod (MP). The scheme could not be put to use due to non-availability of carrier equipments with protection coupler at 220 kV S/s, Kota (Rajasthan) and 220 kV S/s, Modak (Rajasthan) with a request to take up the matter with NLDC & NRLDC for providing PLC cabinet alongwith protection coupler at Kota and Modak S/s of Rajasthan.

Further, Auto-reclosure facilities on 220 kV Mehgaon-Auraiya and 220 kV Malanpur-Auraiya have already been commissioned and put into service on 14.11.2014 and 12.11.2014, respectively.

WRLDC may take up the matter of providing PLC cabinets alongwith protection couplers at Kota & Modak S/s of Rajasthan with NLDC and NRLDC to avoid violation of Protection Standard of the inter-regional lines of voltage class 220kV level and above.

3. Alternative scheme to put Auto Reclosure (A/R) in service on the EHV lines connecting to Generating Stations-

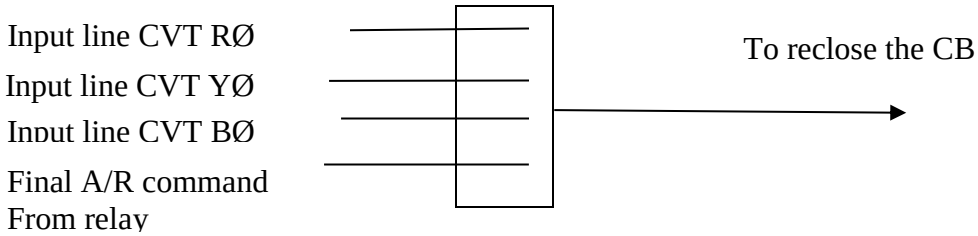
In most of the cases Auto Reclosure (A/R) on EHV lines connecting to Generating Stations are kept out of service, to avoid charging of faulty lines from Generating Stations. Many times tripping of these loaded lines on transient faults create emergencies regarding power evacuation, power swings and system stability. That further resulted in to backing down of generation or other operations to save the system. But all these exercise may take considerable time.

In general, most of the transient faults occurred are of single phase to ground in nature and auto reclose of the line is the best option to maintain the reliability and stability of the system. But a possibility of auto reclose attempt on a faulty line and its anticipated impacts always discourage generating stations to put A/R in service, as they always prefer to synchronize a healthy and charged line.

Therefore from generating station's point of view, an auto reclose scheme can be developed to reclose the line from generating station with some time lag i.e. about 400 msec. after successful reclosing of line from the remote end and also on confirmation of healthy voltages on line CVT at generating station end. This way problems related to switching on faulty linfrom generating station can be overcome and system availability and stability could be maintained in better way.

The logic for this alternative scheme to put Auto Reclosure (A/R) in service on the EHV lines at Generating Stations may be developed as following;

1 Keep dead time setting of A/R 900 ms at remote end from generating station.
2 Keep dead time setting of A/R 1300 ms at generating station and make **AND logic** of reclose command with the line CVT voltages.



The matter is required to be discussed in OCCM of WRPC to revise guidelines for providing Auto Reclosure facility on EHV lines connecting Generating Stations.

4. Non-Availability of telemetry of NTPC Rajgarh (MP) Solar Power Plant –

The telemetry of NTPC Rajgarh Solar Power Plant (50 MW) installed in Madhya Pradesh has not provided by the NTPC despite repeated pursuance by MP SLDC. NTPC has neither commissioned the telemetry nor intimated any expected date for providing telemetry data to MP SLDC. The copies of correspondence made in the matter are attached herewith. NTPC may be advised to provide the telemetry of NTPC Rajgarh (MP) Solar Plant (50 MW) at the earliest.

Thanking you,

Yours faithfully,

Encl: as above.

Suptdg. Engineer (LD:Opn.),
SLDC, MPPTCL, Jabalpur.

MP POWER TRANSMISSION COMPANY LIMITED

STATE LOAD DESPATCH CENTRE, NAYAGAON, JABALPUR 482 008

No. SE/LD: E&T/690 Jabalpur Date 19/10/13

To,

As per list.

Sub :- Providing Telemetry and communication facility to SLDC, Jabalpur in compliance to grid code.

Dear Sir,

It is understood that your company has established/is in the process of establishing renewal Generating Units in MP. As per grid code all users/STU/CTU are required to provide speech and data communication upto the nearest SLDC/Sub-LDC. Further, as per RRF mechanism, telemetry of solar generator having capacity of 5 MW or more and wind generator having capacity of 10 MW or more are required to be provided by concern RE generator/coordinating agency on behalf of RE generator. Further, the telemetry of renewal generators is also required to be arranged for reliable and effective grid management,

In order to plan and arrange the telemetry, certain guidelines need to be followed which are as given hereunder:-

1. The DAS/RTU installed at the power stations/substations/pooling station is required to have IEC 870-5-101 protocol with interoperability matrix compatible with the SCADA system available at SLDC/Sub-LDC. A copy of the interoperability matrix of SLDC SCADA system is enclosed herewith for further needful.

2. It may be noted that the concern renewable agency/coordinating agency is required to provide telemetry of active and reactive power of all feeders upto 33KV, active and reactive power of transformers, bus voltage, frequency and circuit breaker status of all feeders, transformers, bus couplers.

The renewable generator/coordinating agency is requested to provide single line diagram of switchyard of pooling station/connecting station. On receipt of Single line diagram of switchyard of pooling station/point of connectivity, the data Input Output (IO) list shall be prepared and provided by SLDC .

3. The measurand mentioned above are required to be configured in RTU/DAS as IEC type detailed hereunder:-

S.N	Data object	IEC Data type to be configured
1.	Breaker Status	M_DP_TA_1 (TYP04) i.e Double status with time tag.
2.	Analog Input (MW, MVAR, KV, HZ)	M_ME_NA _1 (Type09) or M_ME_NC (TYPE 13)

The other important IEC 870-5-101 parameter setting required to be made in your DAS/RTU are also given hereunder

IecMaxUserFrameLength	**255**
IecLLAddrFieldLength	**1 octet**
IecASDUAddrFieldlength	**1 octet**
IECObject Addr Field length	**2 octet**
IEC Transmission Field length	**1 octet**

4.. The reliable data channel from pooling station/point of connectivity to nearest SLDC/Sub-LDC/wideband node is required to be arranged by RE generator/coordinating agency on behalf of RE generator. The data channel speed may be worked out on the basis of Number of analog data as per details given hereunder:-

No. of Analog Data	Minimum Baud Rate
0 – 30	300
31 – 60	600
61 – above	1200

5. It may please be noted that modem/other integration equipment along with necessary wiring/cabling required for integration of telemetry of renewable generator at control centre end shall also required to be arranged by the concern renewable agency.

6. Complete installation and commissioning of RTU/DAS system at pooling station including extension of process connections, arranging point to point testing with SCADA control centre shall be under the scope of concern renewable generator/coordinating agency. However, SLDC Jabalpur shall do the database development at SCADA control centre end for which you have to forward the single line diagram of the switchyard indicating CT/PT ratios, in time.

It is requested to arrange the telemetry of the renewal Power station as per the details mentioned above on priority basis..

Thanking You,

Yours faithfully,

Superintending Engineer(LD:E&T)
SLDC, MPPTCL, Jabalpur.

Enclosure:- (i) SLDC SCADA system Interoperability matrix document

Copy to:-

1. The CE (LD), MPPTCL, Jabalpur.
2. Chief Engineer (T&C), MPPTCL, Jabalpur

M/s Friends Salt Works & Allied Industries
Maintri Bhavan,
Plot no.18,sector 8, gandhidham,
Kutch-370201
fax-02836-233924

M/s Bhadresh Trading Corporation ltd
205,Majestic Shopping Center,
144,JSS road ,Girgaum,
Mumbai-499004
Tel:067200021, Fax:023800007
email:-vedanjaypower@gmail.com

M/s Alfa Infraprop Pvt. Ltd.
6th floor, Civic Center, Near Naigaon cross road,
dasturwadi, Dadar(E), Mumbai-4000014,
Fax:022-42429997, email: sanjay.shah@alfainfraprop.com

ASN Industries
Sy No. 8-11, Gudar (V), Badwara (T),
Katni Distt.
Fax No. 07622-403940

M/s Arya energy
Arya Energy Limited,
E-14, 3rd floor,shyam plaza,Pandri,
Raipur-492001 (CG)

M/s MP Wind Farm LTD,
ENERGY TOWER,
64, B-Sector, Kasturba Nagar,
Bhopal-462023

M/s G.I. Power Corporation
B1/E3,2nd Floor,Mohan Cooperative Industrial Estate,
Mathura Road,
New Delhi-110044
Fax. 011-49405001

M/s Enercon (India) Ltd., Nagda Hill
B-58, II Floor, Near Chetak Bridge,
Kasturba Nagar.
Bhopal (MP) -462023.

M/s NEPC India Ltd., Chennai
No.36,Wallajah Road,
Chennai - 600 002. India.

M/S Suzlon Energy Ltd.
1090,Scheme No114,Part-2,Ring Rd,
Universal Hospital Row,
Indore-452010

M/s Southern Wincon
52,Gandhi Colony, Choupati,Jaora,
Dist-Ratlam-457226

M/s Choksi Energy & Infra Pvt Ltd.
G 1, Bajson Industrial Estate,cardinal Gracious Roa,
Andheri,Mumbai - 400099, Maharashtra,

M.P.POWER TRANSMISSION COMPONY LIMITED

STATE LOAD DESPATCH CENTRE, NAYAGOAN, RAMPUR,JABALPUR.482 008
(ISO 9001:2008 CERTIFIED)
0761-2702744/ 2702754 **FAX- 0761-2664343**

No. SE/LD:E&T/ 175 Jabalpur date 25/3/14

To,

General Manager
NTPC Ltd,
Renewale Energy and Distributed Generation
E-1/72 Arera Colony
Bhopal 462016

Attn:- Mr. M.P.Sinha

Sub:- Providing telemetry and communication facility to SLDC, in compliance to grid code.
Ref:- Your letter No nil dated 24-03-2014

Dear Sir,

This has reference to above letter dated 24-03-2014 where from, it is understood that your company is in the process of establishing 50 MW Solar Power project at Rajgarh in MP. As per grid code, all users are required to provide the telemetry and data communication up to nearest SLDC/Sub-LDC, so that grid monitoring may be carried out.

It is therefore required that the telemetry and voice communication from your Solar Power Plant to the Sub-LDC Bhopal be arranged before synchronization of your power plant. For planning of telemetry of your power plant, certain guidelines need to be followed which are as enclosed herewith as annexure-1.

It is requested to arrange the telemetry of the your solar Power station as per the details mentioned in the enclosed annexure on priority basis. Please also furnish copy of single line diagram of your switchyard of your power plant from where telemetry shall be provided.

Yours faithfully,

Encls:As above.

Superintending Engineer(LD:E&T)
SLDC, MPPTCL, Jabalpur.

NTPC- Rajgarh
Copy to:- Mr. Ani Choudhary (AE! Electrical) O/C
The Chief Engineer(SLDC),MPPTCL,Jabalpur

M.P.POWER TRANSMISSION COMPANY LIMITED

STATE LOAD DESPATCH CENTRE, NAYAGOAN, RAMPUR,JABALPUR.482 008
(ISO 9001:2008 CERTIFIED)
0761-2702744/ 2702754 **FAX- 0761-2664343**

No. SE/LD:E&T/ 276 Jabalpur date : 03/05/2014

To,

General Manager
NTPC Ltd,
Renewale Energy and Distributed Generation
E-1/72 Arera Colony
Bhopal 462016

Attn:- Mr. M.P.Sinha

Sub:- Providing telemetry and communication facility to SLDC, in compliance to grid code.
Ref:- This office letter No. SE/LD:E&T/175 Dated 25/03/2014.

Dear Sir,

With reference to the above, it is to inform that the you have not provided the telemetry of your generating station despite constant pursuance by SLDC. The non availability of telemetry is creating difficulty in real time grid monitoring.

In this reference, it is to mention that as per grid code all users/STU/CTU are required to provide speech and data communication upto the nearest SLDC/Sub-LDC. Further, it is to mention here that regarding maintenance and establishment of telemetry and communication facilities, CERC has filed a suo motu petition No. 56/SM/2013 and directed NLDC and RLDC to closely monitor the performance and availability of telemetry status. The WRLDC and NLDC is pressing hard for arranging the telemetry of all renewable generating station located in MP area and submit the time schedule of commissioning of telemetry so that the same may be submitted to CERC .

In view of the above, it is requested to please initiate necessary action for arranging telemetry on priority basis. Further, time schedule for arranging the telemetry may also be intimated by return fax, as the same is required to be submitted to WRLDC/NLDC.

It may please be noted that reluctance to provide telemetry data to SLDC/ Sub-LDC shall be treated as non-compliance of CERC regulation & directions of SLDC , and the action according to IE Act 2003 shall be initiated by SLDC.

Yours faithfully,

Chief Engineer (SLDC)
MPPTCL, Jabalpur.

Annexure-1

GUIDELINES FOR PLANNING OF TELEMETRY AND VOICE COMUNICATION

1. The DAS/RTU to be installed at the power stations/substations/pooling station should have IEC 870-5-101 protocol with interoperability matrix compatible with the SCADA system available at SLDC/Sub-LDC. A copy of the interoperability matrix of SLDC SCADA system is enclosed herewith for further needful.

2. The telemetry of active and reactive power of all feeders upto 33KV connected at your pooling station/control centre, active and reactive power of transformers, bus voltage, frequency and circuit breaker status of all feeders, transformers, bus couplers of your pooling station/control centre where DAS /RTU is located shall be required.

3. The measured mentioned above are required to be configured in RTU/DAS as IEC type detailed hereunder:-

S.N	Data object	IEC Data type to be configured
1.	Breaker Status	M_DP_TA_1 (TYP04) i.e Double status with time tag.
2.	Analog Input (MW, MVAR, KV, HZ)	M_ME_NA _1 (Type09) or M_ME_NC (TYPE 13)

The other important IEC 870-5-101 parameter setting required to be made in your DAS/RTU are also given hereunder

IecMaxUserFrameLength	**255**
IecLLAddrFieldLength	**1 octet**
IecASDUAddrFieldlength	**1 octet**
IECObject Addr Field length	**2 octet**
IEC Transmission Field length	**1 octet**

4.. The reliable data channel from DAS/RTU to nearest SLDC/Sub-LDC/wideband node is required to be arranged by Your company. The data channel speed may be worked out on the basis of Number of analog data as per details given hereunder:-

No. of Analog Data	Minimum Baud Rate
0 – 30	300
31 – 60	600
61 – above	1200

5. Modem/other integration equipment along with necessary wiring/cabling required for integration of telemetry of your plant at Sub-LDC /SLDC shall also be arranged by the concern generating agency.

ANNEXURE-9.8

Sl No	Power Station	State	Mock Drill During 1-Jan-to 30-Jun 2014	Mock Drill During 1-Jul-2014 - Till Date
1	Hasdeo Bango	Chhattisgharh	06-Apr-14	-
2	Gandhisagar	Madhya Pradesh	21-May-14	-
3	Pench	Madhya Pradesh	09-Jun-14	-
4	Indira Sagar	Madhya Pradesh	10-Jun-14	-
5	SSP (RBPH & CHPH)	NCA/Gujarat	22-Jun-14	-
6	Bargi	Madhya Pradesh	-	08-Oct-14
7	Ukai (H)	Gujarat	-	-
8	Mini Hydro	Gujarat	-	-
9	Kadana	Gujarat	-	-
10	Dhuvaran	Gujarat	-	-
11	GIPCL-I	Gujarat	-	-
12	GPEC(CLPIPL)	Gujarat	-	-
13	Sugen	Gujarat	-	-
14	AECo (Gas)	Gujarat	-	-
15	Birsinghpur	Madhya Pradesh	-	-
16	Tons	Madhya Pradesh	-	-
17	Omkareswar	Madhya Pradesh	-	-
18	Medikheda	Madhya Pradesh	-	-
19	Rajghat	Madhya Pradesh	-	-
20	Korba(E)-phse-I	Chhattisgharh	-	-
21	Koyna I & II	Maharashtra	-	24-Nov-14
22	KDPH	Maharashtra	-	-
23	Eldari	Maharashtra	-	-
24	Uran (Gas)	Maharashtra	-	2-Dec-14
25	RGPPL	Maharashtra	-	-
26	Ghatghar	Maharashtra	-	-

Sl No	Power Station	State	Mock Drill During 1-Jan-to 30-Jun 2014	Mock Drill During 1-Jul-2014 - Till Date
27	Khopoli	Maharashtra	-	-
28	Bhivpuri	Maharashtra	-	-
29	Bhira	Maharashtra	-	-
30	Bhira PSS	Maharashtra	-	-
31	Trombay	Maharashtra	-	-
32	Kawas	NTPC (Gujarat)	-	-
33	Gandhar	NTPC (Gujarat)	-	-

Annexure-9.9

Sl No	Power Station	State	Nomination Received
1	Hasdeo Bango	Chhattisgharh	Received
2	Korba(E)-phase-I	Chhattisgharh	-
3	Ukai (H)	Gujarat	Received
4	Mini Hydro	Gujarat	-
5	Kadana	Gujarat	Received
6	Dhuvaran	Gujarat	-
7	GIPCL-I	Gujarat	Received
8	GPEC(CLPIPL)	Gujarat	Received
9	Sugen	Gujarat	-
10	AECo(Gas)	Gujarat	Received
11	Gandhisagar	Madhya Pradesh	-
12	Pench	Madhya Pradesh	-
13	Indira Sagar	Madhya Pradesh	Received
14	Bargi	Madhya Pradesh	-
15	Birsinghpur	Madhya Pradesh	-
16	Tons	Madhya Pradesh	-
17	Omkareswar	Madhya Pradesh	Received
18	Medikheda	Madhya Pradesh	-
19	Rajghat	Madhya Pradesh	-
20	Koyna I & II	Maharashtra	-
21	KDPH	Maharashtra	-
22	Eldari	Maharashtra	-
23	Uran (Gas)	Maharashtra	-
24	RGPPL	Maharashtra	-
25	Ghatghar	Maharashtra	-
26	Khopoli	Maharashtra	Received
27	Bhivpuri	Maharashtra	Received
28	Bhira	Maharashtra	Received
29	Bhira PSS	Maharashtra	-
30	Trombay	Maharashtra	Received
31	SSP(RBPH & CHPH)	NCA/Gujarat	Received
32	Kawas	NTPC (Gujarat)	Received
33	Gandhar	NTPC (Gujarat)	-

Annexure-9.13

State	FSP allotted	Status
Gujarat	M/S TESLA	Pilot Load Forecasting has initiated by M/S Tesla from 10.10.14 through online web based application and from 6/11/2014, revision through ftp access to Gujarat /Discom. However, again, some issues are addressed to the M/S TESLA. i.e. inappropriate sequence of Revision, improper Timing of revision etc. M/S TESLA is resolving the issue at their end. Meanwhile, accuracy are also ascertained on whatever available forecast data of M/S Tesla which found unsatisfactory especially during the festival of Diwali, cyclone threat, major gap are observed.
Maharashtra	IIT, MUMBAI	All details / data pertaining to the Pilot Load Forecasting have been provided by MH to IIT Mumbai. In response, IIT Mumbai is providing the forecast service to MH. The accuracy observed by Maharashtra are varies from 2 to 10%.
MP	M/S METEOLOGICA	As informed earlier, Madhya Pradesh has already awarded the Load Forecasting project to M/S L&T InfoTech. Hence, M/S Meteologica FSP, allotted to MP, are not providing Pilot Load Forecasting service to Madhya Pradesh.
Chhattisgarh	M/S SAS	M/S SAS FSP was considered to provide such pilot project of Chhattisgarh. During last WRPC meeting, CS has informed that M/S SAS FSP have not responded since long.On inquiry, SAS informed that since this being free pilot project, matter is put up to their higher authority for approval and they are analyzing on the basis of future scope/ business so looking to their non interest in this project, it is suggested that Chhattisgarh may contact M/S Meteologica for the Pilot Load forecasting for Chhattisgarh.
GOA	M/S MARCADOS	Till today, Goa has not declared their coordinator for Pilot Load Forecasting Project. Even after so many times various officers of GOA are contacted but not responded. Hence it is requested to pl take up matter with higher officers of GOA from WRPC end. Further Marcodos has now closed and so they have to be provided new forecasting company.
DD	IIT, GANDHINAGAR	All details / data pertaining to the Pilot Load Forecasting have been provided by DD to IIT Gandhinagar. Now, the response from IIT, Gandhinagar is awaited.
DNH	IIT, GANDHINAGAR	All details / data pertaining to the Pilot Load Forecasting have been provided by DD to IIT Gandhinagar. Now, the response from IIT, Gandhinagar is awaited.

ANNEXURE 10

SR NO	UTILITIES	OCC NO.	MONTH	STATUS	REMARK
1	CHHATTISHGARH	454	Dec-14	HOSTED ON 10.12.13 AT RAIPUR	
2	DD	455	Jan-14	HOSTED ON 16.01.14 AT DIU	
3	GUJARAT	456	Feb-14	HOSTED ON 13.02.14 AT VADODARA	
4	RGPPL*	457	Mar-14	-	HOSTED ON 11.03.14 AT MUMBAI BY NTPC MUMBAI HQ-I
5	MAHARASHTRA	458	Apr-14	HOSTED ON 16.04.14 BY MSETCL AT MUMBAI	
6	NTPC, HQ-II Raipur*	459	May-14	-	HOSTED ON 12.05.14 AT MUMBAI BY WRPC AT RELIANCE
7	WRTS-I	460	Jun-14	HOSTED ON 13.06.14 AT NAGPUR	
8	KWPCL	461	Jul-14	-	HOSTING ON 10.07.14 AT RAIPUR BY KWPCL(IPP)
9	TAPS-1&2	462	Aug-14	hosted on 11.08.2014 at TARAPUR	
10	NTPC Gandhar/Kawas	463	Sep-14	hosted on 12.09.2014 at Bharuch	
11	RELIANCE SASAN	464	Oct-14	Hosted on 13.10.2014 at Varanasi	
12	WRPC	465	Nov-14		11.11.2014 at WRPC Mumbai
13	MADHYA PRADESH	466	Dec-14	Hosted on 09.12.2014 at Jabalpur	
14	WRPC	467	Jan-15		to be held on 16.01.2015 at WRPC Mumbai
15	**ESSAR TRANSMISSION**	468	Feb-15		
16	BDTCL/JBTCL	469	Mar-15		
17	NTPC VINDHYACHAL	470	Apr-15		
18	TATA POWER	471	May-15		
19	TORRENT POWER	472	Jun-15		
20	CGPL	473	Jul-15		
21	JPL	474	Aug-15		
22	TAPS-3&4	475	Sep-15		
23	ESSAR ESIL	476	Oct-15		
24	APL	477	Nov-15		
25	DNH	478	Dec-15		
26	NTPC Mouda	479	Jan-16		
27	KSK	480	Feb-16		
28	RELIANCE TRANSMISSION	481	Mar-16		
29	NTPC SIPAT, CG	482	Apr-16		
30	NTPC KORBA	483	May-16		
31	NCA	484	Jun-16		
32	GOA	485	Jul-16		
33	KAPS	486	Aug-16		
34	RKM POWER GEN	487	Sep-16		
35	NHDC	488	Oct-16		
36	NTPC, Mumbai	489	Nov-16		
37	ADANI TRANSMISSION	490	Dec-16		
38	WRTS-II	491	Jan-17		
39	SUGEN (TPL)	492	Feb-17		

466th OCC Meeting

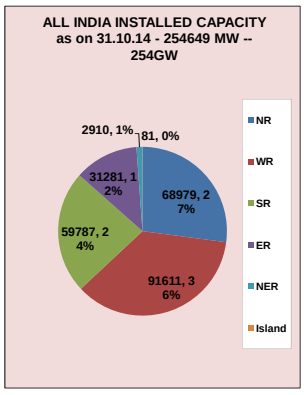
Jabalpur

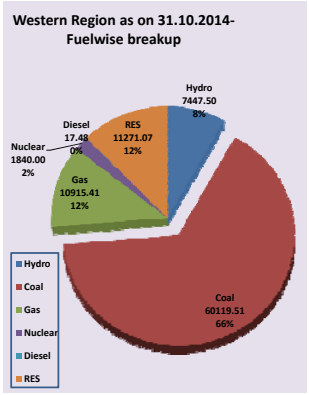
9th December, 2014

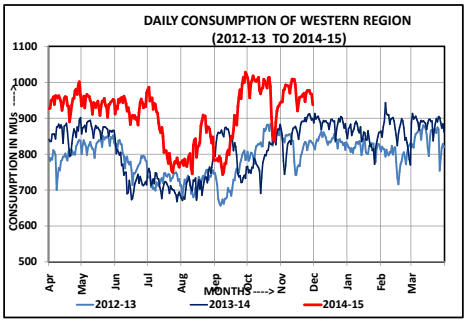
Grid Operation Highlights

Operational Highlights (NOV-14)

- Installed Capacity of WR 91610 MW as on 31.10.2014 which is 36% of total all India capacity of 254GW.
- Regional Energy Consumption
  - Maximum 1009 MUs observed on 11th Nov-14 which is 10.57% higher than last year Nov'13 and 0.88 % less than last Month.
- Regional Demand Met
  - WR: 44549 MW on 10-Nov-14 at 15:00 hrs
  - Madhya Pradesh registered highest ever demand met of 9832 MW in this year April'14 to Nov'14.
  - All the constituents have two digit growth in demand compared to last year whereas less than last month (Oct'14) except Madhya Pradesh.
- Grid Frequency profile- Avg. frequency in Nov'14 was 50 Hz. And in IEGC band was for 53.60% of time.(0.66% higher than last month)
- Wind Generation
  - Gujarat – Total 226.74 Mus with Max. 22.91 Mus on 11.11.2014.
  - Maharashtra – Total 174.74 Mus with Max. 17.23 Mus on 13.11.2014.
- Compliance of DSM
- Total 932 Ckt Km added in the WR Grid in the month of Nov'14 whereas total 6253ckt Km added since April'14. 765 KV Dhule(BDTCL) – Aurangabad (PG) line and 765/400 Kv Dhule(Songir) S/S inclu. ICT I and ICT II (1500 MVA)charged on Dt.04.12.2014.
- Jhanor Blackstart Mockdrill exercise completed successfully on Dt.07.12.2014
- Agenda Items





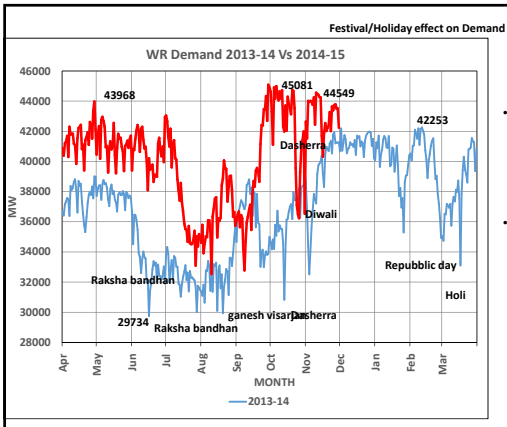


Maximum Energy Consumption : 1009 MUs on 11th Nov'14 (10.57% higher than last year)

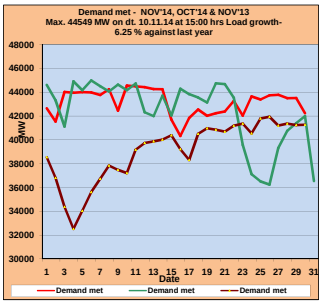
Minimum Energy Consumption : 920 MUs on 16th Nov'14.

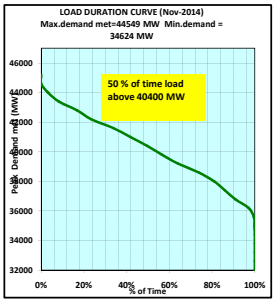
Energy Consumption MU/Day	Nov-14	Oct-14	Nov-13	% Change w.r.t last month	% Change w.r.t last Year
Average	971	1000	861	0.41	12.80
Max	1009	1018	913	-0.88	10.57
Date	11-Nov-14	6-Oct-14	27-Nov-13	~	~

Festival/Holiday effect on Demand



- Average demand met (hourly)in Nov'14 increased by 12.79% compared to last year.
- Max Demand Met increases approx 2600 MW (6.25%) in Nov'14 compared to last year.



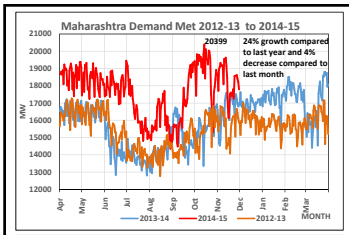


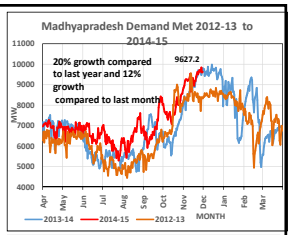
Demand Met	Nov-14	Oct-14	Nov-13	% Change w.r.t last month	% Change w.r.t last Year
Average	43153	42333	39086	1.93	10.40
Max	44549	44988	41927	-0.98	6.25
Date when Max.	10-Nov-14	6-Oct-14	27-Nov-13	~	~

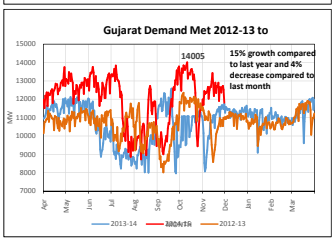
Regional Demand met

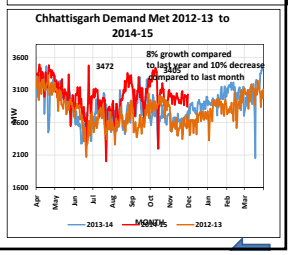
Max: 44549 MW on 10th Nov'14 at 15:00 hrs 6.25% more than the last year.

Min: 34624 MW (17th Nov, 04:00 hrs)

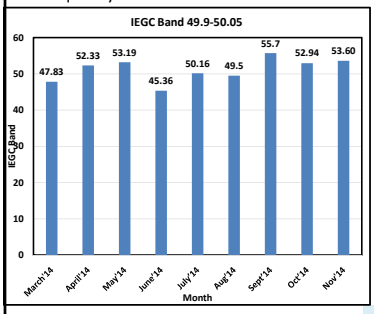








Frequency Profile



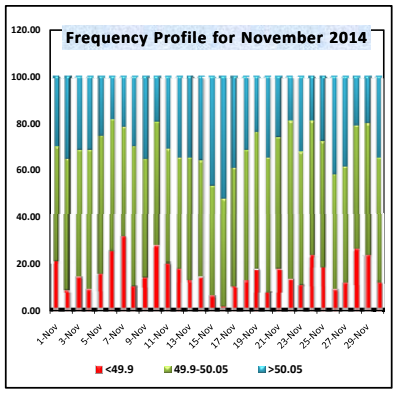
Months	% of time frequency			FVI
	<49.9	49.9-50.05 IEGC Band	>50.05	
March'14	12.91	47.83	39.27	0.12
April'14	30.64	52.33	17.03	0.16
May'14	22.48	53.19	24.33	0.13
June'14	37.15	45.36	17.49	0.24
July'14	34.51	50.16	15.33	0.20
Aug'14	37.87	49.50	12.63	0.19
Sept'14	28.13	55.70	16.16	0.43
Oct'14	25.55	52.94	21.52	0.13
Nov'14	16.49	53.60	29.90	0.10

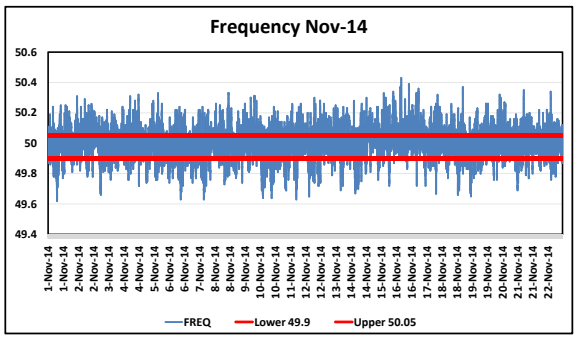
Maximum	50.42 Hz	on 16th November at 06:04 hrs
Minimum	49.58 Hz	on 27th November at 17:40 hrs
Average	50.00 Hz	

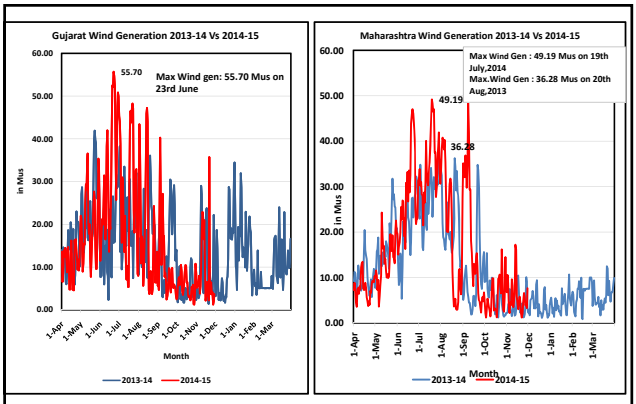
High Frequency Day : On 16th Nov, due to Under drawal by WR (Mah & MP), NR (UP, Haryana, Punjab) and ER (Bihar, Odisha). All India Demand was low

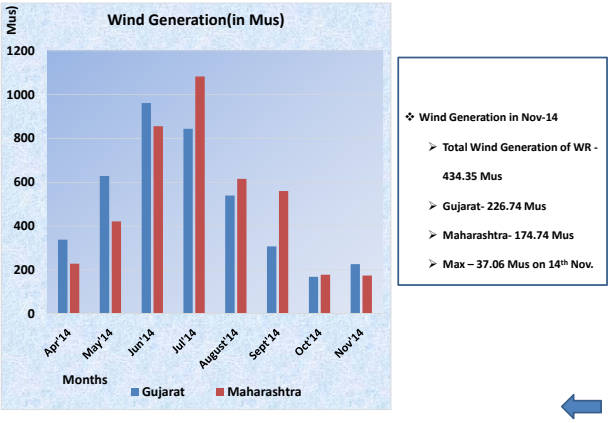
Low Frequency Day : On 27th Nov, falling freq trend due to onset of evening peak.

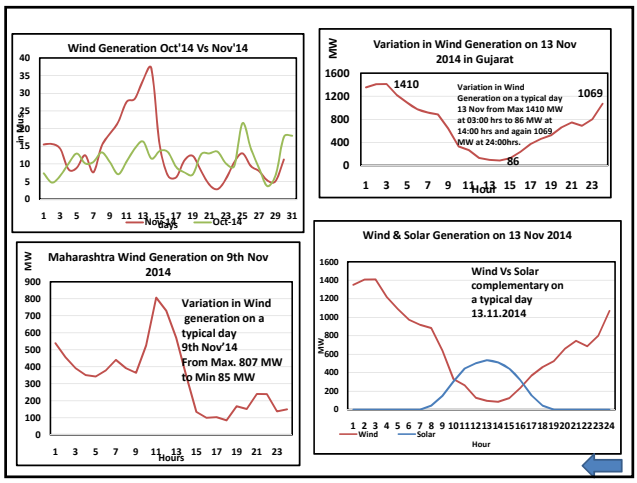
Date	<49.9	49.9-50.05	>50.05
1-Nov	20.97	48.88	30.15
2-Nov	8.16	56.47	35.37
3-Nov	14.10	54.48	31.42
4-Nov	8.50	60.12	31.38
5-Nov	15.46	59.46	25.08
6-Nov	25.50	56.03	18.47
7-Nov	31.86	46.58	21.56
8-Nov	9.98	60.54	29.48
9-Nov	13.85	51.03	35.12
10-Nov	27.79	52.52	19.69
11-Nov	20.00	49.00	31.00
12-Nov	17.56	47.74	34.70
13-Nov	12.40	52.60	35.00
14-Nov	14.01	49.98	36.01
15-Nov	5.90	47.29	46.81
16-Nov	1.23	46.45	52.32
17-Nov	9.80	51.03	39.17
18-Nov	12.22	56.21	31.57
19-Nov	17.34	59.14	23.52
20-Nov	7.60	57.70	34.70
21-Nov	17.43	56.60	25.97
22-Nov	12.99	67.85	19.17
23-Nov	10.69	56.88	32.43
24-Nov	23.61	57.15	19.24
25-Nov	18.36	53.85	27.79
26-Nov	8.43	50.05	41.52
27-Nov	11.59	50.01	38.40
28-Nov	26.17	52.96	20.87
29-Nov	23.61	56.39	20.00
30-Nov	11.74	53.33	34.93
Max	31.86	67.85	52.32
Average	15.29	53.94	30.76





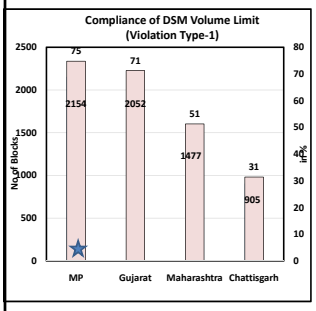


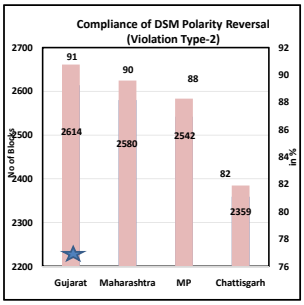




Compliance to DSM : Nov-2014

Total Time Blocks-2880





Congratulations to SLDCs!

Deviation of MP remained within 12% of schedule for 75 % of time blocks
Gujarat was able to reverse polarity of its deviation for 91 % of time

Addition of New Elements - Nov 2014

GENERATING UNITS

SL.NO.	CONSTITUENT	UNIT NAME	UNIT NO	C`ty(MW)	DATE	TIME
NIL						

Total Capacity added from Apr'14 to Nov'14 – 5295 MW

TRANSMISSION LINES

SL.NO.	CONSTITUENT	LINE NAME	CKT NO	KV	DATE	TIME	Line length (in km)
1	POWERGRID	Navsari-Kala	LILO at Magadwada GIS	400	3/11/2014	0:04	16
2	POWERGRID	Wardha-Raipur	Ckt-I	765	15/11/2014	16:35	370
3	POWERGRID	Wardha-Raipur	Ckt-II	765	15/11/2014	12:53	370
4	BDTCL	Indore - Bhopal	S/C	765	19/11/2014	22:48	176
						Total	932

ICTS

SL.NO.	CONSTITUENT/Transmission Licensee	STATION NAME	KV RATIO	CAPACITY (MVA)	CHARGING DATE	TIME
1	POWERGRID	Magarwada GIS (DAMAN)	400/220	315	7/11/2014	22:24
2	POWERGRID	Magarwada GIS (DAMAN)	400/220	315	7/11/2014	21:23

LINE REACTORS

SL.NO.	CONSTITUENT	STATION NAME	Line Name	KV	C'ty(MVAR)	DATE
1	POWERGRID	Bina	Jabalpur-Bina Ckt-3	765	240	11/11/2014
2	POWERGRID	Satna	Satna-Vindhyachal ckt-I	765	240	11/11/2014
3	POWERGRID	Gwalior	Jaipur-Gwalior ckt-2	765	240	22/11/2014
4	POWERGRID	Solapur	Solapur-Karad	400	80	25/11/2014
5	POWERGRID	Jabalpur Pool	Jabalpur pool-Dharamjaygarh ckt-2	765	240	29/11/2014

BUS REACTORS

SL.NO.	CONSTITUENT	STATION NAME	KV	C'ty(MVAR)	DATE	TIME
1	POWERGRID	Wardha	765	3*110	1/11/2014	19:45

ITEM Nos-5. Non Receipt of DR/EL details in Nov-14

Sr. No	Lines/ICTs/Event	Date and Time	Reason	DR/EL Submission pending
1	765 kV Satna-Gwalior 1	06-11-2014 21:13	R Phase to Earth Fault	PGCIL WR-2
2	400 kV Indore-Asoj 3	11-11-2014 20:57	DT at Indore end	GETCO ,PGCIL WR-2
3	765 kV Wardha-Aurangabad 2	12-11-2014 00:01	R Phase to Earth Fault	PGCIL WR-1
4	400 kV Karad-Kolhapur 2 & 400 kV Karad-Jaigad 1	13-11-2014 16:55	O/V (Reason Cited by Trans Agency)	MSETCL
5	400 kV Karad-Kolhapur 1	13-11-2014 18:31	O/V (Reason Cited by Trans Agency)	MSETCL
6	765 kV Seoni-Wardha 2	15-11-2014 21:24	O/V (Reason Cited by Trans Agency)	PGCIL WR-1
7	Grid Event of 220 kV Amona	16-11-2014 11:15	Bus fault	Goa
8	400 kV Sipat-Raipur III	16-11-2014 13:29	Tripped at Sipat end	NTPC, PGCIL Chhattisgarh
9	400 kV Asoj- Choronia & 400 kV SSP-Asoj	16-11-2014 17:47	B phase to Earth Fault	GETCO, NCA
10	400 kV Indore(PG)-Indore(MP)	17-11-2014 15:38	Tripped from Indore (PG) End only	PGCIL WR-2
11	765 kV Seoni –Bilaspur 1	21-11-2014 18:21	Tripped during testing	PGCIL Chhattisgarh
12	400 kV CGPL –Jetpur 2	22-11-2014 18:37	R-Y Fault	PGCIL WR-2 , CGPL
13	400 kV Dehgam-Wanakbori	23-11-2014 02:01	Y phase to Earth Fault	GETCO, PGCIL WR-2
14	400 kV Vindhyachal-Jabalpur 2	23-11-2014 20:03	Y Phase to Earth Fault	NTPC, PGCIL WR-2
15	765 kV Seoni-Wardha 2	25-11-2014 13:59	O/V (Reason Cited by Trans Agency)	PGCIL WR-1
16	765 kV Seoni-Wardha 2	26-11-2014 17:02	O/V (Reason Cited by Trans Agency)	PGCIL WR-1

ITEM No -5. DR/EL details of Oct 14 still pending, inspite of assurance in 465th OCC

Sl. No	Details of incident	Owner Utility	Date	Time	Category as per Standards	DR /EL Receipt Status
1	Bus fault at Badod for Badod-Kota linedue to Y ph pT burst	MPPTCL	06-Oct-14	19:09	GI-1	Detail still awaiting
2	Tripping of Satna-JP-Nigrie line 2 on Fault and 400/220 kV ICT-2 at Satna on Backup O/C protection	WRTS-2 (PG), JP NIGRIE	01-Oct-14	10:34	GI-2	Incomplete details by PG

ITEM Nos-8 Healthiness status of DG set - NOT received

State	Black Start Station
Gujarat	Ukai (H), Kadana, Dhuvaran, GIPCL-II, GPEC(CLPIPL), Sugen
Madhya Pradesh	Birsinghpur, Indira Sagar, Omkareswar
Maharashtra	Ghatghar
Chhattisgarh	Hasdeo Bango , Korba(E)-phase-I

SLDC / RLDC	Status of Healthiness at SLDC/RLDC
WRLDC	Checked on weekly basis. Healthiness ok
Maharashtra	In last OCC, it was informed that an order has been placed for procuring DG set at SLDC Kalwa. Present status to be reviewed
Madhya Pradesh	Present status to be reviewed
Gujarat	Checked on weekly basis. Healthiness ok
	Present status to be reviewed

9.1 Extension of start-up supply to power stations located in remote areas

- During the 465th OCC meeting contingency arrangement for availing start up power by CGPL Mundra from 220 kV Nanikhakar was discussed.
- It was decided that a joint team of GETCO, WRTS-II and CGPL officials would visit the site and assess the feasibility of connectivity between CGPL Mundra and 220kV Nanikhakar line for drawing start-up supply under contingency situation.
- Further the SLDCs were also advised to identify captive power plants which could extend the start-up supply during blackout.

9.4 Study Group to assess ATC Limit for each State

- Member (GO&D), CEA on 29th Oct 2014 emphasized

> To ensure safe, secure & stable operation of the system, Maharashtra should draw power from the grid keeping in view its import ATC, which should be assessed meticulously on regular basis by the SLDC.

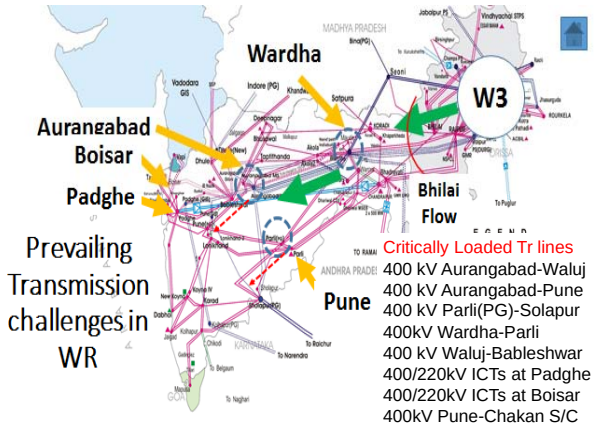
- Nominations from SLDC, GETCO, MPPTCL and MSETCL have been received at WRLDC.
- SLDC- Chhattisgarh, CSPTCL Goa, DD, DNH may also forward nominations.
- **It is proposed that the study group would conduct simulations in January-2015 to assess import/export capability of respective States for March 2015**.

Madhya Pradesh

9.2 Healthiness of Capacitor bank at 400kV Indore(MP) to arrest Low Voltage

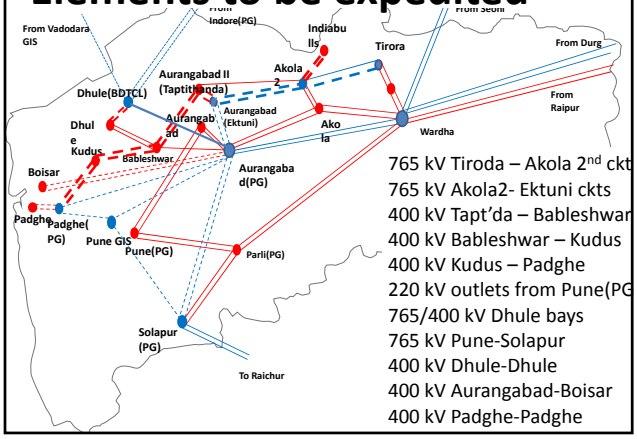
9.3 Progress of Insulator Replacement on 400kV SSP-Rajgarh(MPPTCL Portion)

9.5 Transmission constraints within Maharashtra System



Critically Loaded Tr lines
400 kV Aurangabad-Waluj
400 kV Aurangabad-Pune
400 kV Parli(PG)-Solapur
400kV Wardha-Parli
400 kV Waluj-Bableshwar
400/220kV ICTs at Padghe
400/220kV ICTs at Boisar
400kV Pune-Chakan S/C

Elements to be expedited



765 kV Tiroda – Akola 2nd ckt
765 kV Akola2- Ektuni ckts
400 kV Tapt'da – Bableshwar
400 kV Bableshwar – Kudus
400 kV Kudus – Padghe
220 kV outlets from Pune(PG)
765/400 kV Dhule bays
765 kV Pune-Solapur
400 kV Dhule-Dhule
400 kV Aurangabad-Boisar
400 kV Padghe-Padghe

Elements to be commissioned on priority in Maharashtra

Sl. No.	Transmission line	Agency	Schedule of commissioning
1.	765KV Tirora-Akola-II-Aurangabad (MS)(Ektuni) 2xS/C (Only 765kV Tiroda-Akola-II S/C commissioned)	MEGPTL	Mar'14
2.	765kV Aurangabad(Ektuni)S/S with 765/400kV 2x1500MVA ICTs	MSETCL	Mar'14
3.	400KV Auragabad-II(Taptithanda)-Bableshwar-Kudus D/C	MSETCL	Mar'14
4.	220KV transmission lines from Aurangabad(PG), 2x315MVA, 400/220kV ICTs idle charged	MSETCL	Mar'14
5.	Additional 220kV outlets from Pune(PG)	MSETCL	Mar'14
6.	400kV Dhule(MS)-Dhule(PG) D/C	BDTCL	Oct'14(line completed, but could not be commissioned due to non-availability of bays by MSETCL at Dhule S/S

Elements to be commissioned on priority in Maharashtra

Sl.No.	Transmission line	Agency	Schedule of commissioning
1.	765kV Aurangabad(PG)-Padghe(PG)	PGCIL	March'16
2.	765kV Aurangabad(Ektuni)S/S – Aurangabad(PG) D/C	MSETCL	Mar'14
3.	400kV Auragabad(PG)-Boiser D/C	PGCIL	June'15
4.	400/220kV 500MVA ICT at Boiser	PGCIL	Nov'14
5.	765kV Aurangabad(PG)-Dhule D/C	BDTL	Nov'14
6.	765kV Aurangabad(PG)-Sholapur D/C	PGCIL	Nov'15

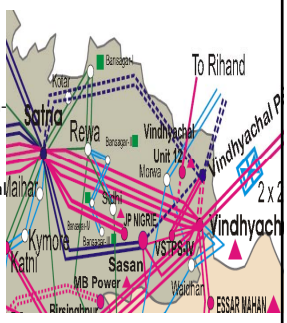
9.6 Harmonizing the format for Emergency outage proposal

The following information should be given to WRLDC.

1. Name and Voltage level of the Element required to be taken under emergency outage
2. Requesting Agency
3. Element owner
4. Date and Duration of the outage
5. Reason of Emergency outage.

9.7 Secure evacuation from Sasan-Vindhyachal complex

- Sasan / Vindhyachal- complex Evacuation
  - o 400 kV Bus split at VSTPS
  - o Vindhyachal-12 connected to NR
  - o SPS for contingency of 765 kV Sasan-Satna commissioned
- Elements to be expedited
  - o 2x1500 MVA, 400/765kV Vindhyachal pooling station
  - o 765 kV Sasan-Vindhyachal
  - o 765 kV Vindhyachal - Satna ckt-1 & 2
  - o 765 kV Gwalior – Jaipur ckts



- Sasan may indicate the likely commissioning of unit-5 and unit-6.

9.8 Mock Black Start Exercise in Western Region

Sl No	Power Station	State	Mock Drill (1-Jan-to 30-Jun 14)	Mock Drill (1-Jul-2014 - Till Date	Sl No	Power Station	State	Mock Drill During 1-Jan-to 30-Jun 2014	Mock Drill During 1-Jul-14 - Today
1	Hasdeo Bango	Chattisgharh	06-Apr-14	-	17	Medikheda	MP	-	-
2	Gandhisagar	MP	21-May-14	-	18	Rajghat	MP	-	-
3	Pench	MP	09-Jun-14	-	19	K(E)-phase-I	Chhattisgharh	-	-
4	Indira Sagar	MP	10-Jun-14	-	20	Koyna I & II	Maharashtra	-	24-Nov-14
5	SSP	NCA/Gujarat	22-Jun-14	-	21	KDPH	Maharashtra	-	-
6	Bargi	MP	-	08-Oct-14	22	Eldari	Maharashtra	-	-
7	Ukai (H)	Gujarat	-	-	23	Uran (Gas)	Maharashtra	-	2-Dec-14
8	Mini Hydro	Gujarat	-	-	24	RGPPL	Maharashtra	-	-
9	Kadana	Gujarat	-	-	25	Ghatghar	Maharashtra	-	-
10	Dhuvaran	Gujarat	-	-	26	Khopoli	Maharashtra	-	-
11	GIPCL-I	Gujarat	-	-	27	Bhivpuri	Maharashtra	-	-
12	GPEC (CLPIPL)	Gujarat	-	-	28	Bhira	Maharashtra	-	-
13	Sugen	Gujarat	-	-	29	Bhira PSS	Maharashtra	-	-
14	Birsinghpur	MP	-	-	30	Trombay	Maharashtra	-	-
15	Tons	MP	-	-	31	Kawas	NTPC(Gujarat)	-	-
16	Omkareswar	MP	-	-	32	Gandhar	NTPC(Gujarat)	-	07-Dec-14 -
					33	AECo	Gujarat	-	-

9.9 The Status of Nomination Received for workshop on System Restoration Procedure

Sl No	Power Station	State	Nomination Received	Sl No	Power Station	State	Nomination Received
1	Hasdeo Bango	Chhattisgharh	Received	18	Medikheda	Madhya Pradesh	Received
2	Korba(E)-phase-I	Chhattisgharh	-	19	Rajghat	Madhya Pradesh	Received
3	Ukai (H)	Gujarat	Received	20	Koyna I & II	Maharashtra	Received
4	Mini Hydro	Gujarat	-	21	KDPH	Maharashtra	Received -
5	Kadana	Gujarat	Received	22	Eldari	Maharashtra	-
6	Dhuvaran	Gujarat	Received	23	Uran (Gas)	Maharashtra	Received
7	GIPCL-I	Gujarat	Received	24	RGPPL	Maharashtra	Received
8	GPEC(CLPIPL)	Gujarat	Received	25	Ghatghar	Maharashtra	Received -
9	Sugen	Gujarat	Received	26	Khopoli	Maharashtra	Received
10	AECo(Gas)	Gujarat	Received	27	Bhivpuri	Maharashtra	Received
11	Gandhisagar	Madhya Pradesh	Received	28	Bhira	Maharashtra	Received
12	Pench	Madhya Pradesh	Received	29	Bhira PSS	Maharashtra	Received
13	Indira Sagar	Madhya Pradesh	Received	30	Trombay	Maharashtra	Received
14	Bargi	Madhya Pradesh	Received	31	SSP(RBPH & CHPH)	NCA/Gujarat	Received
15	Birsinghpur	Madhya Pradesh	Received	32	Kawas	NTPC (Gujarat)	Received
16	Tons	Madhya Pradesh	Received	33	Gandhar	NTPC (Gujarat)	Received
17	Omkareswar	Madhya Pradesh	Received				

9.10 Testing of envisaged SPS for SR-NEW grid operation

Report of MOCK SPS Signal Generated from Raipur (1-Dec-14)

Time at which Signal Generated from Raipur		Ch-1 13:38:11:519	Ch-2 14:09:58:834	Comments/ Remark
Time at which Signal was received at Generators	KWPCL	13:38	14:09	Ok
	NSPCL	13:37:59	14:09	Ok
	JPL	13:38	14:09	OK
	JPL Exnt	No	No	JPL received the Signal but JPL has not extend the Signal to JPL Stg-II
	BALCO	No	No	SPS Signal Not received at BALCO
	DB Power	13:38	14:09	OK
	KSK	13:38	14:09	OK
	LANCO	No	No	PowerGrid may give the Status

Update the progress

SPS related to Overloading or Tripping	Station identified for Generator Reduction in WR	Pending Action	Responsible Agency
765kV Solapur-Raichur	KWPCL/DB Power	Wiring for Generation Reduction within the Station	KWPCL/ DB Power
	LANCO	Communication Channel to be Checked	POWERGRID
400kV Raipur-Wardha	JPL Extn	Signal to be extended from JPL Stg-1 to JPL Stg-2	JPL
	BALCO	Communication Channel to be Checked	POWERGRID
400kV Parli-Solapur	KWPCL/DB Power	Wiring for Generation Reduction within the Station	KWPCL/ DB Power
	LANCO/JPL Extn / BALCO	SPS Signal to be Extended	POWERGRID / JPL
	250 MW Load Shedding or Generator Pickup at Koyna	SPS Signal to be Extended	MSETCL and POWERGRID
400kV Wardha-Parli	IndiaBulls	SPS Signal to be Extended at IndiaBulls, Koradi , Khaparkheda, Chandrapur in cordination with MSETCL	MSETCL and POWERGRID
	Koradi		
	Khaparkheda		
	Chandrapur		

9.11 Implementation of the revised AUFLS DD and DNH

Sr. Nos	Discussion	Responsible Agency
1	DNH has informed in 465th OCC that work order has been placed and the agency has been deployed for implementation.	DNH
2	DD inform that retendering for the relays started on 7th November,2014	DD

9.12 Telemetry Status

•Maharashtra (Data Not Available at)

Sl. No	New Station	Existing Station
1	Warora	Khaparkheda
2	Lonikhand(New)	Deepnagar
3	Chandrapur Stg-II	
4	Taptithanda	

•GUJARAT (Data Intermittent)

Sl. Nos	Existing Station
1	220kV Bhatiya
2	220kV Mokha.

•PGCIL (Data Intermittent at)

Sl. Nos	Existing Station
1	765kV Kotra
2	765kV Dharamjaygarh
3	765kV Tamnar
4	400kV Navsari

- PGCIL (Lease line connectivity)

PMU Data from Satna to WRLDC

Redundant Comm Channel	Assurance in 464 and 465 OCCM
APL Tiroda	"APL Tiroda assured in 464 OCCM that at worst case it would be completed by 19-Nov-14."
CGPL	Order Placed for procurement of redundant channel
SASAN UMPP	Procured alternate channel, which was under testing.

Western Region summary sheet and details of current status of implementation of telemetry system — Annexure - IV

Status as on : 27.11.14

Sl. No.	User Name	Total Nos of Stations		Telemetry not Provided				Telemetry Intermittent				Total non-availability of data in % (Telemetry not provided plus Telemetry intermittency)	
				Total nos of station		Non-availability of data in % (wrt total nos of stations)		Total nos of station		Non-availability of data due to intermittency in % (wrt total nos of stations)			
		GS	SS	GS	SS	GS	SS	GS	SS	GS	SS	GS	SS
1	Maharastra	32	192	2	23	6.3%	12.0%	4	62	12.5%	32.3%	18.8%	44.3%
2	Chattisgarh	8	23	0	0	0.0%	0.0%		-	0.0%	-	0.0%	0.0%
3	Madhya Prdesh	19	81	-	-	-	-	-	-	-	-	-	-
4	Gujarat	25	121	+	2	+	1.7%	+	1	+	0.8%	+	2.5%
5	Goa	-	7	-	2	-	28.6%	-	5	-	71.4%	-	100.0%
6	DD	-	1	-	1	-	100.0%	-	-	-	-	-	100.0%
7	DNH	-	4	-	4	-	100.0%	-	-	-	-	-	100.0%
8	ISGS	8	-	-	-	-	-	0	-	0.0%	-	0.0%	-
9	POWERGRID	-	36	-	0	-	0.0%	+	4	-	11.1%	-	11.1%
10	IPP	22	-	-	-	+	+	4	-	18.2%	-	18.2%	-
	TOTAL	114	465	2	32	1.8%	6.9%	8	72	7.0%	15.5%	8.8%	22.4%
	Total (over all)	579		34		5.9%		80		13.8%		19.7%	

Note:
1 Supporting Details are given below
2 Intermittancy of data due to shifting old to new communication & data is varified at WRLDC in current week
3 Communication between all SLDCs to WRLDC is in radial mode in ULDC network and any failure in any equipmemt /Fibre leads to total data black out.
4 Some of Major generating Stations &sub-stations are working on single channel leading to loss of data at times
(Example CGPL,SASAN, Adani(MSEB),KOTRA, TAMNAR etc)

Nodes with single channel

Sl. No.	Name of Station	Owner Utility	Sl. No.	Name of Station	Owner Utility
1	Bhatapara 400	POWERGRID	23	MAGARWADA 400	POWERGRID
2	Boiser 400	POWERGRID	24	KALA 400	POWERGRID
3	PunePG 400	POWERGRID	25	Sipat 765	NTPC
4	Raigarh 400	POWERGRID	26	Gandhar 400	NTPC
5	Wardha 765	POWERGRID	27	Kawas 220	NTPC
6	Bilaspur 400	POWERGRID	28	Vindhyachal IV 400	NTPC
7	Damoh 400	POWERGRID	29	Vindhyachal I & II 400	NTPC
8	Khandwa 400	POWERGRID	30	Tarapur 220	NPCIL
9	Rajgarh 400	POWERGRID	31	RGPPL 400	RGPPL
10	Seoni 765	POWERGRID	32	MAUDA 400	NTPC
11	Vapi 400	POWERGRID	33	Jindal 400	IPP
12	ParliPG 400	POWERGRID	34	Lanco 400	IPP
13	Sujhalpur 400	POWERGRID	35	ACB India 400	IPP
14	Bilaspur 765	POWERGRID	36	Mahan Essar 400	IPP
15	NAVSARI 400	POWERGRID	37	Sasan 765	IPP
16	Raipur Pooling 765	POWERGRID	38	KSK Mahanadi 400	IPP
17	Jabalpur Pooling 765	POWERGRID	39	EMCO 400	IPP
18	TAMNAR 765	POWERGRID	40	DB Power 400	IPP
19	KOTRA 765	POWERGRID	41	JP NIGRIE 400	IPP
20	AURNGABAD 765	POWERGRID	42	ESIL 220	IPP
21	GMR RAIPUR 400	POWERGRID	43	DHARIWAL 400	IPP
22	DHARAMJAYGARH 765	POWERGRID	44	Hazira 400	Hazira

9.13 ADMS(Automatic Demand Management Scheme) IEGC 5.4.2

Sl. No	Detail Action Plan Received	Sl. Nos	Detail Action Plan Not Received
1	Madhya Pradesh	1	Chattisgarh
2	Gujarat	2	GOA
3	Maharashtra	3	DD
		4	DNH

PROGRESS OF AUTOMATIC DEMAND MANAGEMENT SCHEME (ADMS) IN WR — Annexure - I

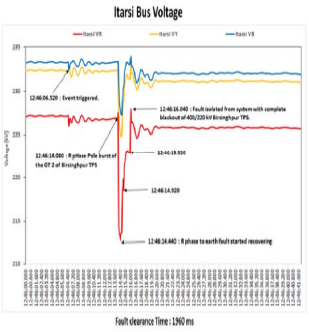
Sl. no	Activity	Madhyapradesh	Gujarat	Maharashtra
1	IDENTIFICATION OF FEEDERS FOR ADMS (Y/N)	The feeders for ADMS have been identified for each discom such that there will be no overlapping of feeders with UFR feeders on any weekday. The feeder grouping and logics for ADMS operation also finalised. Each DISCOM have 25 to 30 feeder groups under ADMS operation.	The detail s of substations / feeders identified for ADMS are as under: Total **No. of 132 / 66 KV S/S. - 100 Nos. Total No. of 11 KV Feeders - 730 Nos.** **Total load in MW - 650 MW.**	The details of substations / feeders identified for ADMS are as under: Total No. of 220/132 S/S. - 59 Nos. Total No. of EHV/HV feeders - 102/683 Nos.Avg load in MW - 2397 MW. Identification of feeders and formulation of scheme completed. Triggering of logic to be finalised in coordination with WRLDC/WRPC .
2	PILOT PROJECT/DEMONSTRATION IF ANY (Y/S)	Proposed in December 2014.	Yes	Remote operation on EHV feeder (220KV Mulund) is successful. Demo for operation of 11/22/33 KV HV feeder is planned in last week of Oct 14.
3	PREPARATION OF ACTION PLAN/ DETAILED PROJECT REPORT (Y/N)	The action plan has been finalised. The ADMS shall be immplemented through TRANSCO Scada for which action has been initiated by MPPTCL. It is expected that the order would be finalised by October end and pilot project implementation would be in December 2014. The implementation in all 320 RTU locations will progress alongwith commissing of the RTUs and is expected to be fully operational on all identified feedres by the end of 3rd/4th quarter of 2015.	Road map of project: **Identification of technology, Prototype demonstration by the developers, Budgetary offer collections from developers**: (Two developers has shown interest for providing solutions, they have also given DEMO of the product. Budgetary offer is given by one developer) By 15th March 2014. (completed) **Detail project report submission to Competent authority and getting administrative approval of budgetary provision etc**: By 15th April 2014. (Project report	Revised Action plan is prepared and enclosed herewith (Annexure-2). Detailed project report is under preparation
4	MANAGEMENT / ADMINISTRATIVE FUNDING APPROVAL	Management approval for implementatuion has been obtained. A sepatare meeting is being arranged with DISCOMs for funding of the project by sharing of cost among them. A proposal shall also be submitted for funding through PSDF.	Management approval has been received in July-14.	Awaited
5	Submission of Action Plan in CERC	The status report has been submitted to CERC.	The progress report had been submitted on 20.05.14 to Hon'ble CERC. The progress report was also submitted to WRPC on 27.08.14.	Submitted. However, revised due to delay in identification of HV Feeders and PLCC communication requirements for HV feeders at non RTU locations

6	% progress in physical segregation of ADMS feeders from the feeders being used for load shedding under routine load rostering, distress shedding, UFR, df/dt, SPS etc.	Completed	Completed	Percentage of physical separation of ADMS feeders from the feeders being used for load shedding under routine load roastering, distress shedding, UFR df/dt, SPS etc. will be calculated by discom. The same will be submitted separately after receipt of information from Discom.
7	% progress in wiring/establishing communication link between SLDC and substation for transmitting control signal from remote (through SCADA or otherwise)	Not mentioned	Not mentioned	56 Communication links out of 138 RTU locations are established (40% progress) for transmission of Control signal from SLDC
8	TARGET DATE FOR PROJECT COMPLETION	3rd/4th quarter of 2015.	By the end of January - 15.	2nd quarter of 2015
9	REMARKS	On behalf of DISCOMs, MP SLDC is implementing the ADMS in the state of Madhya Pradesh through Transco SCADA which is under implementation phase (out of 320 RTUs so far about 50 have been installed/commissioned) and the complete project would be completed by September 2015. Thus ADMS shall complete in all respects by end of 3rd/4th quarter of 2015. The logics have been developed by MP SLDC for load shed as well as restoration and also for restoration of load when system is under underdrawal state at high frequency. The overlapping of feeders under defense mechanism (UFR) have been avoided in the logics. Each DISMOs have 25 to 30 feeder groups under ADMS.		On behalf of DISCOM, Maharashtra STU/SLDC is implementing the ADMS in Maharashtra using the existing transmission SCADA System. Establishment of communication network is under process and 56 communmication links out of 138 are commissioned. Discom has identified some HV feeders which are not at RTU location. PLCC communication channels from RTU locations to HV feeders location need to be additionally planned. Implementation of ADMS shall complete in all respect only after commissioning of all 138 communication links for RTU locations and commissioning of PLCC communication channels from RTU locations to HV feeders locations. The entire work is scheduled for completion by **June 2015**

	Progress Status		
	Issue	Discussion	Responsible Agency
9.14	Tie Breaker of Korba(NTPC)-II and Seoni Bay at 400kV Bhilai	It was informed in 463 , 464 and 465 OCC that Tie-Breaker would be available by end of Oct-14.	CSPTCL
9.15	Non-availability of bus bar protection at 400kV Korba (West)	It was informed in 464th OCC that they have procured the system and it will be commissioned by November'14	CSPGCL/ CSPTCL

9.16 Blackout of 400 kV Birsinghpur Thermal station

Non-availability of Bus bar protection on 220 kV Bus at 400/220 kV Birsinghpur sub-station led to tripping of five 400kV and eight 220kV elements as well as black out of Birsinghpur Station for 44 minutes and loss of 840 MW of Generation.



Thank You