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STATE LOAD DESPATCH CENTRE, NAYAGAON, RAMPUR, JABALPUR
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ISO 9001:2015

No.07-05/SG-9B-II/54 Jabalpur, dated:10.01.2020

To

As per distribution list

Sub: Agenda of 73rd meeting of Operation and Coordination Committee of MP.

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The Agenda of 73rd meeting of the Operation and Coordination Committee of MP scheduled on 13th January 2020 at Conference Hall, SLDC, MPPTCL, Jabalpur has been uploaded on the website of SLDC 'www.sldcmpindia.com' and can be downloaded.

(R.A. Sharma)
Member Secretary, OCC
SLDC, MPPTCL, Jabalpur

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AGENDA FOR 73RD MEETING OF OPERATION & COORDINATION COMMITTEE OF MP TO BE HELD ON 13TH JANUARY 2020 AT 11:00 AM AT CONFERENCE HALL, SLDC, MPPTCL, NAYAGAON, JABALPUR.

ITEM NO. 1 : CONFIRMATION OF MINUTES : Minutes of 72nd meeting of Operation & Coordination Committee of MP held on 19th November 2019 at Conference Hall, SLDC, MPPTCL, Nayagaon, Jabalpur were forwarded to the committee members vide No. 07-05/SG-9B-II/30 Jabalpur dated 06.01.2020. No comments have been received.

[OCC may confirm the minutes]

ITEM NO.2: REVIEW OF SYSTEM OPERATION DURING THE MONTHS OCTOBER 2019 TO NOVEMBER 2019.

2.1. Frequency Particulars: During OCTOBER 2019 the system frequency was below 49.90 Hz for 3.19% of time against 4.57% of time during NOVEMBER 2019. The system frequency was above 50.05 Hz for 19.77% of time during OCTOBER 2019 against 20.18 % of time during NOVEMBER 2019. The system frequency was within the IEGC range of 49.90-50.05 Hz for 77.05 % of the time during OCTOBER 2019 against 75.25 % of time during NOVEMBER 2019. The average monthly frequency was 50.00 Hz during month of OCTOBER 2019 and 50.01 Hz during month of NOVEMBER 2019.

The detailed frequency particulars for the month of OCTOBER 2019 and NOVEMBER 2019 are enclosed at **Annexure-2.1**. The brief detail of frequency profile is given here under:-

Month	Average frequency	Minimum Integrated frequency over an hour	Maximum integrated frequency over an hour	Instantaneous Minimum Frequency	Instantaneous Maximum Frequency
OCTOBER 2019	50.01 Hz	49.88 Hz	50.12 Hz	49.67 Hz	50.31 Hz
NOVEMBER 2019	50.01 Hz	49.85 Hz	50.10 Hz	49.65 Hz	50.27 Hz

[Committee may like to note]

2.2 Operational Matters

2.2.1 Operational Discipline : System operated in terms of frequency profile for the months OCTOBER 2019 & NOVEMBER 2019 is as given below for discussion by the committee :

Month	% of time Frequency Below 49.90 Hz	% of time Frequency above 50.05 Hz	% of time frequency within the permissible range of 49.90-50.05 Hz.	Average monthly frequency
OCTOBER 2019	3.19%	19.77%	77.05%	50.01 Hz
NOVEMBER 2019	4.57%	20.18%	75.25%	50.01 Hz

[Committee may like to note]

2.2.2 Voltage Profile: During the months OCTOBER 2019 & NOVEMBER 2019 the maximum and minimum voltage as recorded at following important 400 KV s/s in MP Grid:-

Sr. No.	Name of 400 KV Substation	OCTOBER 2019		NOVEMBER 2019	
		Max. Voltage Observed	Min. Voltage Observed	Max. Voltage Observed	Min. Voltage Observed

		Voltage KV	Date	Voltage KV	Date	Voltage KV	Date	Voltage KV	Date
1	Bhopal	417.84	02.10.19	397.74	04.10.19	420.02	27.11.19	393.48	12.11.19
2	Bina	418.30	02.10.19	400.25	29.10.19	417.03	08.11.19	389.98	15.11.19
3	Gwalior	414.60	01.10.19	393.86	09.10.19	417.87	19.11.19	385.27	12.11.19
4	Indore	420.02	27.10.19	401.38	25.10.19	421.08	27.11.19	397.31	12.11.19
5	ISP	422.10	25.10.19	404.60	25.10.19	422.40	27.11.19	401.00	12.11.19
6	Julwaniya	430.24	27.10.19	404.46	22.10.19	430.20	29.11.19	402.86	15.11.19
7	Katni	423.03	23.10.19	404.97	03.10.19	421.68	08.11.19	401.81	25.11.19
8	Nagda	422.79	27.10.19	403.28	25.10.19	422.90	27.11.19	398.18	12.11.19
9	Pithampur	420.52	21.10.19	401.00	25.10.19	420.00	04.11.19	398.00	12.11.19
10	Birsinghpur	427.99	10.10.19	413.35	17.10.19	425.55	08.11.19	407.24	12.11.19
11	Singhaji	425.34	27.10.19	405.40	25.10.19	424.38	04.11.19	404.39	05.11.19
12	Satpura	427.31	25.10.19	405.05	31.10.19	426.73	08.11.19	406.00	04.11.19
13	Itarsi	424.38	02.10.19	404.46	25.10.19	422.04	08.11.19	393.33	12.11.19
14	Ashta	426.31	25.10.19	406.11	25.10.19	425.18	24.11.19	398.72	24.11.19
15	Chhegaon	428.94	27.10.19	405.61	25.10.19	427.55	14.11.19	403.20	15.11.19
16	Kirnapur	442.29	24.10.19	425.03	16.10.19	448.99	16.11.19	420.96	11.11.19
17	Badnawar	426.60	27.10.19	407.35	25.10.19	426.64	13.11.19	403.16	12.11.19

[Committee may please note & discuss]

2.2.3 Status of Capacitor Banks in sub-transmission system: The updated information of the status of capacitor banks in sub-transmission system as on 31th MAY 2019 as submitted by DISCOMs is detailed below:

DISCOM	Capacitor bank installed in good condition (No)				Capacitor Banks healthy but not in service due to control ckt problem			Capacitor bank installed but defective & are repairable (No)			Requirement of repair against each unit (No)	Requirement against non-repairable capacitor banks		Capacitor banks already covered under ADB T-V		Balance capacitor banks to be covered in other schemes	
	600 KVAR	1200 KVAR	1500 KVAR	1800 KVAR	600 KVAR	1200 KVAR	1500 KVAR	600 KVAR	1200 KVAR	1500 KVAR	No of 100 KVAR Units required	600 KVAR	1200 KVAR	600 KVAR	1200 KVAR	600 KVAR	1500 KVAR
EZ	404	139	72	-	3	5	3	5	6	0	25	32	6	0	0	-	0
CZ	1	667	918	18	-	-	-	0	0	0	3	0	0	0	0	0	0
WZ	612	522	737	-	0	2	0	25	32	46	219	06	19	-	-	-	0

Central Discom informed that its 18 no. 1500MVAR Capacitor Banks converted to 1800 kVAR unit.

The committee may like to discuss.

[Action: MPPTCL, DISCOMS]

2.2.4 Status of Shunt Capacitor Banks installed at various EHV Transmission Substation: The updated information of the status of installed capacitor banks (in MVAR) in EHV transmission system as on 31.10.2019 as submitted by MPPTCL is given below:-

Voltage Class	Capacitor bank installed as on 31.08.19(MVAR)	Capacity Added after Last OCC Meeting (MVAR)	Capacitor banks already covered under ADB T-V	TOTAL CAPACITY AS ON 31.10.19 (MVAR)	Capacitor Bank Installed but defective & are not repairable (No & MVAR)
220 KV	100.00	0.00	100.00	100.00	All in Service
132 KV	1238.00	0.00	1238.00	1238.00	
33 KV	5435.00	48.00	5483.00	5435.00	
Total	**6773.00**	0.00	**6821.00**	**6773.00**	

[Action: MPPTCL]

2.2.5 Status of completion of ongoing Transmission Schemes being executed by MPPTCL: The various ongoing Transmission Schemes completed during the financial year 2019-2020 (up to NOV 2019) and plan for completion of various ongoing Transmission Schemes for the Year 2019-2020 is enclosed as **Annexure 2.2.5(i) and 2.2.5(ii) respectively.**

[Action: MPPTCL]

2.2.6 U/F and df/dt Relay Operation

(i) **U/F and df/dt Relay Operation:** Frequency did not touch 49.20 Hz during OCTOBER 2019 and NOVEMBER 2019. There was no df/dt operation during the same period. MPPTCL informed that under Frequency Plan for all the stages have been implemented and in operation.

[Action: MPPTCL]

(ii) **Defective u/f, df/dt relays:** MPPTCL has informed that all the df/dt and U/F relays are in operation, where the U/F relays are not available, the numerical relays programmed for under frequency operation. Defective df/dt relay at 220KV Sagar & 220KV S/S Chhatarpur have been replaced & at 132KV S/S Chapda the df/dt protection is provided through df/dt feature of DPR. All U/F stages are in good/ healthy & working condition.

[Committee may like to note]

2.3 Power Cuts / Load restrictions/Differential Load Shedding by DISCOMS & group allocation to 33 KV feeders:

(i) Details of DISCOM wise Power supply given to various domestic categories during the period OCTOBER 2019 and NOVEMBER 2019 is enclosed at **Annexure 2.3(i).** **[Committee may like to note]**

(ii) **Group Allocation to Newly Commissioned existing EHV substations:-** The region wise list of 33 KV feeders emanating from various newly commissioned/existing EHV substations for which groups have not been allocated is given in **Annexure 2.3 (ii)**. The DISCOM wise details of pending group allocation to 33 KV feeders is given below:-

SN	DISCOM	Region	No of 33 KV feeders for which groups to be allocated
01	EAST	Jabalpur	21

02		Sagar	00
03		Rewa	00
04		**Total**	**21**
05	WEST	Indore	05
06		Ujjain	04
07		**Total**	**09**
08	CENTRAL	Bhopal	17
09		Gwalior	00
10		**Total**	**17**
TOTAL		**Grand Total**	**47**

Discoms are requested to furnish the details as per list enclosed at **Annexure-2.3(ii)** in the meeting.

In view of the above it is requested that the order copy for which group have been allocated may please be submitted to P&D, MPPTCL under intimation to SLDC.

[ACTION: DISCOMs]

ITEM NO. 3 : OPERATIONAL PLANNNING:

3.1 Generating Units under planned outage and proposed maintenance program: The latest status for annual maintenance /outages of thermal generating units of MPPGCL for FY 2019-2020 has not been provided by ED(O&M:Gen.) for the month FEB-2020 to MARCH-2020.

Details regarding hydel unit outage has not been provided byCE (O&M:Hydel), MPPGCL.

[Committee May like to note]

3.2 Proposed shutdown program of Transmission lines / Transformers: The proposed shutdown of transmission elements for the period 01.01.2010 to 31.03.2020 as submitted by T&C, MPPTCL is enclosed as **Annexure-3.2**. **[Committee May like to discuss]**

3.3 Long Outages of transmission elements and protections: The status submitted by MPPGCL /MPPTCL are given below:-

Sr. No	Line/Transformer/ etc under long Outage	Outage date	Reason	Response from Utility
1	160MVA, 220/132KV BHEL X'mer – 2 at 220KV S/s Satna.	14.08.2019	B-Phase bushing & OLTC selector switch failed due to heavy lightening.	Transformer tripped on Differential trip indications, due to failure of 132KV R phase bushing, became defective, replaced by 160MVA transformer on 14-11-19
2	160MVA CGL, 220/132KV X'mer at 220KV S/S Shujalpur. Sl. No. T-8318-3	31.08.2019	Tripped on Differential & PRV trip indication during heavy rains and lightning.	Transformer tripped during heavy rains and lightning, declared failed due to fire. However load is manageable with available 2x160MVA Transformers.
3	12.5MVA EMCO, 132/33KV X'mer at 132KV S/S Chanderi (Sl.No. 1023-10789)	11.09.2019	X'mer Tripped on Differential Trip indications	Transformer tripped on Differential Trip indications, found defective after testing, being replaced by 20MVA Transformer by Dec-19

4	12.5MVA BHEL, 132/33KV at 132KV S/S Bhanegaon (Sl.No. 6000191)	25.09.2019	X'mer Tripped on Differential Trip indications	Transformer tripped on Differential Trip indications, found defective after testing, being replaced by 16MVA Transformer by Dec-19
5	40MVA IMP 132/33KV Transformer at 132KV S/S Belkheda	21-11-19	Transformer tripped on Differential Trip indications	Transformer tripped on Differential Trip indication after internal inspection / testing work by OEM M/s IMP , being replaced by 40MVA Transformer by Jan-20
6	500 MVA, 400/220 KV X'mer at STPS.	19.04.2018	X'mer tripped at 21:55 Hrs. due to LA Burst. Emergency shutdown taken for 15 days from 21.04.18 to 05.05.18 for CPRI oil filtering and RLA testing work.	Dismanteling & shifting work of 500 MVA ICT bank has been completed. Presently civil work is under progress. The work is expected to be completed by June 2020. Latest status may also be intimated by MPPGCL/MPPTCL in the meeting.
7	50 MVAR (Make GE) Line Reactor at 400KV Sarni-Asta Ckt-I.	31.03.2018	Under outage since 31.03.18 due to concentration of Acetylene gas. DGA test of transformer oil of reactor was carried out by M/s CPRI, Bhopal.	M/s GE(T&D) India (OEM) deputed their team on dtd-30.10.2019 for internal inspection of reactor. Presently work is under progress. Latest status may also be intimated by MPPGCL in the meeting.

The latest status of the outages has not been submitted by MPPGCL.

Any transmission element/ EHV element under outage, which has not been intimated/included under aforesaid outage list, should be invariably intimated to SLDC. All entities are requested to ensure the same. The utility may submit the latest status.

[Action:MPPGCL/MPPTCL]

ITEM NO. 4 : OPERATIONAL STATISTICS FOR THE MONTH OF OCTOBER 2019 AND NOVEMBER 2019:

The details of actual generation, Schedule from Central Sector, demand etc. are given in the following Annexures:

Annex. 4.1 Unit wise actual Generation of MPPGCL thermal Units and station wise Generation of MPPGCL & NHDC Hydel Units.

Annex. 4.2 Power Supply Position(Energy Balance Sheet).

POWER SUPPLY POSITION FOR THE MONTH : OCT 19					
					All Fig in MW
Particulars	**Max Dem Met on : 19-Oct-19 AT : 07-15**	**Average 01-10 Oct**	**Average 11-20 Oct**	**Average 21-31 Oct**	**Average Monthly**
STATE PEAK DEMAND MET	**8736**	**6892**	**7450**	**6845**	**7055**
BREAKUP :-					

STATE THERMAL (Actual Gen)	924	729	872	709	768
STATE THERMAL (RSD) Total MW	3788	3771	3671	3905	3786
STATE HYDEL	1415	2022	1132	889	1333
IPP (STATE)	317	303	330	326	320
CENTRAL SECTOR (Schedule)	2992	2356	2868	2389	2533
CENTRAL SECTOR (Surrender)	498	1319	755	646	907
IPP (INTER STATE)	2463	1782	2064	2007	1953
RAILWAY	201	227	218	229	225
RENEWABLE ENERGY	433	474	375	462	438
OTHERS	-299	-290	-285	-300	-292
BANKING / PURCHASE / SALE	564	-580	0	243	-101
DEVIATION	-273	-118	-85	-93	-99
DEVIATION (AVERAGE)		Between (-2160 to 533)	Between (-1275 to 603)	Between (-606 to 603)	Between (-2160 to 603)
ENERGY SUPPLY STATE (LU)	1799.98				

POWER SUPPLY POSITION FOR THE MONTH : Nov 19					
					All Fig in MW
Particulars	**Max Dem Met on : 26-Nov-19 AT : 08-45**	**Average 01-10 Nov**	**Average 11-20 Nov**	**Average 21-30 Nov**	**Average Monthly**
STATE PEAK DEMAND MET	**12921**	**7984**	**9194**	**10130**	**9103**
BREAKUP :-					
STATE THERMAL (Actual Gen)	2865	1002	1891	2601	1831
STATE THERMAL (RSD) Total MW	3788	3598	2730	1893	2740
STATE HYDEL	1069	762	601	603	655
IPP (STATE)	320	333	221	320	291
CENTRAL SECTOR (Schedule)	3596	2616	2848	2963	2809
CENTRAL SECTOR (Surrender)	498	302	317	277	299
IPP (INTER STATE)	2192	2162	2211	2119	2164
RAILWAY	237	231	226	232	229
RENEWABLE ENERGY	730	354	416	432	401
OTHERS	-364	-287	-216	-321	-275
BANKING / PURCHASE / SALE	2314	916	1157	1339	1138

DEVIATION	-37	-70	-93	-96	-86
DEVIATION (AVERAGE)		Between (-716 to 416)	Between (-768 to 444)	Between (-1190 to 401)	Between (-1190 to 444)
ENERGY SUPPLY STATE (LU)	2456.37				

Annex. 4.3 Hourly Average of Availability and Demand.

Annex. 4.4 Hourly average schedule Vs Drawal of DISCOMs.

[Committee may like to note]

ITEM NO. 5 : SYSTEM DISTURBANCE IN MP DURING OF OCTOBER 2019 AND NOVEMBER 2019: The Grid Disturbances and Grid Incidents in MP during these months are given in **Annexure 5.** **[Committee May like to discuss]**

ITEM NO. 6.0 : IMPORTANT OPERATIONAL ISSUES:-

6.1 STATUS OF COMPLETION OF ONGOING SCHEMES FOR COMMISSIONING OF REACTORS / TRANSMISSION ELEMENTS:- The present status regarding schedule and commissioning of reactors / transmission elements is as below:-

S.No.	400 KV S/s	Size MVAR	Implementing Agency	Expected Date of Commissioning as intimated in last OCC
1.	Line Reactor on 400 kV Sapura–ISP line at STPS	50 MVAR	MPPGCL	In 66th OCC MPPGCL informed that the price bid has to be opened and the reactor will be commissioned by June 2019. Latest status may please be submitted by MPPGCL in the meeting.
2.	Bus Reactor at SSTPS	125 MVAR	MPPGCL	Work will be carried out under PSDF as intimated by MPPGCL in 62nd OCC in 66th OCC MPPGCL informed the committee that the drawing has been approved and reactor is expected to be commissioned by March 2019. In 68th OCC, MPPGCL informed the committee that reactor will be commissioned by October 2019. MPPGCL was apprised that considering commissioning of unit 3 and 4 at SSTPS stage II, early commissioning of 125 MVA reactor is required to ensure secure operation of grid. Latest status may please be submitted by MPPGCL in the meeting.

The latest status may be submitted in the meeting.

[Action: MPPGCL/NHDC]

6.2 STATUS OF IMPLEMENTATION OF SPS AT SINGHA JI TPS:- As per the studies conducted by SLDC, P&D-MPPTCL & WRLDC in coordination with MPPGCL, installation of SPS at SSTPS

was proposed. The point wise comments of SLDC e-mailed on dtd-27.08.2019 on the proposed logics mentioned in MPPGCL letter no.511-2100/SSTPP/T&C/1034 20.08.2019

Further, it is mentioned that the setting on overloading protection of 400kv lines should be same at SSTPS and far end. Therefore this setting should be adopted in consultation with SE(400KV circle) Khandwa, SE(T&C) Indore MPPTCL. It is also noticed that the CT provided on 400kv SSTPS- Julwaniya ckt at SSTPS end is 1000 Amps but at Julwaniya end, the CT is provided with 2000 Amps. Therefore, SSTPS end also CT may be provided with 2000 Amps. The capacity of CT provided on 400kv SSTPS-Pithampur ckt I , II , III & IV may be adopted in consultation with SE(T&C) Indore MPPTCL.

It is also to mention that a reminder e-mail dtd-20.12.2019 from SLDC was sent to ED-Engg., MPPGCL enquiring about the status of implementation of SPS at SSTPS by MPPGCL but the updated status has not been intimated to SLDC till date.

In view of the above it is to intimate that as decided, SPS shall be installed MPPGCL at SSTPS for meeting various contingencies and generation criteria of SSTPS complex. SSTPS has discussed the matter and formulate in consultation with SLDC for installation of proposed special protection scheme and forwarded ED-engineering for further needful. It is also to mention that all four units at SSTPS are on bar, under such condition it is essential that SPS should be in service considering security of the SSTPS complex. It is therefore again requested that status of installation of SPS at Singhaji TPS may be intimated and kindly make it functional at the earliest. **[Action: ED:Engg.-MPPGCL, GCC-MPPGCL]**

6.3 TRIPPING DUE TO FOG / BAD WEATHER AND REMEDIAL ACTION THEREOF:- On dtd 02.01.2020, at Indore and adjoining area of Western MP multiple tripping took place which caused interruption at Ghatabillod ,Depalpur, Agar, Tal Susner , Sitamau substations. Dense fog has been reported as cause for the tripping. Due to tripping of multiple elements, the system was on alert mode in Western MP area for a long duration. The preventive action is necessary to avoid such undesired tripping incidents. It is invariably required that remedial action may be initiated so that tripping due to excessive fog may be avoided.

Sometimes dust and other pollutants in air deposit on insulators occasionally lead to tripping of lines, therefore during maintenance of transmission lines proper cleaning arrangement of insulators could be ensured in pollutant prone area.

In the above context it is mentioned that tripping of lines due to fog in winter season had been discussed at WRPC. It was pointed out that during winter due to fog in Western area of MP / Indore area to avoid tripping of multiple transmission elements. The Committee had advised for taking necessary measures. This matter has been discussed time to time earlier also during MP OCCM.

The committee may discuss. **[Action: CE(T&C)]**

6.4 CONSTRAINTS IN EHV NETWORK IN INDORE REGION DUE TO OUTDATED EHV EQUIPMENTS:- It to mention that due to existing outdated EHV equipments there is constraint in running the EHV equipments on rated capacity / full load during peak season and to avoid overloading/tripping the loads are diverted by opening of EHV lines causing unnecessary outage of EHV elements. List of some such nodes is mentioned below:-

1. **132 KV BUS SECTION ISOLATOR & CONDUCTOR AT 220 KV S/S UJJAIN:-** Since last 1 year after the charging of 220 KV Ujjain – Indore (PG) Ckt-I&II, the 132KV Ujjain – Ratadiya Ckt is opened from 220kV S/s Ujjain and 132KV Ratadiya -Bherugarh is open from 132 KV S/s Ratadiya in every load season because of high ampere flow on 132 KV Bus Section Conductor & Isolator at 220 KV S/s Ujjain. Due, to this the loading of both the 132 KV S/s Ratadiya and 132 KV S/s Ingoria are managed through 220 KV S/s Nagda and 220 KV S/s Badnagar & 132kV S/s Bherugarh become radial. It is to mention that as many 132KV S/s are connected to 220 KV S/s Ujjain and during emergency conditions the diversion of load at 220 KV S/s Ujjain is not possible because of 132 KV Bus Section Conductor & Isolator problem at 220 KV S/s Ujjain. Hence SE-T&C, Ujjain is requested to kindly take up the matter and take necessary action rectify the issue for safe & secure grid operation.

   [Action: T&C-MPPTCL]

2. **132 KV HALF MAIN BUS OF 220KV S/S NORTH ZONE:-** It is to mention that the 132 KV Half Main Bus at 220 KV S/s North Zone is consisting old conductor and other half bus section has been upgraded with new conductor. Therefore the 132 KV Main Bus & 132 KV Circuits at 220 KV S/s North Zone cannot be loaded as per the rated capacity due to restriction of loading of 132KV Half Main Bus section. Hence SE(T&C)-Indore is requested to kindly take necessary action & rectify the issue in coordination with EE, EHT-Construction. **[Action: T&C-MPPTCL]**

3. **OVER LOADING OF 132 KV SINGHANA – MANAWAR & 132 KV KUKSHI – RAJGARH:- It** is to mention that loading of 4 no. 132 KV Substations i.e., 132 KV S/s Singhana, 132 KV S/s Kukshi, 132 KV S/s Alirajpur & 132 KV S/s Jobat which about 200MW is feed through only 2 no. 132 KV Circuits i.e., 132 KV Manawar – Singhana Ckt & 132 KV Kukshi – Rajgarh(Dhar) Ckt. With approximate loading of 98MW & 85MW respectively. 132 KV Manawar – Singhana Ckt & 132 KV Kukshi – Rajgarh(Dhar) Ckt. are continuously loaded with full capacity and in N-1 contingency of any of these circuits, the other circuit will not sustain and there will be interruption at 132 KV S/s Singhana, 132 KV S/s Kukshi, 132 KV S/s Alirajpur & 132 KV S/s Joba. It is also to mention that 132 KV Kukshi – Barwani Ckt is also dismantled. Hence P&D-MPPTCL is requested to kindly take necessary action in coordination with T&C-MPPTCL & EHT-MPPTCL to resolve the issue.

   [Action: P&D and T&C-MPPTCL]

6.5 THE CONTINGENCY PLAN TO HANDLE DISTRESS CONDITION DUE TO MULTIPLE TRIPPING:- On dtd 02.01.2020, at Indore and adjoining area of Western MP multiple tripping took place which caused interruption at Ghatabillod ,Depalpur, Agar, Tal, Susner , Sitamau substations. Due to multiple tripping of EHV elements, 315 MVA 400/220 KV transformer at Badnawar substation also trippedg on overload. The loading on ICT at Nagda substation also reached upto dangerous level. It is observed that there is no contingency plan available to handle distress condition due to multiple tripping of EHV elements. It is mentioned that there should be identified 33KV feeder available at all node, which may be switched off in consultation with concerned Discom for short period to handle emergency and to relief the line & X'mer loading due to multiple tripping of EHV elements & in case if load diversion is not possible, so that large area

may be saved from total power failure. The incidence of trippings took place on 02.01.2020 , at Indore area could be handled smoothly, if such plan is available with important nodes.

The existing SPS are required to be revised considering integration of new elements and prevailing demand pattern. It is also observed that field units are insisting hard for availing post Manson maintenance of EHV elements in the month of December and January without considering load management issue. All post Manson maintenance should be carried out before MP demand picks up. It is desired that shutdown on all important element should be availed under observation of SE (T&C) of respective area and proper load relief plan should have chalked out in coordination with Discom so that any contingency may be handled in planed way.

The Committee may discussed the matter. **[Action: CE(T&C),Discom]**

6.6 CT PROVIDED ON FEEDERS RADIATING FROM OSP HYDEL POWER STATION AT OSP END AND REVIEW THEREOF:- The CT ratio provided on feeders radiating from OSP Hydel power stations are indicated hereunder:-

S.No	Name of feeder	CT ratio at OSP end	CT ratio at far end
1.	220KV OSP Khandwa	500/1	800/1
2.	220 KV OSP Chhegaon	800/1	1200/1
3.	220 KV OSP Barwaha	500/1	1200/1
4.	220 KV OSP Julwaniya	500/1	1200/1
5.	220 KV OSP Nimrani tap Barwaha	800/1	1200/1

It may please be seen that the CT ratio provided in aforesaid lines at OSP end are not uniform. On dtt-07.01.202 to carter the MP demand, 6 no. machines at OSP were taken on bar during morning peak hours. However the power flow at 220 KV OSP – Barwaha Ckt reached approximately 174MW. As the current on circuit crossed the CT ratio, connected with this circuit at OSP end, there was no option, but to H?T one M/C at OSP during peak hours. Such situation is undesirable for safe & secure grid operation. It is therefore felt that CT ratio provided at OSP end are required to be increased immediately to handle power flow under contingency condition in safe mode.

It is also indicated that representative of OSP informed the Committee during 52nd OCCM of MP that the replace of CT ratio of Barwaha line 800/1 Amp shall be done after commissioning of 6th bay at OSP by MPPTCL. In this regard it is mentioned that the replacement of CT should not be linked with construction of 6th bay of OSP HPS, as this have no technicality involved. If OSP authority has any apprehension on the matter they may depute suitable officers in OCCM meeting so that issue shall be discussed and their doubt could be resolved. Considering above facts, OSP is requested to review the aforesaid issue and take necessary steps to change the CT ratio from 500/1 to 800/1 in all radiating feeders at the earliest.

The Committee may discussed the matter. **[Action: OSP,NHDC]**

6.7 EXCESSTIVE TRIPPING OF 33 KV FEEDERS RADIATING FROM EHV SUB STATIONS:- It is to intimate that CE(T&C), MPPTCL vide letter no-1972 dtd-19.09.2019 informed about

the excessive tripping of 33KV Discome feeders emanating from EHV-substation. It was also mentioned that due to lack of maintenance of these lines, during faults these lines trips along with 33KV incomers of 132/33KV EHV X'mers, resulting in supply failures in the entire area fed by respective X'mer/EHV Sub-station. MPERC also monitors these tripping and MD, MPPTCH has showed the concern about such excessive tripping of 33KV feeders. A sub-station wise list of 33KV & 11KV feeders under the control of Discoms on which excessive tripping (10 & more that 10) is enclosed as **Annexure-6.7**.

In view of the above it is to mention that proper maintenance of these lines shall be shall be carried out regularly by Discoms to reduce fault tripping for safe & secure grid operation. Further it is also requested to issue suitable instruction to field officer to take necessary and corrective action so that the tripping may be reduced which will improve the performance of company and increase revenue.

[Action: Discom]

6.8 REVIEW AND UPDATING LOAD DROPPING SCHEME/ SYSTEM PROTECTION SCHEMS (SPS) AT SUBSTATIONS IN M.P TO HANDLE EMERGENCY CONDITION:-

Considering the integration of new transmission elements in the grid it is to bring to the notice that the existing load drop scheme shall also be reviewed and updated timely as per the updated network. It is also to bring to the notice that at 132 KV S/s Chambal on dtd- 28.05.2019 at 13:04 Hrs. 132 KV Chambal – North Zone Ckt – I & II tripped as Y-Phase conductor of ckt – II snapped resulting in overloading & tripping of 132 KV Indore SZ – Satsai Ckt & 132 Kv Indore SZ – E.Complex ckt even after operation of load drop scheme. Hence it can be gathered that after up gradation of 132 KV North Zone S/s to 220 KV S/s North Zone the load drop scheme has not been revise accordingly. It is also to intimate that the load drop scheme shall also be reviewed according to the increasing 33 KV load.

MPPTCL is requested to review the existing load drop scheme (SPS) and to implement new load drop scheme as per requirement as per undated network and submit to SLDC.

In view of the above it is requested that the complete details of all SPS commissioned in MP by MPPTCL along with load shed quantum, may be submitted to SLDC so that the copy of the same could be placed in Control room of SLDC and concerned substation / power station for reference & record and the same can also be submitted to WRLDC. **[Action: MPPTCL/MPPGCL]**

6.9 WRLDC TRIPPING PORTAL:- It is to inform that as intimated by WRLDC in 529th WR-OCCM, that WRLDC has started a tripping portal from 01.06.2019 for uploading FIR, DR/EL and other details related to the tripping of all 400KV elements, important grid elements, inter-state/inter-regional links and lines connected to PGCIL. Further details major Grid Disturbance resulting in significant load loss/generation loss is also required to be uploaded on the WR-Portal and as per IEGC 54.2(r), utilities need to submit the data within 24 hours of the event. The link (https://portal.wrldc.in/Trippingnew/Account/Login.aspx) , common user ID & password for the entities of MP has been shared with all the entities vide this office letter No.07-05/RPC-51/ 18.06.2019.

As advised in 529th WR-OCCM, all Utilities are requested to use and submit the data through the WRLDC tripping portal. Therefore, entities are requested to use and upload the FIR, DR/EL and other details

related to the tripping of elements mentioned above, in the Tripping Monitoring System of WRLDC within stipulated time.

[Action: MPPTCL/MPPGCL/NHDC/JP BINA]

6.10 PROTECTION COORDINATION DURING INTEGRATION OF NEW INTRA-STATE ELEMENTS:- In compliance to the IEGC & WRLDC operating procedure the protection coordination of the existing elements & adjacent substations shall be prior to integration of new intra state elements. All the concerned entities are requested to ensure/review the protection coordination of adjacent substations/elements and confirm the same along with the firsttime charging documents for intra state elements also. **[Committee May Like To Discuss]**

6.11 AVAILING SHUT DOWN ON NON-ISTS ELEMENTS (ELEMENTS FOR WHICH ONLY APPROVAL OF MP-SLDC IS REQUIRED) AND OUTAGE MODULE THEREOF:- The parallel run of the ABT, OA & MIS system is in progress and the outage module has already been initiated (link:- http://223.31.122.117:8080/EltrixPortal/login.jsp). Further it is to inform that the User ID and Password for all the circles/generating stations/EHT-M/EHT-C along with user manual of the outage module has already been provided vide this office e-mail dtd-14.01.2019. Also vide this office letter no. No No.07-05/174-B/Kalki/131 dtd-15.01.2019 all the concerned entities/authorities were requested to communicate the User ID/Password & issue necessary directives to the respective authorities to initiate the use of web based outage module.

In view of the reliability and safe & secure grid operation entities are requested to follow the outage procedure and submit the outage request well in advance i.e., on D-3 basis by 17:00 Hrs. only the emergency shut down request shall be made on D-1 day or in real time.

In view of the above all the concerned entities are again requested to submit/process the outage, tripping, generator outage, generator start/stop, new element charging request through web based outage module in addition to the existing practice. It is also to mention that from 01.04.2019 it will be mandatory to process the outage request through outage module only, hence all the entities shall approach for approval of shut down through outage module. In case of any queries/addition of element/etc the entities can write to us on e-mail:- sldcmpjbp@gmail.com, outage.sldc@gmail.com. It is also to mention that WRLDC has developed a separate portal for WR-OCCM approval of outage of ISTS elements which shall be discussed separately.

[Action: MPPTCL/MPPGCL/DISCOM'S/NHDC/KALPTARU/JP BINA/BLA]

6.12 MAPPING OF FEEDERS:- As earlier, it has been requested to initiate the process of mapping of AUFLS feeders in SCADA system, however no any progress in this regard noticed so far. In 8th NPC, it has been decided that WRPC would submit the details / progress of feeder mapping to NPC Secretariat on regular basis (quarterly).

In view of above, it is requested quarterly details/ progress of mapping of feeders may kindly be furnished so that same may be communicated to WRPC for onward communication.

[Action: MPPTCL/DISCOM'S]

6.13 INSPECTION OF RELAYS OF AUTOMATIC UNDER FREQUENCY LOAD SHEDDING AND CERTIFICATION THEREOF: - It is desired that for safe & secure operation of integrated system, the under frequency relay should be connected in the system in healthy condition. Accordingly, WRPC is pressing hard to provide the self-certified status of healthiness of relays of Automatic Under Frequency Load Shedding (AUFLS) and periodic checking of the same. Vide this office various correspondence. The CE (T&C) and also SE(T&Cs) were requested to provide status of healthiness of relays of Automatic Under Frequency Load Shedding on priority basis to SLDC, so that same may be communicated to WRPC. Inspite of repeated request vide various correspondence, moreover the matter had been raised in OCC meeting of MP in time to time, however the desired information are still awaited from utilities.

It is therefore desired that the above matter may be treated as urgent and status of healthiness of Automatic Under Frequency Relays may be provided to SLDC and also the under frequency may be tested periodically. In this context it is also mentioned that time to time WRPC official as well as SLDC official shall visit the sub-stations to ascertain the healthiness of under frequency relay.

Committee may please discuss the matter. **[Action: MPPTCL(T&C/P&D), Discoms]**

ITEM NO. 7: BLACK-START MOCK DRILL OF HYDEL POWER STATIONS

Black Start mock drill of Hydel stations of MPPGCL:- the Black Start Mock Drill conducted during 2019-2020 is as detailed below:-

S.NO.	NAME OF HPS	PROPOSED/TENTATIVE DATE OF MOCK DRILL	STATUS
1.	BARGI	19.12.2019	SUCCESSFULL
2.	MANIKHED	28.12.2019	SUCCESSFULL
3.	RAJGHAT	27.12.2019	SUCCESSFULL
4.	BIRSINGHPUR HPS	30.12.2019	UN-SUCCESSFULL

The proposed / tentative dates for conducting black start mock drill at remaining Hydel power station of MP is in FY-2019-2020 is detailed as mentioned below:-

S.NO.	NAME OF HPS	PROPOSED/TENTATIVE DATE OF MOCK DRILL
1	**ISP**	**TO BE DISCUSSED**
2	**OSP**	
3	**PENCH HPS**	**05.02.2020**
4	**TONS HPS**	**16.01.2020**

All the concerned entities are requested to review the proposed tentative dates for conducting black start mock drill and confirm the readiness in the meeting. It is also requested that the generators shall intimate the Unit No. and the Bus No. on which the mock drill is to be conducted.

[Action : MPPGCL/NHDC]

ITEM NO. 08: AVAILABILITY BASED TARIFF (ABT) RELATED ISSUES

8.1 TESTING & CALIBRATION OF METERS AND NON-RECEIPT OF ABT METER DATA THROUGH AMR SYSTEM:

1. SLDC has already requested CE(T&C) office in previous OCCMs to conduct testing / calibration of meters installed at the interface points under their jurisdiction as per Regulations 10 and 18 of Central Electricity Authority (Installation and operation of meter) Regulation 2010. CE(T&C) office is requested to apprise the Committee about the status of testing & callibration.

2. SLDC had intimated in the previous OCCM that complete Load survey data of ABT meters installed at the interface points of Transco- Discoms, Open Access Customers, HT Consumers, Railways TSS end and REGs are not received through AMR System installed at SLDC and requested to include the interface points of Transco with Railways, OAC's, REG's and HT Consumers. The list of complete interface points has already been sent to CE(T&C) office vide UO Note no. 280 dated 12.12.2019. CE(T&C) office is requested to apprise the Committee about the status of AMC.

[Action : CE(T&C) MPPTCL]

8.2 ISSUANCE OF STATE DEVIATION ACCOUNT, REACTIVE ENERGY ACCOUNT ON WEEKLY BASIS AND COMPUTATION OF WEEKLY TRANSMISSION LOSSES FROM 3RD FEBUARY-2020:- It was decided in the workshop held at MPPMCL, Bhopal on 06th Dec 2019 that SLDC will endeavor to issue intra state DSM account on weekly basis issue by 31st Jan 2020. The workshop was chaired by Secretary Energy / MD, MPPMCL and MD's of East, Cnetral & West Discom were also present. Accordingly, SLDC has decided to issue Intra-State State Deviation account, Reactive energy account on weekly basis and computation of weekly transmission losses from 3rd Febuary-2020. SLDC has already requested MPPTCL, MPPGCL and Discoms vide letter no. 20, 21 & 22 dated 04.01.2020 to provide following assistance for compliance of directives of Secretary Energy / MD MPPMCL:

1. One Nodal Officer from the CE(T&C), MPPTCL, GCC, MPPGCL and Discoms may be nominated for coordination with SLDC.
2. MPPTCL, MPPGCL and Discoms shall ensure that at all inter-face meters installed under their jurisdiction, AMR facility is provided for data downloading at SLDC and should be functional at all the time. Any new Inter-face meter installed in future, shall be capable of transmitting data to SLDC through AMR system installed at SLDC.
3. If weekly data of some of the meters is not recived through AMR, Nodal officer from each entities shall send weekly data through email within two days on request of SLDC.
4. Nodal officer from each entities shall furnish weekly JMR data in SLDC format.
5. Nodal officer from each Discom shall be responsible for furnishing all the requisite data to SLDC.
6. Entity wise details of meters where AMR is not provided / functional are shown in **Annexure-8.2** for the month of December-2019.

CE(T&C) office, MPPGCL and Discoms are requested to apprise the committee about the compliance of above. **[Action : MPPTCL,MPPGCL,Discoms]**

8.3 NON RECEIPT OF ABT METER DATA OF RAILWAY TSS THROUGH AMR SYSTEM:-The data of main and check ABT meters installed at the following TSS of Railways is not being received through AMR system for the month of December-2019:-

1. Railway TSS Sukhi Sewaniya.
2. Railway TSS Khirkiya
3. Railway TSS Linga.
4. Railway TSS Narsinghpur.
5. Railway TSS Maxi.
6. Railway TSS Mangliya.
7. Railway TSS Talwadia
8. Railway TSS Jaora.
9. Railway TSS Suwasara.
10. Railway TSS Beohari.
11. Railway TSS M. Kheda.
12. Railway TSS Sehore.
13. Railway TSS Bareth-I
14. Railway TSS Gulabganji.
15. Railway TSS Karaiya Bhadoli-II.
16. Railway TSS Khanna Banjari.
17. Railway TSS Nainpur.
18. Railway TSS Kala Akhar.
19. Railway TSS Sausar.

Railways is requested to apprise the Committee about the status of above metets data not downloading through AMR. **[Action :Railway]**

8.4 MISMATCH IN BLOCKWISE DATA AND MIDNIGHT DATA IN ABT METERS INSTALLED AT 400KV SSTPS- PITHAMPUR CKT-3 & 4, SSTPP:- SLDC has requested in previous OCCMs to MPPGCL that 15 minutes blockwise data recorded in the meter no. XD435283 & XD435282 installed at 400KV SSTPS- Pithampur Ckt-3 & 4 of SSTPS PH-II do not match with midnight data i.e monthly injection data. SLDC vide letter No.53 dated 10/01/2020 has also reported the issue to CE, SSTPP, MPPGCL. MPPGCL is requesed to apprise the Committee about the action taken for resolving the problem. **[Action : MPPGCL]**

8.5 TESTING & CALLIBRATION OF INTERFACE METERS:- MPPGCL is requested to conduct testing / calibration of main, check and standby meters installed at the interface points of power stations as per Regulations 10 and 18 of Central Electricity Authority (Installation and operation of meter) Regulation 2010.

[Action : MPPGCL]

8.6 NON RECEIPT OF MONTHLY INJECTION DATA (JMR) WIND POWER PROJECTS FOR ISSUANCE OF MONTHLY STATE ENERGY ACCOUNT:-The SE(O&M), Dhar do not furnish the monthly injection data of the following Wind Power Projects connected at 33KV level. However, SLDC is incorporating the injection data recorded in ABT meter in SEA, but, verification of data could not be done.

i) 15MW Wind Power Project of M/s Tirupati Dhar Renewable Power Pvt. Ltd. connected at 33KV Jaitpura Dhar. – SE(O&M) Dhar.

ii) 15MW Wind Power Project of M/s Dhar Wind Power Projects Pvt. Ltd. connected at 33KV Dashera Maidan – SE(O&M) Dhar.

DDCs, Indore is requested to take up the matter with their CE(Comml), office for issuance of directives to SE(O&M), Dhar to furnish the JMR data.

8.7 TIME DRIFT IN ABT METER INSTALLED AT THE POOLING STATIONS OF WIND AND SOLAR GENERATING STATIONS AND SLIDING WINDOW PROBLEM:- The ABT meters installed at the following Pooling Stations of Solar Power Project has time drift and thus not recording the correct data. SLDC has requested to Generators with copy to concerned licensee vide letter no. 2353 dated 31/08/2019 for time synchronization of the ABT meters with GPS so that correct DSM account of these Wind and Solar Projects is issued by SLDC.

Sr.No.	FEEDER NAME	LOCATION NAME	Location	VOLTAGE LEVEL	Meter No
1.	33 KV UJAS -2 ICHHAWAR	132KV S/S ICHHAWAR	Grid S/s End	33	MPC59975
2.	33KVBHADRESH_SUSNER	132KV S/S SUSNER	Grid S/s End	33	XB593639
3.	33 KV UJAAS 1 BERCHHA	132KV S/S BERCHHA	Grid S/s End	33	XB571652
4.	33 KV UJAAS 1 SUSNER	132KV S/S SUSNER	Grid S/s End	33	XB571653

The ABT meters installed at the following Wind and Solar Generating Stations are recording the 15 minutes block wise data on slinding window principal thus blockwise data do not match with midnight data. SLDC has requested to Generators with copy to concerned licensee vide letter no. 2353 dated 31/08/2019 and letter no .2771 dated 16/10/2019 for immediate replacement of these ABT meters.

Sr.No	Feeder Name	Substation	ABT Meter No.	QCA NAME
1	33KV SUZLON-I SAILANA	132 KV S/S SAILANA	XE479853	REConnect Energy Solution Pvt Ltd
2	33KV SUZLON-II SAILANA	132 KV S/S SAILANA	XE479854	REConnect Energy Solution Pvt Ltd
3	33KV SUZLON-III SAILANA	132 KV S/S SAILANA	XE479855	REConnect Energy Solution Pvt Ltd
4	33KV SUZLON-I RATLAM	132KV S/S JAORA	XE479856	REConnect Energy Solution Pvt Ltd

5	33KV SUZLON- IV RATLAM	132KV S/S JAORA	XE479859	REConnect Energy Solution Pvt Ltd
6	33KV SUZLON- V RATLAM	132KV S/S JAORA	XE479860	REConnect Energy Solution Pvt Ltd
7	33KV SUZLON-IV AGAR	132KV S/S AGAR	XE479864	REConnect Energy Solution Pvt Ltd
8	33KV SUZLON-V (SUSNER-III)	132KV S/S SUSNER	XE479867	REConnect Energy Solution Pvt Ltd
9	33KV SUZLON-III (AGAR- I),	132KV S/S AGAR	XE479863	REConnect Energy Solution Pvt Ltd
10	33KV SUZLON BEHAPUR DALODA-I	220 KV S/s DALODA	XE479862	REConnect Energy Solution Pvt Ltd
11	33KV SUZLON BEHPUR DALODA-II	220 KV S/s DALODA	XE479861	REConnect Energy Solution Pvt Ltd
12	33KV SUZLON I (SUSNER-I),	132KV S/S SUSNER	XE479866	REConnect Energy Solution Pvt Ltd
13	33KV SUZLON I (SUSNER-II),	132KV S/S SUSNER	XE479865	REConnect Energy Solution Pvt Ltd
14	33KV AVP POWER INFRA PVT LTD.,	132KV S/S SONKATCH	XD595991 XD595994	REConnect Energy Solution Pvt Ltd
15	33KV BADONI POWER PVT. LTD.	132KV S/S MAXI	XD522128 XD558031	REConnect Energy Solution Pvt Ltd
16	33KV M P Wind Farm, Nagda Hill	220 KVS/SDewas	XE525393	Manikaran Analytics Ltd.
17	33KV Suzlon Gujrat Wind Park , Barod	220 KV S/S Barod	XD595984 XD595980	Manikaran Analytics Ltd.
18	33KV Friend salt Susner	132KV S/s Susner	X0888530	Reconnect Energy Pvt. Ltd.
19	33KV Ujaas I Barod	220KV S/s Barod	XE525398	Manikaran Analytics Ltd.
20	33KV Ujaas II Barod	220KV S/s Barod	XE525399	Manikaran Analytics Ltd.
21	33KV Ujaas I Rajgarh	220KV S/s Rajgarh Biora	YO356649	Manikaran Analytics Ltd.
22	33KV Suzlon Dev I Nagda Hill Dewas	220KV S/s Dewas	XE479868	Reconnect Energy Pvt. Ltd.
23	33KV GI Power Corporation Ldt.	220KV S/s Dewas	X1071843	QCA not appointed
24	33KV Freewings Power	132KV S/S MAKDON	Y0505422	QCA not appointed

DCC, Indore & Bhopal is requested to take-up the issue with concerned officials for time synchronization and replacement of ABT meters. **[Action : West & Central Discoms]**

8.8 TESTING & CALLIBRATION OF INTERFACE METERS:- Discoms are requested to conduct testing / calibration of meters installed at the interface points of Renewable Energy Generators and Inter Discom feeders under their jurisdiction as per Regulations 10 and 18 of Central Electricity Authority (Installation and operation of meter) Regulation 2010. **[Action : Discoms]**

ITEM NO. 9: SCADA and E&T RELATED ISSUES

9.1 ARRANGENEMENT OF TELEMETRY OF IMPORTANT 220KV SUB STATIONS & 132KV S/S HAVING INJECTION FROM RENEWABLES/CAPTIVE POWER PLANTS OR HAVING INTERDISCOM FEEDERS /TRACTION FEEDERS:-The telemetry of new 400KV S/s, 220KV S/s, important 132KV S/s having injection from renewable generating Stations, Captive Power Plant & Railway Traction feeders is to be provided before charging of the sub stations.

Further **220KV Sheopurkalan S/s** has been charged but telemetry of this sub stations is not yet provided. The matter has already been discussed in last three OCCM in which MPPTCL informed that all the required hardware materials have been received & its telemetry integration shall be done shortly. However the telemetry of 220 KV Sheopur Kalan is not yet provided to SLDC.

The telemetry of Birsingpur HPS and Zinna HPS is also not available and same needs to be provided by MPPGCL. In last OCCM, MPPGCL informed that order for RTU & cables has been placed & its delivery is expected soon. MPPGCL is requested to provide the current progress in the matter.

The telemetry of these identified Sub Stations is urgently required for monitoring of grid. Hence the progress in the matter as well as further schedule of commissioning of telemetry may please be provided by MPPTCL & MPPGCL.

[Action: - CE (T&C)/CE (Procurement), MPPTCL, ED(O&M :Gen), MPPGCL]

9.2 TELEMETRY OF BUS VOLTAGE IN DFE RTUS:- In substations having DFE RTUs, the telemetry of Bus voltage is extended through MFM provided for transformer telemetry. This arrangement results in wrong Bus voltage at the time of outage of transformer & causes inconvenience in grid monitoring & operation. In this reference, it is to mention that it is a standard practice to provide Bus voltage through separate MFM/transducer.

The matter has already been discussed in 69th, 70th, 71st & 72nd OCCM meeting in which T&C representatives informed that instructions in the matter has already been issued to field offices for providing telemetry of Bus voltage. MPPTCL is requested to provide current progress in the matter.

[**Action: - MPPTCL]**

9.3 PROVIDING TELEMETRY OF ISOLATORS OF GENERATING STATIONS:-The telemetry of isolators is required for real time grid monitoring as well as for better functioning of EMS system. NLDC & WRLDC are constantly requesting to provide the telemetry of isolators of 400 KV, 220 KV substations & Generating Stations; and reason for non-integration of telemetry of isolator status.

The matter regarding providing telemetry of isolators of Generating Stations was pursued with MPPGCL vide this office UO dtd.12.09.19 & also discussed in 70th, 71st, & 72th OCCM in which MPPGCL informed that telemetry integration of isolators shall be done on top most priority wherever possible and in places where RTUs are under replacement, provision of isolators shall be made while procurement of new RTUs. MPPGCL is requested to provide the current status in the matter.

In last OCCM, ISP informed that isolator signals are already available in ISP SCADA system from where telemetry to SLDC is proposed to be provided through IEC gateway but Isolator status is not available in SLDC SCADA system after upgradation OF ISP system.

SLDC pursued the matter with JP Bina to provide the telemetry of isolators in which JP Bina informed that their SCADA upgradation is being carried out & the telemetry of isolators will be extended to SLDC after completion of upgradation of their SCADA. JP Bina is thus requested to provide the current status in the matter. **[Action: - MPPTCL, MPPGCL, JP Bina, NHDC]**

9.4 UPGRADATION OF EXISTING RTU's & DISCREPANCY IN TELEMETRERED VALUES RECEIVED FROM DIFFERENT EHV S/S & POWER STATIONS:-

The present status of telemetry discrepancy including upgradation requirement is enclosed herewith as **Annexure-9.4**. The list of major telemetry discrepancies is as given below :-

(a) MPPGCL Generating Substations :-

1. Satpura TPS :-

S.No.	Description	Unit	Pending since	MPPGCL response in meeting dtd.30.10.18	MPPGCL response in 72th OCCM
1	**400 KV Satpura - Itarsi**	MW	6 months	-	MPPGCL informed that Transducers of all the three circuits have been replaced and also checked the ports of analog I/P card and now planning to purchase high precision transducer but SLDC vide letter No SE/LD:E&T/04 Dtd 02.01.2020 requested to investigate the issue and arrange to rectify the issue as transducers have already been replaced and then how the replacement by another transducer would resolve the issue. Kindly update the progress in this matter so far.
2	**400 KV Satpura-Koradi**	MW	6 months	-	
3	**400 KV Satpura-Seoni**	MW	6 months	-	
4.	Gen-7 GT	MVAR	More than 1 year	-	Still pending. MPPGCL informed that during S/D of the unit transducer will be replaced.

2. SGTPS :-

Sr.No.	Description	Unit	Pending since	MPPGCL response in meeting dtd.30.10.18	MPPGCL response in 72nd OCC

1	220/33 KV Transformer	MW/MVAR	More than one year	MPPGCL informed that it shall be provided **within one month.**	Still pending. Kindly provide the telemetry.

3. Gandhi Sagar HPS :-

Restoration of the telemetry of Gandhi Sager HPS through wideband equipment:-

The wideband communication equipment installed at Gandhi Sagar HPS was tested by M/s Fibcom engineer in coordination with concern officer at Gandhi Sagar HPS, in last week of October and it was informed that the wideband equipments are healthy & in working condition. Further voice communication through wideband equipment is also restored but telemetry of GS HPS is pending due to fault in RTU.

MPPGCL is requested to arrange restoration of fault in RTU so that telemetry of GS HPS may be available for grid monitoring.

Sr.No.	Description	Unit	Pending since	MPPGCL response in meeting dtd.30.10.18	MPPGCL response in 72nd OCC
1.	33 KV Rajasthan(Kuakheda) feeder	MW/MVAR	Commissioning	SLDC informed that the telemetry of this feeder is of utmost importance as it is an inter-regional feeder. MPPGCL informed that they will arrange for the telemetry of this feeder on priority.	MPPGCL informed that these discrepancies shall be rectified after upgradation of RTUs.
2.	132 KV Bus 1	Voltage	2 months	Wrong Values	No response from MPPGCL
3.	132 KV Bus 2	Voltage	2 months	Wrong Values	No response from MPPGCL

(b) Transmission/ other Generating Substations :-

Sl No.	Name of Substation	Name of feeders/transformers
01	***400 ISP***	***(i) Isolator data is not available.*** ***(ii) Telemetry of your power plant are not updating properly/update with time delay. The Generation values stops updating properly and while non updation, no non update tag is appeared some time.***
02	400 KV Chhegaon	Wrong CB status of :- 1. 400 KV Transfer Bus Coupler
03	400 KV Julwaniya	This problem is persisting since last 8 months. No action in the matter has been taken. 1. CB status of 132/33 KV Xmer is showing open.

		2.CB of 220KV Sendhwa feeders 1,2
04	400 KV Katni	Wrong CB status of 125 MVAR Bus Reactor
05	400 KV Kirnapur	Wrong values of 132 KV Balaghat 1 & 2 (in case of load above 30 MW)
06	400 KV Pithampur	Faulty CB status of 400 KV Singhaji Ckt-4
07	220 KV Nimrani	Telemetry of 33 KV Maral is to be provided
08	220 KV Kotar	Faulty CB status of 132 KV RTS
09	220 KV Panagar	Faulty CB status of 220 KV Sukha feeder -1.
10	220 KV Ujjain	Faulty CB status of 132 KV Bus Coupler
11	220 KV Rewa	CB status of 220 KV Bus Coupler is faulty. CB status of 132 KV Sagra and RTS feeder are faulty.
12	220 KV Ratlam	220 KV TBC CB faulty

[Action: - MPPTCL, MPPGCL,NHDC]

9.5 EXTENSION OF RGMO/FGMO SIGNAL TO SLDC/WRLDC :- The extension of RGMO/FGMO signal of following generating units is still pending:-

S.No.	Name of Generating Station	Unit.No.	MPPGCL response in last OCC
1	SGTPS	1,2,3,4	MPPGCL informed in last three OCC meetings that it is under tendering process & telemetry integration of RGMO/FGMO signal shall be completed within 3-4 months. However no progress in the matter has been observed even after lapse of 10 months period.
2	BARGI HPS	1,2	MPPGCL informed in last four OCC meetings that integration of RGMO/FGMO signal shall be done during AOH of units in 2019. However the AOH of Bargi HPS units have been done but the integration of RGMO/FGMO signal is still pending.

Wrong RGMO/FGMO signal status :-

S.No.	Name of Generating Station	Unit.No.	Remarks
1	TONS	1,2,3	Incorrect RGMO/FGMO status of Tons HPS units is

			being frequently observed. The matter was discussed in OCC in which MPPGCL informed that problem is due to requirement of manual intervention for ON operation status of RGMO/FGMO. SLDC requested MPPGCL to arrange for automatic operation of RGMO/FGMO signal status through its OEM, however no response from MPPGCL in the matter has been observed.
2.	SSTPS Phase II	3,4	Incorrect RGMO/FGMO status of SSTPS Phase II is available. The matter has been pursued by SLDC, however the discrepancy still exists.

MPPGCL is thus requested to kindly arrange for integration/restoration of telemetry of RGMO/FGMO in RTU installed at power stations on topmost priority.

9.6(a) NON AVAILABILITY/ UNRELIABLE TELEMETRY OF HYDEL POWER STATIONS:- The telemetry of Hydel Power Stations is very unreliable & frequent long outage with abnormal delay in restoration of same is observed. The RTU availability of MPPGCL HPS is as detailed here under :-

RTU	AVAILABILITY Nov 19	AVAILABILITY Dec 19
RAJGHAT HPS	95	95
BARGI HPS	90	91
MADIKHEDA HPS	95	54
GANDHI SAGAR HPS	0	0
PENC HPS	98	99
DEOLOND HPS	97	95
TONS HPS	87	86

It is to mention that as per CERC communication regulation 2017, availability of telemetry is required to be ensured more than 99.9% but as indicated above the telemetry availability of Hydel Power Stations is very low.

SLDC has constantly pursued the matter in last various OCC meetings regarding arrangement of RTU/PLCC spares, measuring instruments & adequately trained manpower at MPPGCL stations. However, MPPGCL has not taken any actions regarding this matter.

MPPGCL is thus again requested to take following measures to ensure round the clock availability of real time data to SLDC:-

1. Arrangement of essential spares at power stations and one set of all spares at centralized location with intimation to all power stations
2. Arrangement of training to persons looking after telemetry work.

3. Arrangement of measuring instruments like level meters wherever not available.
4. Ensuring availability of RTU configuration at all power stations.

During the last meeting held at SLDC on 9th December, it was agreed by MPPGCL to nominate two number officers from each Hydle Power Stations for coordination and maintenance of telemetry. However, no such nomination is received so far despite constant pursuance.

[Action :- ED(O&M:Gen),MPPGCL]

9.6 (b) NON AVAILABILITY/ UNRELIABLE VOICE COMMUNICATION BETWEEN SLDC TO THERMAL/ HYDEL POWER STATIONS :- It is to inform that as per CERC communication regulation 2017, availability of communication channel is required to be ensured more than 99.9%. However, despite constant pursuance, presently most of the PLCC voice communication of various power stations to SLDC is out since long time and detailed of non-availability as here under: -

Sr.No	**Name of HPS/TPS**	**2 wire PLCC channel**	**MPPGCL response in meeting dtd.30.10.18**	**Remark**
1.	Bansagar- IV	PLCC voice communication is not established	AE, Tons HPS informed that he will visit Bansagar-IV for restoration of voice communication of Bansagar-IV at the earliest.	**Restoration of PLCC channel is still pending**. In last meeting it was informed that MPPGCL arranging the PLCC panel.
2.	Madikheda	PLCC voice channel is not working since long time.		Restoration of PLCC channel is still pending due HF bypass on all 3 No LILO location viz Karera, Chinnor & Dabra. MPPTCL is requested to arrange for extension of voice channel utilizing Mahalgaon wideband node in coordination with Madikheda HPS.
3 3	Birsinghpur HPS /TPS	PLCC voice channel is not working since long time due to faulty PLCC exchange at	AE Birsinghpur informed that presently voice communication between SLDC to thermal power house is proper & the commissioning	In last meeting it was informed that the restoration shall be completed within a

		Birsinghpur.	of EPAX at site is under progress. AE Birsinghpur assured that the voice channel of Birsinghpur HPS shall be restored **within one month**.	month however restoration of voice channel is still pending.

The matter regarding Non Availability/ Unreliable voice communication Between SLDC to Thermal/ Hydel Power Stations was discussed in various OCC meeting however 2 wire voice facility extension of Singhaji 1 & 2 TPS, Madikheda HPS, is still pending.

[Action :- ED(O&M:Gen),MPPGCL]

9.6(C) REPLACEMENT OF RTUS IN THERMAL POWER STATIONS:- Large no. of discrepancies pertaining to MPPGCL Thermal Power Station are pending since long time. The various discrepancies are due to non-availability of desired spares, non renewal of AMC contract of RTUs, Modems, PLCC equipments. The replacement of RTUS in thermal power stations is required to be arranged to ensure round the clock availability of telemetry. SLDC has requested earlier to arrange the replacement of RTUs.

The matter was also discussed in last OCCM in which MPPGCL informed that they will look into the matter and initiate action as soon as possible. Further a separate Meeting Generation officers was also organized at SLDC on 9TH Dec,2019 regarding above issues. However, no progress in the matter has been observed.

MPPGCL is requested to provide the current status in the matter.

9.7 NON AVAILABLITY & WRONG TIME STAMPING OF SOE AT SLDC SCADA:- The proper receipt of Sequence of events (SOE) in SLDC SCADA system from field RTUs is an important feature required for analysis of grid incidents. However, on some instances, it has been observed that the SOE was not received in SCADA system and accordingly, the matter was taken up with field for verification for proper configuration /connections of SOE data in RTUs.

After long pursuance, the matter was investigated and it was found that the settings “inf code 2” & “inf code 4” were not correct in Dongfeng make RTUs. These settings have now verified and changed in some of the RTUs and SOE with correct time stamping from RTUS where settings were modified is now receipt in SLDC SCADA/EMS system. However, the verification of the same in most of the RTUs is still pending. The matter regarding verification of SOE in all Dongfeng make RTUS was also discussed in last three OCCM meetings and it was confirmed to arrange the same by end of August 2018. However no significant progress in the matter has been observed.

Out of 180 RTUs, **SOE verification of 174 RTUs has been completed** & the list of RTUs where SOE verification is pending is enclosed herewith as **Annexure-9.7**. MPPTCL is requested to provide schedule of SOE verification and arrange SOE verification of balance RTUs on top most priority.

[Action: - MPPTCL, MPPGCL,NHDC]

9.8 UTILIZATION OF W.B NODE AT BIRSINGHPUR TPS:- In last various OCC, SLDC informed that the W.B node at Birsinghpur TPS has already been commissioned in 2016 and Currently it is utilized to provide the Telemetry of SGTPS only. In order to utilize **W.B node at Birsinghpur TPS** properly, near end Sub-Station telemetry are also required.

MPPGCL is requested to provide current progress in the matter.

9.9 MAINTENANCE OF OPGW NETWORK :- Under the project MP portion of Master Telecom project executed by PGCIL,36 No. of wideband nodes has commissioned. As per agreement between MPPTCL and PGCIL, the subsequent maintenance of these links is to be looked after by MPPTCL. While execution of the project, it was informed by PGCIL that the AMC of the terminal equipments is covered under the equipments contract. However, modalities for AMC payment is to be finalised by MPPTCL with PGCIL. The draft agreement for maintenance of equipments has already been forwarded by PGCIL. Further, separate arrangement towards maintenance of OPGW cable (upto FODP) involving OPGW restoration, OPGW LILO work, OTDR testing, OPGW shifting during line diversion etc is to be made by MPPTCL.

Further, it is also to mention that some of the nodes installed under agreement between MPPTCL and PGCIL is not utilized properly. The telemetry of 132KV Pichore is shifted to PLCC in place of restoration of problem in wideband node. Similarly, as per the permission provided by MPPTCL for Chindwara repeater station, PGCIL has to arrange shifting of equipments from Chindwara to Daloda. However, the same is not done by PGCIL.

In last three OCCM, MPPTCL was requested to take up the matter with PGCIL. However no progress in the matter has been observed. MPPTCL is thus again requested to take up the matter on highest priority & provide the current status in the matter. **[Action: - MPPTCL]**

9.10 LONG OUTAGE OF RTUS, PROBLEM IN DATA AND VOICE CHANNELS & INTERMITTENT TELEMETRY DUE TO NOISE IN COMMUNICATION CHANNEL:- The long outage of telemetry & substations having intermittent telemetry due to heavy noise in communication channel is discussed in detail:-

Sl No.	Name of Sub Station	Out from /Remark
01	**Gandhi Sagar HPS**	**Out Since more than 3 months**
02	**132 KV Sheopur kalan**	**Very intermittent**
03	**Satpura 220 TPS**	**Very intermittent**
04	**200 KV S/s Sirmore**	**Very intermittent.**
05	**132 KV Kannod**	**Very intermittent**
06	**Satpura TPS**	**Very intermittent**

MPERC vide Letter dated 09-08-2017 has directed to submit reason for long outage for RTU & also directed to ensure proper functioning of RTUs.

MPPTCL, MPPGCL are requested to sort out rectification of above RTU/data channel on top most priority & arrange for alignment of PLCC Channel & identify/replace the outdoor equipments which injects the noise in the channel/system. **[Action :- MPPGCL, MPPTCL]**

9.11 TELEMETRY OF RAILWAY TSS SUB STATIONS:- The telemetry of existing 38 Nos railway Traction Sub Stations & upcoming 25 new railway TSS is required to be provided by railway for monitoring of drawl by each TSS and also monitoring of demand of railway in MP.

In last OCCM, Railways informed that telemetry integration of 24 Railway TSS shall be done within **a month.** However no progress in the matter has been observed. Railways is requested to expedite the matter on priority & also inform the current progress in the matter. **[Railway]**

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

It is proposed to hold 74th Operation and Coordination Committee meeting of MP on 21.02.2020. The host and venue of the same shall be decided in the meeting.

[Action :- All the concerned entities]

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FREQUENCY PARTICULARS

S. No.	Particulars	Oct-18		Nov-19	
1	**INTEGRATED OVER AN-HOUR**				
1.1	Maximum Frequency	50.12 Hz	Between 13.00 hrs & 14.00 Hrs on 26.10.19	50.1 Hz	Between 13.00 hrs & 14.00 Hrs on 12.11.19
1.2	Minimum Frequency	49.88 Hz	Between 18.00 hrs & 19.00 Hrs on 19.10.19	49.85 Hz	Between 06.00 hrs & 07.00 Hrs on 18.11.19
1.3	Average Frequency	50.01 Hz		50.01 Hz	
2	**INSTANTANEOUS FREQUENCY**				
2.1	Maximum Frequency	50.31 Hz	AT 13.03.50 HRS ON 13.10.19	50.27 Hz	AT 22.00:50 HRS ON 26.11.19
2.2	Minimum Frequency	49.67 Hz	AT 07.07:20 HRS ON 24.10.19	49.65 Hz	AT 06.21:00. HRS ON 18.11.19

3 Percentage of time when frequency was :-

	%age of time when frequency was	Oct-18	Nov-19
3.1	Below 48.5 Hz	0.00	0
3.2	Between 48.50 Hz and 48.8 Hz	0.00	0
3.3	Between 48.80 Hz and 49.2 Hz	0.00	0
3.4	Between 49.20 Hz and 49.5 Hz	0.00	0
3.5	Between 49.50 Hz and 49.7 Hz	0.00	0
3.6	Between 49.70 Hz and 49.9 Hz	3.19	3.19
3.7	Between 49.9 Hz and 50.05 Hz	77.05	77.05
3.8	Between 50.05 Hz AND 51.5 Hz	19.77	19.77
3.9	Above 51.5 Hz	0.00	0.00
4	No. of times frquency touched 48.80 Hz	0	0
4.1	No. of times frquency touched 48.60 Hz	0	0
4.2	No. of times frquency touched 51.0 Hz	0	0

ANNEXURE -2.2.5.i

M.P POWER TRANSMISSION COMPANY LIMITED

TRANSMISSION WORKS COMPLETED DURING 2019-20 (UP TO 30.11.2019)

I	EHV TRANSMISSION LINES					
S. No.	NAME OF THE TRANSMISSION LINE / (FINANCED BY)	TYPE OF CIRCUITS	ROUTE LENGTH	CIRCUIT KMS.	MONTH OF COMPLETION	DATE OF COMMI-SSIONING
1	2	3	4	5	6	7
A.	**400 KV TRANSMISSION LINES**					
1	Nill					
B.	**220 KV TRANSMISSION LINES**					
1	220kV DCDS line from Betul 220kV S/s - Gudgaon 220kV S/s (2x46.771) (GEC)	DCDS	46.77	93.542	June'2019	Test charged on 12.06.2019
2	2nd Ckt of 220kv Satna - Chhatarpur line (152) (JICA-I)	2nd ckt	160.00	160	Aug'2019	charged on 29.08.2019
3	LILO of both Ckt. Of Badnagar -Ratlam D/C line at 400Kv S/s Badnawar (2x1.453+4x6.221) ADB-III		7.67	27.79	Nov'2019	charged 11.11.2019
4	2nd circuiting of Ratlam switching S/s - Daloda 220kV DCSS line GEC		36.75	36.754	Nov'2019	36.754 cktkm part line charged on 22.11.2019%
5	LILO of Ratlam - Daloda 220kV line at 220Kv S/s Jaora (2x3.51) GEC		3.57	3.566	Nov'2019	1x3.566 cktkm one ckt charged 22.11.2019
C.	**132 KV TRANSMISSION LINES**					
1	132 KV 2 phase 2 wire DCSS line for PS to 132/25 KV 5 MVA RTS at Sausar from 132 KV S/s Boregaon (RTS)	DCSS	17.413	17.413	May'2019	charged on 25.05.2019
2	132 KV Shyampur - Pilukhedi DCSS line (1x22.834) (UBI)	DCSS	22.83	22.834	June'2019	charged on 28.06.2019
3	2nd ckt of 132 KV Sheopur- Baroda line & LILO of its both ckt at 220 KV S/s Sheopur for 132 KV interconnection of 132 KV S/s Sheopur & 220 KV S/s Sheopur. (2nd ckt- 34 cktkm+2x1+4x5) (UBI)	DCDS	5.13	5.131	June'2019	5.131 cktkm charged on 29.06.2019
4	132 kv DCSS Karakbel - Belkheda (1x24.93) (ADB-III)	DCSS	24.93	24.93	June'2019	charged on 30.06.2019
5	LILO of 2ND CIRCUIT OF 132KV Gwalior- Pichhore at 132Kv S/s Dabra (2X0.108) (ADB-III) (balance work) (Note: LILO at Chinour 27.364 cktkm charged on 04.08.2017)(ADB-III)	DCDS	0.11	0.216	June'2019	comm on 03.06.2019
6	132 KV line 2 phase 2 wire Nainpur - RTS Nainpur line (4.176) (CCW)	DCSS	4.176	4.176	June'2019	12.06.2019
7	LILO of 132kV Betul - Gudgaon at 220kV S/s Gudgaon (2x9.825)(132kV interconnector between Gudgaon 220 kV S/s & Gudgaon 132kV S/s (Note:LILO 1st ckt(2x5.092) charged on 24.01.2019)(2nd ckt 2x4.733) (GEC)	DCDS	4.73	9.466	June'2019	2nd ckt charged on 20.06.2019
8	LILO of Satna 220kV-Kymore 132kV DCSS line for Uchehara (2x1.8) (JICA-II)	DCDS	1.8	3.60	July'2019	comm on 18.07.2019
9	132Kv DCSS line from GWSTPP to upcoming Make up Water Pump House river Narmada (Line-II)(1x24.515) (CCW)	DCSS	24.52	24.515	July'2019	comm on 11.07.2019
10	LILO of Both circuit of 132 kv DCDS Gwalior(Mahalgaon) - Dabra/Karera line at 220 KV S/s Gwalior II) (2x2x5.95+2x1.278) (Transco/UBI)	DCDS	7.26	26.472	Aug'2019	charged on 29.08.2019
11	2nd ckt of 132 KV Sheopur- Baroda line & LILO of its both ckt at 220 KV S/s Sheopur for 132 KV interconnection of 132 KV S/s Sheopur & 220 KV S/s Sheopur. (2nd ckt- 33.410 cktkm +1x1.896 +3x3.235) (Note- 5.131 cktkm charged on 29.06.2019) (UBI)	2nd ckt+DCDS	38.54	45.011	Aug'2019	charged on 24.08.2019
12	132Kv DCSS 2 phase 2wire line from 132Kv s/s Prithvipur to RTS Niwadi for p/s to RTS Niwadi (1x22.712) (RTS)	DCSS	22.71	22.712	Aug'2019	charged on 09.08.2019
13	LILO of one circuit of 132 kv Neemuch220 - Ratangarh DCDS line at 132 KV S/s Morwan (2x0.56) (UBI)		0.56	1.12	Sept'2019	chared on 16.09.2019

1	2	3	4	5	6	7
14	LILO of 132 kv Bhikangaon Khargone line at Biston 132 KV S/s (2x18.997) (ADB-III)		18.997	37.994	Sept'2019	charged on 14.09.2019
15	132Kv DCSS 2 phase 2wire line from 132Kv s/s Beohari for PS to RTS Beohari (1x20.8) (CCW)		20.80	20.8	Sept'2019	charged on 09.09.2019 (upto dead end)
16	132kv DCSS Gautampur -Depalpur line (1x19.609) (JICA)		19.609	19.609	Oct'19	charged on 30.10.2019
17	133 KV Datiya- Bhitarwar DCSS line (1x35.296) (UBI)		16.8	16.8	Oct'19	part line (1x16.8 cktkm) charged on 31.10.2019
18	132 kv DCSS Narsinghpur - Devnagar (1x23) (ADB-III) (Note-1x24.43 + 1x11.33 muiti ckt NSP Karakbel line)		24.43	24.43	Oct'19	charged on 26.10.2019
19	132 kv DCDS Narsinghpur - Karakbel line (part line ckt-I 1x11.33 charged) ADB-III		11.33	11.33	Oct'19	charged on 26.10.2019
20	132kV DCSS line Chichli - Palohabada (1x25.606) (Note: charged Part line 10.776 on 28.03.2019) (ADB-III S)		15.11	15.11	Oct'19	balance 15.110 cktkm charged on 23.10.2019
21	132 kv DCDS Narsinghpur - Karakbel line (2x15.62 + 4x11.33) ADB-III		26.95	65.23	Nov'2019	(2x15.62 + 3x11.33) charged 13.11.2019
22	LILO of S/C ckt of 132 KV Seoni-Lakhnadon line at 220kv S/S Seoni (2x23.042) JICA		23.04	46.084	Nov'2019	charged on 30.11.2019
23	132kV DCDS line from 400 kV Ujjain to 132KV Vikram Udyogpuri (Narwar) (2x21.632) UBI		19.55	39.1	Nov'2019	2x19.55 cktkm part line charged 22.11.2019
24	132 kv DCSS Khurai- Khimlasa line (1x20.943) ADB-III		20.94	20.943	Nov'2019	charged 28.11.2019
25	132 kv DCSS Badnagar - Chhayan Line (1x28.26) ADB-III (Part line 20.969 ckt charged on 05.11.2018 by tapping arrangement)		6.945	6.945	Nov'2019	balance 1x6.945 cktkm charged on 02.11.2019
26	LILO of 132 kv Ratlam - Meghnagar line at 132Kv S/s Petlawad (2x7.58) ADB-III		7.58	15.16	Nov'2019	charged 15.11.2019
II.	**EHV SUB - STATIONS**					
S. No.	**NAME OF SUBSTATION / (DISTRICT) / (FINANCED BY)**	**VOLTAGE RATIO (KV)**	**No.OF X-mer & Cap. (MVA)**	**EFFECTIVE CAPACITY MVA**	**MONTH OF COMPL-ETION**	**DATE OF COMMI-SSIONING**
A.	**400 KV SUBSTATIONS**					
1	Nill					
B.	**220 KV SUBSTATIONS**					
a.	**220 KV NEW SUBSTATIONS**					
1	Jaora 220/132kV S/s (Upgradation) (2x160MVA + 1x40) (Note:40 MVA X-mer charged on 17.02.2019) GEC	220/132	1x160	160	Nov'2019	30.11.2019
C.	**132 KV SUBSTATIONS**					
a.	**132KV NEW SUBSTATIONS**					
1	Bada malehra 132kv s/s 1x40MVA (ADB-III)	132/33 kV	1x40	40	May'2019	charged on 30.05.2019
2	Pilukhedi 132kV S/s with 1x50 MVA (UBI)	132/33 kV	1x50	50	June'2019	charged on 28.06.2019
3	Karakbel 132kv s/s1x40 MVA (Dist. Narsinghpur) (ADB-III)	132/33 kV	1x40	40	July'2019	comm on 25.07.2019
4	Belkheda 132kv s/s 1x40 MVA (Dist- Jabalpur)(ADB-III)	132/33 kV	1x40	40	July'2019	comm on 04.07.2019
5	Biston 132kv s/s1x40 MVA (ADB-III)	132/33 kV	1x40	40	Sept'2019	rest charged on 20.09.2019
6	Morwan 132kV S/s with 1x40 MVA (UBI)	132/33 kV	1x40	40	Oct'19	charged on 25.10.2019
7	Khimlasa 132kv s/s 1x40 MVA ADB-III	132/33 kV	1x40	40	Nov'2019	charged on 28.11.2019
8	Devnagar 132kv s/s 1x40 MVA (Dist- Narsighpur) (ADB-III)	132/33 kV	1x40	40	Nov'2019	30.03.2019 from 33 KV & 05.11.2019 (132kV)
9	Vikram Udyogpuri 132kV S/s with 1x50 MVA UBI	132/33 kV	1x50	50	Nov'2019	charged on 27.11.2019
10	Bhitarwar 132kV S/s with 1x50 MVA UBI	132/33 kV	1x50	50	Nov'2019	charged on 04.11.2019

EHV TRANSMISSION WORKS UNDER PROGRESS AS ON 30.11.2019

S. No.	NAME OF THE TRANSMISSION LINE	CKT. KMS.	PROGRESS IN % (Nov'2019)
A.	**400 KV TRANSMISSION LINES**		
1	400 kV DCDS line from Nagda 400 kV S/s to Mandsaur 400 kV S/s	137.32	59.00%
2	400 kV DCDS line for LILO of one ckt of Satna(PGCIL) - Bina(PGCIL) 400 kV at Sagar 400 kV S/s	56	90.00%
3	400 kV DCDS line from Ashta 400 kV S/s to Ujjain 400 kV S/s	179.474	43.00%
4	400 kV DCDS line from Indore (PGCIL) 765 kV S/s to Ujjain 400 kV S/s	84.528	86.00%
5	400 kV DCDS line from Nagda 400 kV S/s to Ujjain 400 kV S/s	53.2	56.00%
6	LILO of one ckt of 400 KV Khandwa - Rajgarh PGCIL line at Chhegaon 400 kV S/s	3.78	14.00%
B.	**220 KV TRANSMISSION LINES**		
1	LILO of one Ckt of 220kv DCDS Ashta - Dewas line at 220kv S/S Chapda (DCDS) (2x32.782)	66	63.00%
2	220Kv DCDS line from Pithampur-Depalpur line (2X31)	62	79.00%
3	220Kv DCDS Julwaniya- Kukshi (2X58)	116	24.00%
4	220Kv DCSS Shujalpur- Narsinghgarh line (1X43.6)	44	51.00%
5	LILO of one circuit of Bhopal-Hoshangabad DC line at 220kV S/s Adampur	5.84	37.00%
6	Part (b).LILO of 220kV Sarni - Pandhurna at 220kV S/s Betul (2x38.864) (Note: Betul220 & Betul400 I/C line 3.76 cktkm. charged on 21.07.2017)	77.728	73.00%
7	220kV DCDS line from Kanwan 220kV S/s - Dhar 220kV S/s	62.78	90.00%
8	LILO of both ckt Nagda - Neemuch 220kV line at 400Kv S/s Mandsore(Sitamau) (2x22.787+4x2.229+2x23.323)	101.136	56.00%
9	220kV DCDS line from Mandsaure(Sitamau) 400kV S/s - Maruti Shakti Pool 220kV S/s	92.294	59.00%
10	220kV DCDS line from Neemuch 220kV S/s to Ratangarh 400kV S/s	85.016	92.00%
11	2nd circuiting of Ratlam switching S/s - Daloda 220kV DCSS line	72	87.00%
12	LILO of Ratlam - Daloda 220kV line at 220Kv S/s Jaora (2x3.51)	7.02	100.00%
13	LILO of both ckt of Ujjain - Badod 220 kV line at Ujjain 400 Kv S/s (2x6.4+2x5.691)	24.182	94.00%
14	LILO of both ckt of Ujjain - Nagda 220 kV line at Ujjain 400 Kv S/s (2x2x11.766)	47.064	56.00%
15	220kV DCDS line from Ujjain 400kV S/s to Susner (Nalkheda) 220kV S/s	156.00	11.00%
16	220kV DCDS line from Badod 220kV S/s to Susner (Nalkheda) 220kV S/s	104.55	40.00%
17	220kV DCDS line from Rajgarh(B) 220kV S/s to Susner (Nalkheda) 220kV S/s	124.00	14.00%
18	220kV Chhatarpur-Tikamgarh DCSS line	110	10.00%
19	220 KV DCDS UMSP Rewa - Rewa	53.416	0.00%
20	220 KV DCDS UMSP Rewa - Sidhi	114.998	7.00%
21	220 kV Sabalgarh - Sheopur line (2x110)	220	77.00%
22	220 KV DCDS line from 400 kV Itarsi (PGCIL) to 220 KV S/s Budhni (2x29.942)	59.884	2.00%
	132 KV TRANSMISSION LINES		
1	132kv Nagda(220kv)- Kachrod-Jaora DCSS line (1x64)	64	63.00%
2	132 kv DCSS line between 132Kv S/s Nasrullaganj & 220KV Itarsi s/s (1x53.209)	53.209	82.00%
3	132 kv DCSS Guna-Eshagarh line (1x72)	72	43.00%
4	132 kv Sirmour - Katra DCDS line (2x37.67)	75.34	82.00%
5	LILO of 132 kv Jaora - Khachrod line at Bhesola 132 KV S/s (2x0.729)	1.458	100.00%
6	132 kV DCSS line from 132kV Mandla - Bichhiya (1x43.54)	43.54	6.00%
7	132 kV DCSS line from 132kV Dindori - Gorakhpur 132kv S/s (1x49.4)	49.4	10.00%
8	132 KV Gourjhamar - Deori DCSS line (1x27.493)	27.493	66.00%
9	132kV DCDS line from 400 kV Ujjain to 132KV Vikram Udyogpuri (Narwar) (2x21.632)	43.264	96.00%
10	133 KV Datiya- Bhitarwar DCSS line (1x35.296)	35.296	93.00%
11	2nd circuiting of 132kV Pipariya - Semri Harchand DCSS line (UBI Funding)	39.372	15.00%
12	LILO of one circuit of 132kV Pipariya - Semri Harchand line at Sohagpur 132kV Substation (UBI Funding)	2x1.795	5.00%
13	132kV Shivpuri (220kV) to Karahal line (UBI funding)	1x83	1.00%
14	LILO of 132kV Mugaliyachhap-MTCL line at Patrakar Colony (MPPTCL/REC-II as per estimate)	**1x2.942**	4.00%
15	132 KV DCDS line for LILO of one circuit of Pithampur-Bagdi 132kV line at Natrip Pithampur (MPPTCL/ New funding)	**2x2.967**	6.00%
16	LILO of Manasa-Gandhisagar 132kV line at Rampura (MPPTCL/New funding)	2x7.3	10.00%
17	2nd ckt of 132 KV shahdol 220 - Dindori132 line (2nd ckt-61.71)	61.71	66.00%
18	2nd ckt of 132 KV Gorabazar 220 - Maneri 132 line (2nd ckt-21.175)	21.75	99.00%
19	132kV Julwaniya400 - Shahpura DCSS line (2nd ckt-28 + 1x47.008) (Note:1x47.008 charged on 29.03.2019)	74.866	99.00%
20	132 Kvline from Sailana to Shivgarh (1x25)	25	13.00%
21	LILO of one ckt of Chhegaon- Nepanagar 132 Kv DCDS line at Jhirniya (Marugarh) (2x40)	80	2.00%
22	132 Kv DCSS line from 220kV Ganjbasoda to Gyaraspur (1x37.393)	37.393	5.00%
23	132 Kv DCSS line from Mandla to Dindori (1x110)	110	6.00%
24	2nd ckt of 220 KV Mandideep to 132 KV Mandideep line & LILO for HEG (2nd ckt-6.5 + 2x2.5)	11.5	50.00%

25	2nd ckt of 132 KV Birsingpur - Umariya line (2nd ckt-35.50)	35.5	80.00%
26	132 kv DCSS Panagar - Patan line (1x22.749)	22.749	38.00%
27	132 kv DCSS Dhar - Teesgaon line (1x15.35)	15.35	95.00%
28	LILO of 132 kv Satna-Maihar line at Satna-II S/s (2x11.047)(ADB-III Saving) (Part line 0.50 CktKm charged on 05.12.2018)	22.094	32.00%
29	132kv DCDS line Guna-Bhonra (2x21.394)	21	84.00%
30	132kV DCDS line from Sendhwa 220 kV S/s - Pansemal 132kV line	95.69	70.00%
31	2nd ckt of 132kV Rajgarh(Dhar)220 kV S/s - Jhabua 132kV line	67.938	100% (charged)
32	LILO of both ckt of 132kV Neemuch - Mandsore at Mandsore(Sitamau) 400 kV S/s (2x71.464)	142.928	53.00%
33	2nd Circuiting of Sidhi 220 Mauganj 132 kV DCSS line (new line 6 km involved)(2x8.285+ 35.922 ckm 2nd ckt) (Note:35.922 charged on 27.03.2019)	52	44.00%
34	LILO of both ckt. of 132kV Neemuch - Ratangarh DCDS line at 220kV S/s Ratangarh (2x3.094)(132kV interconnector between Ratangarh 400 kV S/s & Ratangarh 132kV S/s	6.188	26.00%
35	2nd circuiting of Sabalgarh - Vijaypur 132KV DCSS line (31.39)	31.39	100.00%
36	2nd circuiting of Ashta - Ichhawar 132KV DCSS line (34.64)	34.64	88.00%
37	2nd circuiting of Nalkheda - Moman Badodiya 132KV DCSS line (28.34)	28.34	85.00%
38	LILO of both ckt of Ujjain - Tarana 132KV line at Ujjain 400 KV S/s (4x0.198)	0.792	49.00%
39	LILO of Susner - Jeerapur 132kV line at Susner (Nalkheda)	34.922	32.00%
40	2nd Circuiting of Susner - Jeerapur 132 kV DCSS line (30.256)	30.256	67.00%
41	LILO of both ckt of Ujjain 220 KV - Agar 132kV line at Makdon 132KV S/s (2x2x30.052)	120.208	32.00%
42	2nd circuiting of Agar-Susner 132kV DCSS line	31.603	84.00%
43	2nd circuiting of Tarana-Makdon 132kV DCSS line	23.05	69.00%
44	132kV DCDS Alot-Zarda line	49.92	59.00%
45	LILO of one circuit of Susner 132 KV - Agar 132KV line at Susner (Nalkheda) 220kV (2x18)	34	12.00%
46	Julwania 400kV-Pati(Silawad) 132kV DCSS line	40.69	16.00%
47	Panagar 220kV-Dheemarkheda 132kV DCSS line	62.50	43.00%
48	132kV Prithvipur-Orchha DCSS line	33.50	36.00%
49	132kV Udaipura-Tendukheda DCSS line	36.78	99.00%
50	132 kV Gohad - Gormi DCSS line (1x21.187)	21.187	6.00%
51	132kV Narsinghgarh-Suthaliya DCSSline	29.05	52.00%
52	Mugaliyachhap 220 kV - Mahawadia 132KV DCDS line(2x7.661)	15.32	1.00%
53	132kV Sirmour-Atraila DCDSline	70.50	10.00%
54	132kV Sidhi-Sinhawal DCSS line	58.47	7.00%
55	132kV Maneri-Mandla DCSS line	77.59	4.00%
56	Stringing of 3rd conductor on Prithvipur-Niwari 132kV RTS line (MPPTCL/New funding)	1x16.235	100.00%
57	LILO of Prithvipur-Niwari RTS line at Niwari Substation 132kV (MPPTCL/New funding)	2x14	0.00%
58	132Kv DCSS 2 phase 2wire line from 220Kv s/s Kotar for PS to RTS kaima1x26.938)	26.938	63.00%
59	132kV DCSS Sirmore - RTS Dabhaura line (1x56.1)	56.1	97.00%
60	132Kv DCSS 2 phase 2wire line from 220Kv s/s Sidhi for PS to RTS Marwasgram(1x51.341)	51.341	86.00%
61	132Kv DCSS 2 phase 2wire line from 132Kv s/s Dongrital for PS to RTS Gajra Bahara (1x17.435)	17.435	30.00%
62	132kV 2Phase 2Wire Lalbarra-Samnapur RTS line. (Earlier 132kV 2 Phase 2 wire Kirnapur-RTS Hatta Road line)	18.643	51.00%
63	132Kv DCSS 2 phase 2wire line from 132 Kv s/s Nowgaon for PS to RTS Harpalpur (1x49.851)	49.851	92.00%
64	132 KV line from Seoni 220 KV S/s - Nainpur 132 KV S/s	84.026	100% (charged)
65	132Kv DCSS 2 phase 2wire line NainpurRTs - Ghansor line (1x34.413)	34.413	34.00%
66	132Kv 2ph 2 wire DCSS Neemuch - RTS Neemuch line	12.188	83.00%
67	132 KV 2 phase 2wire DCSS line from 132 KV S/s Malhargarh to RTS Sindpan (earliar 132 KV 2 phase 2wire DCSS Mandsore - RTS Mandsore (Sindpan) line)	14.86	60.00%
S. No.	**NAME OF THE SUBSTATION**	**EFFECTIVE CAPACITY MVA**	
A.	**400 KV SUBSTATIONS**		
1	Badnawar 400 KV sub-station with 2x315MVA 400/220 KV X-mer (1x315MVA charged on 07.03.2019 & 1x125MVAR Bus reactor charged on 11.03.2019)	630	85.00%
2	Mandsore 400 KV sub-station with 2x315MVA 400/220 KV X-mer + 2x160 MVA	630	28.00%
3	Sagar 400 KV sub-station with 2x315MVA 400/220 KV X-mer	630	78% 2nd unit 315 MVA charged on 25.08.2019 from 220 kv side
4	Ujjain 400 KV sub-station with 2x315MVA 400/220 KV X-mer+ 2x160	630	56.00%
5	Pithampur 400KV S/s, Addl. 1x315 MVA X-mer	315	1.00%
6	400KV 1x125 MVAR Reactor at 400KV S/s Chhegaon(Torni)		19.00%

B. a	**220 KV SUBSTATIONS**		
1	Gorabazar 220/132kv with 1x160MVA + 40MVA	160	18.00%
2	Chapda 220 Kv S/s (Upgradation) with 1x160MVA	160	56.00%
3	Upgradation of Depalpur 132Kv S/s to 220kv with 1x160MVA	160	60.00%
4	Adampur 220/33kv S/s 2x50MVA	100	57.00%
5	Kukshi 220 Kv S/s Upgradation)with 1x160MVA	160	47.00%
6	Sailana 220/132kV S/s (2x160MVA + 1x63) (Note:63 MVA charged on 12.03.2019)	320	65.00%
7	Jaora 220/132kV S/s (Upgradation) (2x160MVA + 1x40) (Note:40 MVA X-mer charged on 17.02.2019 & 1st 160 MVA charged on 30.11.2019(220KV)	320	79%
8	Gudgaon 220/132kV S/s (1x160MVA + 1x63) (Note:63 MVA charged on 24.01.2019)	160	70.00%
9	Ratangarh 220/132kV S/s (2x160MVA + 1x63)	320	55.00%
10	Nalkheda 220/132kV S/s (2x160MVA + 1x63)	320	8.00%
11	North Zone Substation at Indore to 220kV (Upgradation)(Note- 1x160MVA charged on 30.07.2018)	320	77.00%
12	Sheopurkala 220kv S/s with 2x160MVA+ 2x63MVA (Revised) (Note: 1x63MVA charged on 30.06.2019 & CB charged on 10.07.2019)	320	42.00%
13	Upgradation of 220 kV S/s at Udaipura	160	11.00%
14	33/220kV Pooling Sub-station at Badwar (3x100) (1st 100 MVA charged on 29.03.2019 & 2nd on 04.07.2019)	300	79%
C.	**132 KV SUBSTATIONS**		
(a)	**NEW SUBSTATIONS**		
1	Narsinghgarh 132kv s/s with 1x40 MVA	40	42.00%
2	Bhesola 132kV S/s with 1x50 MVA	50	74.00%
3	Deori 132kV S/s with 1x50 MVA	50	80.00%
4	Pati 132kV S/s with 1x50 MVA	50	3.00%
5	Orchha 132kV S/s with 1x50 MVA	50	12.00%
6	Madwas 132kV S/s with 1x50 MVA	50	1.00%
7	Unchehera 132kV S/s with 1x50 MVA	50	47.00%
8	Tendukheda 132kV S/s with 1x50 MVA	50	28.00%
9	Suthaliya 132kV S/s with 1x50 MVA	50	1.00%
10	Atraila 132kV S/s with 1x50 MVA	50	2.00%
11	Natrip 132KV S/s, with 1x63MVA	63	3.00%
12	Jetpura Palasia 132KV S/s, with 1x63MVA	63	1.00%
13	Shivgarh 132kV S/s with 1x50 MVA	50	13.00%
14	Singoli 132KV S/s, with 1x50MVA	50	3.00%
15	Bichhiya 132kV S/s with 1x50 MVA	50	7.00%
16	Gyaraspur 132 Kv S/s, with 1x50 MVA	50	4.00%

Discoms wise Average Supply Hours

PARTICULARS	East Zone		Central Zone	
	Oct-19	Nov-19	Oct-19	Nov-19
Commissinary HQ	23:54	23:57	23:45	23:54
District HQ	23:52	23:56	23:33	23:36
Tehsil HQ	23:50	23:54	23:43	23:50
Rural -Mixed	23:46	23:50	23:39	23:43
Rural -DLF	23:46	23:50	23:38	23:44
Rural -Irrigation	9:56	9:57	9:55	9:57

PARTICULARS	West Zone		MP	
	Oct-19	Nov-19	Oct-19	Nov-19
Commissinary HQ	23:55	23:56	23:50	23:56
District HQ	23:51	23:55	23:45	23:52
Tehsil HQ	23:47	23:52	23:47	23:52
Rural -3Phase	-	-	23:43	23:47
Rural -1Phase	23:41	23:45	23:42	23:47
Total Rural	9:49	9:52	9:54	9:56

Annexure-2.3.ii

LIST OF 33KV FEEDERS UNDER MPPKVVCL, JABALPUR
(For which group to be allocated)

JABALPUR REGION

Name of EHV Substation	Name of 33KV feeder	Date of commission-ing of feeder bay	Date of commission -ing of feeder
400KV			
400 KV Kirnapur	33 KV Hatta 33 KV Kirnapur 33 KV Rajegaon	11.11.2018 12.11.2018 12.112018	11.11.2018 12.11.2018 12.11.2018
220KV			
220 KV Seoni	33 KV Karirat	21.08.2007	06.01.2016
132KV			
132 KV Ponder	33 KV NSPL	19.01.2018	19.01.2018
132 KV Palohabada	33 KV Bilthari 33 KV Sadumar	01.04.2019 02.04.2019	01.04.2019 02.04.2019
132 KV Narsinghpur	33 KV Nagar Palika	28.02.2018	02.11.2018
132 KV Karapgaon	33 KV Karapgaon 33 KV Bansadehi 33 KV Kareli 33 KV Aamgaon	29.12.2017 29.12.2017 29.12.2017 29.12.2017	24.02.2018 27.01.2018 27.01.2018 28.01.2018
132 KV Waraseoni	33 KV Dongarmali 33 KV Waraseoni 33 KV Kochevahi 33 KV Khairlanji	10.10.2018 06.12.2018 06.12.2018 08.12.2018	10.10.2018 06.12.2018 06.12.2018 08.12.2018
132 KV Nainpur	33 KV Keolari-II	22.01.2018	28.03.2018
132 KV Saori	33 KV Saori 33 KV Lawaghogri 33 KV Mujawar 33 KV Bhutai	05.10.2018 05.10.2018 06.11.2018 06.11.2018	12.11.2018 13.11.2018 12.11.2018 30.01.2019

LIST OF 33KV FEEDERS UNDER MPPKVVCL, INDORE
(For which group to be allocated)

INDORE REGION

Name of EHV Substation	Name of 33KV feeder	Date of commissioning of feeder bay	Date of commissioning of feeder
220KV			
220KV Pithampur (Sec-III)	33KV SRF	03.09.2013	03.09.2013
132KV			
132KV Chandrawatiganj	33KV Chandrawatiganj	27.04.2015	27.04.2015
132KV Electronic	33KV AKVN (Namkeen Cluster)	31.03.2016	31.03.2016
132KV Raukhedi	33KV DLF-I 33KV DLF-II	03.01.2014 03.01.2014	15.09.2018 15.09.2018

UJJAIN REGION

Name of EHV Substation	Name of 33KV feeder	Date of commissioning of feeder bay	Date of Charging of feeder
220KV			

220KV Barnagar	33KV Bangred	23.10.2017	20.10.2018
132KV			
132KV Agar	33KV Agar Town-II	03.12.2012	24.05.2018
132KV Arniyakalan	33KV Designco Manufacture & Exporter (5MW Solar Power Plant)	01.05.2018	01.05.2018
132KV Agrod	33KV Madhopur	30.06.2018	26.07.2018

LIST OF 33KV FEEDERS UNDER MPPKVVCL, BHOPAL
(For which group to be allocated)

BHOPAL REGION

Name of EHV Substation	Name of 33KV feeder	Date of charging of feeder bay	Date of charging of feeder
220 KV			
220 KV Ganjbasoda	33 KV Simcon-I 33 KV Simcon-II	03.11.2016 31.08.2017	03.11.2016 09.09.2017
220 KV Pipariya	33 KV Food Park (AKVN)	19.06.2017	25.06.2017
132 KV			
132 KV Tamot	33 KV Obedullaganj 33 KV AKVN-1 33 KV AKVN-2	05.05.2016 05.10.2016 05.10.2016	02.02.2017 05.10.2016 05.10.2016
132 KV Lateri	33 KV Anantpura	15.06.2017	22.05.2018
132 KV Salamatpur	33 KV Dewanganj 33 KV Aamkheda 33 KV Salamatpur Industrial	04.12.2017 04.12.2014 25.11.2017	04.12.2017 04.12.2017 10.01.2019
132 KV Udaipura	33 KV Thaladigawan 33 KV Boras 33 KV Udaipura	26.04.2018 04.06.2018 04.06.2018	04.06.2018 06.06.2018 07.01.2019
132 KV Ayodhya Nagar	33 KV Maholi	30.10.2018	30.10.2018
132 KV Nasrullaganj	33 KV Kankariya	15.05.2004	15.09.2017
132 KV Khirkiya	33 KV Killod	07.12.2017	10.01.2018
132 KV Bilquisganj	33 KV Uljhawan	07.01.2018	20.07.2018

ANNEXURE-3.2

73rd OCCM : PROPOSED SHUTDOWN OF TRANSMISSION ELEMENTS FOR THE PERIOD 01-01-20 TO 31-03-20

Sr- No	KV	Line / Transformer / Reactor / Bay	From		To		Basis (Daily/ Continue)	Reason
			Date	Time	Date	Time		
A- 400 KV TRANSFORMERS								
1	400	315MVA TELK Transformer at 400KV S/s Katni	2-Jan-20	9:00	3-Jan-20	17:00	Continue	For Pre monsoon maintenance work
2	400	315MVA BHEL Transformer at 400KV S/s Katni	6-Jan-20	9:00	7-Jan-20	17:00	Continue	For Pre monsoon maintenance work
3	400	315MVA TELK Transformer at 400KV S/s Katni	3-Feb-20	9:00	4-Feb-20	17:00	Continue	Reserved for Post monsoon maintenance if shutdown on dated 02.01.2020 & 03.01.2020 not availed due to any reason.
4	400	315MVA BHEL Transformer at 400KV S/s Katni	6-Feb-20	9:00	7-Feb-20	17:00	Continue	Reserved for Post monsoon maintenance if shutdown on dated 06.01.2020 & 07.01.2020 not availed due to any
5	400	315MVA Transformer-I at 400KV S/s Julwaniya	24-Feb-20	09:00	24-Feb-20	17:00	Daily	For Pre monsoon maintenance work
6	400	315MVA Transformer-I at 400KV S/s Julwaniya	25-Feb-20	09:00	25-Feb-20	17:00	Daily	For Pre monsoon maintenance work
7	400	315MVA Transformer-II at 400KV S/s Julwaniya	27-Feb-20	09:00	27-Feb-20	17:00	Daily	For Pre monsoon maintenance work
8	400	315MVA Transformer-II at 400KV S/s Julwaniya	28-Feb-20	09:00	28-Feb-20	17:00	Daily	For Pre monsoon maintenance work
9	400	315MVA Transformer-I at 400KV S/s Chhegaon	3-Mar-20	09:00	4-Mar-20	18:00	Continue	For Pre monsoon maintenance work
10	400	315MVA Transformer-II at 400KV S/s Chhegaon	6-Mar-20	10:00	7-Mar-20	18:00	Continue	For Pre monsoon maintenance work
11	400	315MVA Transformer-I at 400KV S/s Pithampur	23-Mar-20	10:00	23-Mar-20	17:00	Daily	For Pre monsoon maintenance work
12	400	315MVA Transformer-I at 400KV S/s Pithampur	24-Mar-20	10:00	24-Mar-20	17:00	Daily	For Pre monsoon maintenance work
13	400	315MVA Transformer-II at 400KV S/s Pithampur	25-Mar-20	10:00	25-Mar-20	17:00	Daily	For Pre monsoon maintenance work
14	400	315MVA Transformer-II at 400KV S/s Pithampur	26-Mar-20	10:00	26-Mar-20	17:00	Daily	For Pre monsoon maintenance work
B- 400 KV REACTORS								
1	400	125MVAr BHEL Line Reactor at 400KV S/s Katni	9-Jan-20	9:00	9-Jan-20	17:00	Daily	For Pre monsoon maintenance work
2	400	125MVAr BHEL Line Reactor at 400KV S/s Katni	10-Feb-20	9:00	10-Feb-20	17:00	Daily	Reserved for Pre monsoon maintenance if shutdown on dated 09.01.2020 not availed due to any reason.
3	400	50MVAr Bus Reactor at 400KV S/s Julwaniya	4-Mar-20	09:00	4-Mar-20	17:00	Daily	For Pre monsoon maintenance work
4	400	50MVAr Bus Reactor-I&II at 400KV S/s Pithampur	27-Mar-20	10:00	27-Mar-20	17:00	Daily	For Pre monsoon maintenance work
5	400	125MVAr Line Reactor-I at 400KV S/s Pithampur	28-Mar-20	10:00	28-Mar-20	17:00	Daily	For Pre monsoon maintenance work
6	400	125MVAr Line Reactor-II at 400KV S/s Pithampur	30-Mar-20	10:00	30-Mar-20	17:00	Daily	For Pre monsoon maintenance work
C- 400 KV FEEDER & BAYS OF 400 KV- S/S-								
1	400	400KV Indore-ISP-I	1-Jan-20	09:00	1-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
2	400	400KV Indore-ISP-II	2-Jan-20	09:00	2-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
3	400	400KV TBC at 400KV S/s Indore	3-Jan-20	09:00	3-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
4	400	400KV Main Bus-I at 400KV S/s Katni	13-Jan-20	9:00	13-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
5	400	400KV Main Bus-II at 400KV S/s Katni	14-Jan-20	9:00	14-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
6	400	400KV Indore-ISP-I	3-Feb-20	09:00	3-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
7	400	400KV Indore-ISP-II	4-Feb-20	09:00	4-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
8	400	400KV TBC at 400KV S/s Indore	5-Feb-20	09:00	5-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
9	400	400KV Main Bus-I at 400KV S/s Katni	11-Feb-20	9:00	11-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
10	400	400KV Main Bus-II at 400KV S/s Katni	12-Feb-20	9:00	12-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
11	400	400KV Indore-ISP-I	2-Mar-20	09:00	2-Mar-20	18:00	Daily	For bay equipment maintenance and testing work

Sr- No	KV	Line / Transformer / Reactor / Bay	From		To		Basis (Daily/ Continue)	Reason
			Date	Time	Date	Time		
12	400	400KV Indore-ISP-II	3-Mar-20	09:00	3-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
13	400	400KV TBC at 400KV S/s Indore	4-Mar-20	09:00	4-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
14	400	400KV Chhegaon-Malwa (SSTPH)	9-Mar-20	09:00	9-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
15	400	400KV Chhegaon-Julwaniya	12-Mar-20	09:00	12-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
16	400	400KV Julwania-Chhegaon	13-Mar-20	09:00	13-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
17	400	400KV Julwaniya-SSTPS	18-Mar-20	09:00	18-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
18	400	400KV Transfer Bus-Coupler at 400KV S/s Julwaniya	20-Mar-20	09:00	20-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
D- 220 KV FEEDER & BAYS-								
1	220	220KV Damoh-Katni 400	2-Jan-20	09:00	2-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
2	220	220KV ICT-I at 220KV S/s Sukha	3-Jan-20	09:00	4-Jan-20	17:00	Continue	For bay equipment maintenance and testing work
3	220	220KV Damoh PGCIL-Tikamgarh	4-Jan-20	09:00	4-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
4	220	220KV Indore-Pithampur	4-Jan-20	09:00	4-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
5	220	220KV Barwaha-Handiya	6-Jan-20	10:00	6-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
6	220	220KV Indore-Barnagar	6-Jan-20	09:00	6-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
7	220	220KV Nimrani-Maheshwar-II	7-Jan-20	10:00	7-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
8	220	220KV Indore-Dewas	7-Jan-20	09:00	7-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
9	220	220KV ICT-II at 220KV S/s Sukha	7-Jan-20	09:00	8-Jan-20	17:00	Continue	For bay equipment maintenance and testing work
10	220	220KV Seoni-PGCIL-II	8-Jan-20	09:00	8-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
11	220	220KV Indore-Jetpura	8-Jan-20	09:00	8-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
12	220	220KV Chhindwara-PGCIL-I	9-Jan-20	09:00	9-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
13	220	220KV Indore-Mangliya	9-Jan-20	09:00	9-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
14	220	220KV Bus Tie & Main Bus-I at 400KV S/S Badnawar	9-Jan-20	09:00	9-Jan-20	17.:00	Daily	For bay equipment maintenance and testing work
15	220	220KV Chhindwara-PGCIL-II	10-Jan-20	09:00	10-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
16	220	220KV Sagar-Damoh PGCIL-I	10-Jan-20	09:00	10-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
17	220	220KV Indore-Barwaha-I	10-Jan-20	09:00	10-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
18	220	220KV Pandhurna-Kamleshwar	13-Jan-20	09:00	13-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
19	220	220KV Sagar-Damoh PGCIL-II	13-Jan-20	09:00	13-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
20	220	220KV Indore-Barwaha-II	13-Jan-20	09:00	13-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
21	220	220KV Indore-Indore-East	14-Jan-20	09:00	14-Jan-20	18:00	Daily	For bay equipment maintenance and testing work
22	220	220KV Bus Tie & Main Bus-II at 400KV S/S Badnawar	14-Jan-20	09:00	14-Jan-20	17.:00	Daily	For bay equipment maintenance and testing work
23	220	220KV Ujjain-Hatuniya PGCIL -I at 220KV S/S Ujjain	14-Jan-20	09:00	14-Jan-20	17.:00	Daily	For bay equipment maintenance and testing work
24	220	220KV Ujjain-Hatuniya PGCIL -II at 220KV S/S Ujjain	15-Jan-20	09:00	15-Jan-20	17.:00	Daily	For bay equipment maintenance and testing work
25	220	220KV Ashta I at Shajapur 220KV s/s	17-Jan-20	08:00	17-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
26	220	220KV Damoh-Damoh PGCIL-I	18-Jan-20	09:00	18-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
27	220	220KV Damoh-Damoh PGCIL-II	20-Jan-20	09:00	20-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
28	220	220KV Sagar-Bina-I	22-Jan-20	09:00	22-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
29	220	220KV Bichholi at Dewas 220KV s/s	23-Jan-20	08:00	23-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
30	220	220KV Sagar-Bina-II	24-Jan-20	09:00	24-Jan-20	17:00	Daily	For bay equipment maintenance and testing work
31	220	220KV Damoh-Damoh PGCIL-III	25-Jan-20	09:00	25-Jan-20	17:00	Daily	For bay equipment maintenance and testing work

Sr- No	KV	Line / Transformer / Reactor / Bay	From		To		Basis (Daily/ Continue)	Reason
			Date	Time	Date	Time		
32	220	220KV PGCIL-I at 220KV S/S Shujalpur	1-Feb-20	09:00	1-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
33	220	220KV PGCIL-II at 220KV S/S Shujalpur	2-Feb-20	09:00	2-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
34	220	220KV Damoh-Katni 400	3-Feb-20	09:00	3-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
35	220	220KV ICT-I at 220KV S/s Sukha	3-Feb-20	09:00	4-Feb-20	17:00	Continue	For bay equipment maintenance and testing work
36	220	220KV Indore at Dewas 220KV s/s	5-Feb-20	08:00	5-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
37	220	220KV Barwaha-Itarsi	6-Feb-20	10:00	6-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
38	220	220KV Damoh PGCIL-Tikamgarh	6-Feb-20	09:00	6-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
39	220	220KV Indore-Pithampur	6-Feb-20	09:00	6-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
40	220	220KV ICT-II at 220KV S/s Sukha	6-Feb-20	09:00	7-Feb-20	17:00	Continue	For bay equipment maintenance and testing work
41	220	220KV Nimrani-Julwaniya	7-Feb-20	10:00	7-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
42	220	220KV Indore-Barnagar	7-Feb-20	09:00	7-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
43	220	220KV Indore-Dewas	8-Feb-20	09:00	8-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
44	220	220KV Sagar-Damoh PGCIL-I	10-Feb-20	09:00	10-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
45	220	220KV Indore-Jetpura	10-Feb-20	09:00	10-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
46	220	220KV Indore-Mangliya	11-Feb-20	09:00	11-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
47	220	220KV Ashta II at Shajapur 220KV s/s	11-Feb-20	08:00	11-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
48	220	220KV Pandhurna-Kamleshwar	12-Feb-20	09:00	12-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
49	220	220KV Indore-Barwaha-I	12-Feb-20	09:00	12-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
50	220	220KV Sagar-Damoh PGCIL-II	13-Feb-20	09:00	13-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
51	220	220KV Indore-Barwaha-II	13-Feb-20	09:00	13-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
52	220	220KV Indore-Indore-East	14-Feb-20	09:00	14-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
53	220	220KV Chhegaon-SSTPH-I	17-Feb-20	10:00	17-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
54	220	220KV Sagar-Bina-I	17-Feb-20	09:00	17-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
55	220	220KV Ujjain-Hatuniya PGCIL -I at 220KV S/S Ujjain	17-Feb-20	09:00	17-Feb-20	17.:00	Daily	For bay equipment maintenance and testing work
56	220	220KV Damoh-Damoh PGCIL-I	18-Feb-20	09:00	18-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
57	220	220KV Ujjain-Hatuniya PGCIL -II at 220KV S/S Ujjain	18-Feb-20	09:00	18-Feb-20	17.:00	Daily	For bay equipment maintenance and testing work
58	220	220KV Chhegaon-SSTPH-II	19-Feb-20	10:00	19-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
59	220	220KV Sagar-Bina-II	19-Feb-20	09:00	19-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
60	220	220KV Damoh-Damoh PGCIL-II	21-Feb-20	09:00	21-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
61	220	220KV Chhegaon-Omkareshwar	22-Feb-20	10:00	22-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
62	220	220KV Chhegaon-Khandwa(PGCIL)-I	24-Feb-20	10:00	24-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
63	220	220KV Chhegaon-Khandwa(PGCIL)-I I	26-Feb-20	10:00	26-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
64	220	220KV Damoh-Damoh PGCIL-III	26-Feb-20	09:00	26-Feb-20	17:00	Daily	For bay equipment maintenance and testing work
65	220	220KV Nepanagar-Khandwa (PGCIL)	28-Feb-20	10:00	28-Feb-20	18:00	Daily	For bay equipment maintenance and testing work
66	220	220KV ICT-I at 220KV S/s Sukha	2-Mar-20	09:00	3-Mar-20	17:00	Continue	For bay equipment maintenance and testing work
67	220	220KV Damoh PGCIL-Tikamgarh	4-Mar-20	09:00	4-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
68	220	220KV Indore-Pithampur	5-Mar-20	09:00	5-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
69	220	220KV ICT-II at 220KV S/s Sukha	5-Mar-20	09:00	6-Mar-20	17:00	Continue	For bay equipment maintenance and testing work
70	220	220KV Barwaha-Indore-I	6-Mar-20	10:00	6-Mar-20	17:00	Daily	For bay equipment maintenance and testing work

Sr- No	KV	Line / Transformer / Reactor / Bay	From		To		Basis (Daily/ Continue)	Reason
			Date	Time	Date	Time		
71	220	220KV Sagar-Damoh PGCIL-I	6-Mar-20	09:00	6-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
72	220	220KV Indore-Barnagar	6-Mar-20	09:00	6-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
73	220	220KV Nimrani-Chhegaon-II	7-Mar-20	10:00	7-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
74	220	220KV Indore-Dewas	7-Mar-20	09:00	7-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
75	220	220KV Badnawar-Kanwan-I	10-Mar-20	09:00	10-Mar-20	17.:00	Daily	For bay equipment maintenance and testing work
76	220	220KV Sagar-Damoh PGCIL-II	11-Mar-20	09:00	11-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
77	220	220KV Damoh-Katni 400	12-Mar-20	09:00	12-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
78	220	220KV Indore-Jetpura	12-Mar-20	09:00	12-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
79	220	220KV Indore-Mangliya	13-Mar-20	09:00	13-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
80	220	220KV Sagar-Bina-I	16-Mar-20	09:00	16-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
81	220	220KV Damoh-Damoh PGCIL-I	16-Mar-20	09:00	16-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
82	220	220KV Indore-Barwaha-I	16-Mar-20	09:00	16-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
83	220	220KV Pandhurna-Kamleshwar	17-Mar-20	09:00	17-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
84	220	220KV Sagar-Bina-II	17-Mar-20	09:00	17-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
85	220	220KV Indore-Barwaha-II	17-Mar-20	09:00	17-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
86	220	220KV Badnawar-Kanwan-I	17-Mar-20	09:00	17-Mar-20	17.:00	Daily	For bay equipment maintenance and testing work
87	220	220KV Ujjain-Hatuniya PGCIL -I at 220KV S/S Ujjain	17-Mar-20	09:00	17-Mar-20	17.:00	Daily	For bay equipment maintenance and testing work
88	220	220KV Damoh-Damoh PGCIL-II	18-Mar-20	09:00	18-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
89	220	220KV Indore-Indore-East	18-Mar-20	09:00	18-Mar-20	18:00	Daily	For bay equipment maintenance and testing work
90	220	220KV Ujjain-Hatuniya PGCIL -II at 220KV S/S Ujjain	18-Mar-20	09:00	18-Mar-20	17.:00	Daily	For bay equipment maintenance and testing work
91	220	220KV Damoh-Damoh PGCIL-III	23-Mar-20	09:00	23-Mar-20	17:00	Daily	For bay equipment maintenance and testing work
92	220	220KV Julwania-Omkareshwar	26-Mar-20	09:00	26-Mar-20	17:00	Daily	For bay equipment maintenance and testing work

Unitwise / Stationwise Genration in MU

A. Thermal

Ann 4.1

Stn. Name	UNIT No.	Capacity MW	Oct-19	Nov-19
AMARKAI	5	210	140.83	129.62
	PH III	210	140.83	129.62
	TOT	210	140.83	129.62
SATPURA	6	200	53.50	37.14
	7	210	78.85	23.79
	PH II	410	132.35	60.93
	8	210	0.00	0.00
	9	210	0.00	0.00
	PH III	420	0.00	0.00
	10	250	0.00	140.41
	11	250	29.03	141.17
	PH IV	500	29.03	281.58
	TOT	1330	161.38	342.50
SANJAY GANDHI	1	210	14.24	0.00
	2	210	0.00	0.00
	PH I	420	14.24	0.00
	3	210	0.00	0.00
	4	210	14.69	40.66
	PH II	420	14.69	40.66
	5	500	291.95	357.62
	PH III	500	291.95	357.62
	TOT	1340	320.89	398.28
SSTPS	1	600	2.79	301.92
	2	600	0.00	193.44
	PH1	1200	2.79	495.36
	3	660	0.00	54.98
	4	660	0.00	0.00
	PH II	1320	0.00	54.98
	TOT	1860	2.79	550.34
MPPGCL THERMAL		4740	625.88	1420.75

Note : 1. Amarkantak Thermal Power Station-II Unit # 4 De-commissioned wef 01-May-2014.
2. Amarkantak Thermal Power Station-II Unit # 3 De-commissioned wef 13-Jan-2015.

B. Hydel

Station Name	Capacity MW	Oct-19	Nov-19
GANDHISAGAR	115.0	0.00	0.00
R.P.SAGAR	172.0	0.00	0.00
J.SAGAR	99.0	21.74	41.91
CHAMBAL	386.0	21.74	41.91
M.P.CHAMBAL	193.0	10.87	20.96
PENCH	160.0	57.65	21.30
M.P.PENCH	107.0	38.43	14.20
BARGI	90.0	62.56	43.95
TONS	315.0	182.38	124.83
BIRSINGHPUR	20.0	8.07	0.89
B.SGR(DEOLONDH)	60.0	29.82	0.00
B.SGR(SILPARA)	30.0	12.24	12.12
RAJGHAT	45.0	16.28	6.69
M.P.RAJGHAT	22.5	9.72	3.99
B.SGR(JINHA)	20.0	12.80	13.07
MADIKHEDA	60.0	23.79	4.69
TOTAL HYDEL	1186.0	427.33	269.45
MPPGCL Hydel	915.0	405.60	227.54
MPSEB HYDEL Share	917.5	390.68	238.70

C. NHDC (Ex-Bus)

Station Name	Capacity MW	Oct-19	Nov-19
Indira Sagar Hydel Project	1000	428.55	168.65
Omkareshwar Hydel Project	520	184.46	85.91

ENERGY BALANCE SHEET
Year : 2019 - 20

All figures in Million Unit

S No.	Source	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Total
		30	31	30	31	31	30	31	30	31	0	0	0	275
A.	**M.P. Availability**													
1	Thermal	2278.56	1929.45	1635.59	1915.93	1213.68	963.02	580.57	1349.87	0.00	0.00	0.00	0.00	**14205.84**
2	Hydel	125.69	135.30	79.20	66.15	263.64	455.97	376.06	236.36	0.00	0.00	0.00	0.00	**1934.43**
3	Total	2404.26	2064.75	1714.78	1982.08	1477.33	1419.00	956.63	1586.23	0.00	0.00	0.00	0.00	**16140.27**
B.	**Exchange with other States / Systems**													
1	Indira Sagar	81.66	94.10	42.03	78.42	507.37	699.26	426.42	167.03	0.00	0.00	0.00	0.00	**2255.64**
2	Omkareshwar	43.59	43.18	17.74	51.33	212.73	216.09	184.46	85.91	0.00	0.00	0.00	0.00	**935.71**
3	MPPMCL Schedule from Central Sector of WR	1777.61	1845.11	1849.93	1786.51	1529.83	1172.16	1404.23	1656.90	0.00	0.00	0.00	0.00	**14472.27**
4	MPPMCL Schedule from Central Sector ER	31.16	30.60	38.99	34.68	32.01	19.40	21.40	39.84	0.00	0.00	0.00	0.00	**284.86**
5	Total MPPMCL Schedule from Central Sector (WR+ER)	1808.77	1875.71	1888.92	1821.19	1561.84	1191.56	1425.63	1696.75	0.00	0.00	0.00	0.00	**14757.13**
6	Deviation Energy of (WR+ER)	-23.86	1.07	-25.22	-21.74	-112.89	-109.08	-72.07	-40.26	0.00	0.00	0.00	0.00	**-489.58**
7	NET NR ISGS POWER SCH to MP	26.28	60.97	70.71	81.98	41.50	17.28	15.84	13.78	0.00	0.00	0.00	0.00	**354.22**
8	RUMS SOLAR REWA (Scheduled Energy)	89.06	83.32	82.07	66.59	78.12	72.78	74.46	86.49	0.00	0.00	0.00	0.00	**696.45**
9	Schedule From Sugen	0.00	0.24	5.07	13.80	2.08	0.47	0.06	0.00	0.00	0.00	0.00	0.00	**21.72**
10	LANCO Amk	162.90	174.72	166.39	124.22	131.15	68.30	162.63	132.51	0.00	0.00	0.00	0.00	**1257.15**
11	SASAN	962.78	1016.20	944.63	880.82	794.41	932.61	937.42	997.82	0.00	0.00	0.00	0.00	**8490.64**
12	ESSAR (STOA against LTA)	0.00	6.16	5.47	4.46	3.62	2.92	1.24	0.56	0.00	0.00	0.00	0.00	**25.68**
13	J P Nigri	315.28	324.01	311.95	162.24	145.83	266.78	316.14	304.85	0.00	0.00	0.00	0.00	**2468.82**
14	MB Power	215.07	230.68	202.23	179.76	142.30	44.13	55.13	116.96	0.00	0.00	0.00	0.00	**1259.16**
15	JHABUA Power	70.02	86.00	80.24	77.37	32.78	3.63	22.44	53.46	0.00	0.00	0.00	0.00	**467.19**
16	Other Open Access Schedule other than MPPMCL Incl. Seci	-188.35	-93.64	-71.91	-76.23	-165.01	-178.04	-212.86	-193.07	0.00	0.00	0.00	0.00	**-1394.89**
17	Himachal Pradesh HYDAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
18	BARH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
19	Schedule from Sardar Sarovar	14.26	11.94	13.14	26.13	398.75	555.46	339.64	189.19	0.00	0.00	0.00	0.00	**1772.45**
20	SCH to Railway from RGPPL_ebid	176.29	183.11	173.39	180.41	168.71	160.33	172.97	170.10	0.00	0.00	0.00	0.00	**1550.70**
21	Schedule from SEZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
22	Schedule from Rihand+Matatila	3.86	2.81	2.58	6.00	3.25	5.17	9.87	4.93	0.00	0.00	0.00	0.00	**49.95**
23	MTOA / STOA FROM RAJASTHAN	0.00	41.28	41.54	43.06	44.55	43.08	44.69	43.41	0.00	0.00	0.00	0.00	**346.68**
24	Medium Term Power Purchase from CSPDCL through PTC agaisnt PPA CSPDCCL dtd. 18.09.2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
25	Medium Term Power Purchase from Balco through PTC agaisnt PPA Balco dtd. 18.09.2012 Including Short term purchase against MTOA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
26	Additional Power Purchase	0.00	0.00	0.00	32.40	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
27	Energy Exchange	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Banking of Energy	-393.14	-468.76	-393.51	-593.40	-564.04	-584.15	288.19	942.43	0.00	0.00	0.00	0.00	**-731.46**
29	Sale of Power	-469.81	-61.02	-40.63	-215.50	-239.14	-221.85	-358.18	-112.06	0.00	0.00	0.00	0.00	**-2003.66**
30	**Total MP Schedule (Including Railway)**	**2793.28**	**3473.75**	**3482.28**	**2815.30**	**2580.76**	**2380.45**	**3295.30**	**4448.11**	**0.00**	**0.00**	**0.00**	**0.00**	29420.38
31	**Total MP Drawal (Including Railway)**	**2769.41**	**3474.82**	**3457.06**	**2793.56**	**2467.87**	**2271.37**	**3223.23**	**4407.85**	**0.00**	**0.00**	**0.00**	**0.00**	28930.80
32	Wheeled Energy of Tawa HEG	0.00	0.00	0.00	0.00	6.48	11.87	8.03	8.83	0.00	0.00	0.00	0.00	**44.69**
33	Wheeled Energy of Wind Farm	10.15	11.63	9.91	13.63	6.94	3.61	5.07	1.49	0.00	0.00	0.00	0.00	**66.63**
34	Wheeled Energy of Solar Plant	67.16	64.39	55.62	28.72	35.74	31.24	50.72	54.02	0.00	0.00	0.00	0.00	**450.86**
35	Wheeled Energy of Bio-Mass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
36	Wheeled Energy of Ascent Hydro +SAS Hydel Hatta	1.34	1.27	1.02	2.49	2.49	5.70	2.34	0.07	0.00	0.00	0.00	0.00	**17.43**
37	Export to MSEB (Nepa-Dharni) Wheeling	-7.23	-6.99	-5.77	-4.96	-4.48	-4.70	-4.99	-5.35	0.00	0.00	0.00	0.00	**-44.47**
38	Deviation Energy of MPPGCL Thermal + Infirm Energy of Singajil	-30.89	-38.40	-35.05	-25.15	-29.92	-29.28	-26.15	-37.36	0.00	0.00	0.00	0.00	**-278.14**
39	Energy Purchased by MP from Wind Farm	403.98	579.40	555.30	644.20	490.23	257.89	152.91	121.59	0.00	0.00	0.00	0.00	**3500.10**
40	Energy Purchased by MP from Solar Plant	163.30	166.07	135.61	109.56	85.64	78.75	121.15	112.90	0.00	0.00	0.00	0.00	**1087.80**
41	Firm / Infirm Energy of HEG Mandideep+Hindalco+HEG Tawa + Trimula Ind. purchase by MP +Wheeled enrgy of CPP / IPP	187.15	101.90	86.30	87.04	176.83	192.05	214.92	194.37	0.00	0.00	0.00	0.00	**1229.12**
42	Purchased from ASN Biomass Katni + RDM Care Ind. Biogas Pariyat + Pragya Energy Pvt. Ltd. Biogas Richhai+ Arya Energy Kotma + Orient Green Power Limited, Gadarawara Bio-Mass+Shaliwahna (CHH+Umariya) + JBP MSW	2.66	2.98	3.06	1.59	0.90	1.64	3.72	2.83	0.00	0.00	0.00	0.00	**22.36**
43	Deviation Energy of ISP	1.41	1.64	1.70	1.83	2.85	3.41	2.13	1.61	0.00	0.00	0.00	0.00	**-142.77**
44	Schedule Energy of BLA Power against LTOA	0.66	4.45	2.27	4.30	1.14	0.44	0.06	0.10	0.00	0.00	0.00	0.00	**13.42**
45	Schedule Energy of JP BINA Power against LTOA	34.61	150.56	147.57	54.21	54.84	35.95	22.66	14.97	0.00	0.00	0.00	0.00	**526.80**
46	Import from bargi Left Bank Canal Power House + ISP NVDA	0.59	-0.01	0.00	0.00	1.36	1.47	0.74	1.67	0.00	0.00	0.00	0.00	**9.17**
47	Chambal Complex Excess / less Overshare by MP	-1.17	-1.09	1.27	-1.96	-16.60	-17.90	-1.48	-2.01	0.00	0.00	0.00	0.00	**-40.93**
48	Rajghat Hydel Power Station Excess / Less Overshare by MP	-0.03	0.00	-0.02	-0.02	2.14	2.96	2.12	1.35	0.00	0.00	0.00	0.00	**9.41**
49	**State Supply (Ex-Power stn. Bus)**	**6132.61**	**6714.64**	**6190.39**	**5820.86**	**5481.89**	**5180.82**	**5344.68**	**6718.10**	**0.00**	**0.00**	**0.00**	**0.00**	**54733.91**
50	AVERAGE DAILY (Ex-Bus)	204.42	216.60	206.35	187.77	176.84	172.69	172.41	223.94	0.00	#DIV/0!	#DIV/0!	#DIV/0!	199.03
51	MINIMUM DAILY (MP Periphery)	147.90	194.22	166.40	149.59	136.89	150.30	151.07	179.06	0.00	0.00	0.00	0.00	136.89
52	MAXIMUM DAILY (MP Periphery)	214.82	221.89	221.88	223.94	190.98	190.33	185.07	247.83	0.00	0.00	0.00	0.00	251.21
53	**State Supply (Ex-Power st. Bus):- YEAR : 2018-19**	**5518.85**	**5998.45**	**5155.78**	**5068.96**	**5412.65**	**5474.68**	**7466.55**	**7895.66**	**7889.18**	**7601.20**	**6356.67**	**6508.26**	**55880.77**
54	Year ((19-20)-(18-19))*100/Year (18-19)	**11.12**	**11.94**	**20.07**	**14.83**	**1.28**	**-5.37**	**-28.42**	**-14.91**	**-100.00**	**-100.00**	**-100.00**	**-100.00**	**-2.05**
55	Unshedule L/S : Year-2019-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
56	Frequency Correction	2.76	3.66	3.72	2.48	2.44	1.66	1.15	1.50	0.00	0.00	0.00	0.00	**22.39**
57	**Restricted Requirement : Year-2019-20**	**6135.38**	**6718.30**	**6194.11**	**5823.34**	**5484.33**	**5182.49**	**5345.84**	**6719.60**	**0.00**	**0.00**	**0.00**	**0.00**	**54756.30**
58	Shedule L/S : Year-2019-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
59	**Un-Restricted Requirement : Year-2019-20**	**6135.38**	**6718.30**	**6194.11**	**5823.34**	**5484.33**	**5182.49**	**5345.84**	**6719.60**	**0.00**	**0.00**	**0.00**	**0.00**	**54756.30**

ENERGY BALANCE SHEET : Demand & Sypply Hours

Year : 2019 - 20

S.NO.		Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Yr 19-20
C.	**MORNING PEAK (MAX)**													
1	DEMAND MET	9738	9880	9955	9845	8606	8545	8736	12921	0	0	0	0	14326
2	LOAD RELIEF	0	0	0	0	0	0	0	0	0	0	0	0	0
3	LOAD SHEDDING	0	0	0	0	0	0	0	0	0	0	0	0	0
D.	**EVENING PEAK (MAX)**													
1	DEMAND MET	9235	9475	9480	9746	8526	8685	8666	10494	0	0	0	0	11237
2	LOAD RELIEF	0	0	0	0	0	0	0	0	0	0	0	0	0
3	LOAD SHEDDING	0	0	0	0	0	0	0	0	0	0	0	0	0
F.	**REGISTERED MAXIMUM**	9738	9880	9955	9845	8606	8685	8736	12921	0	0	0	0	14326
G.	**COMPUTED MAXIMUM DEMAND**	9738	9891	9961	9845	8606	8887	8736	12921	0	0	0	0	14369
H.	**UNRESTRICTED MAXIMUM DEMAND**	9738	9891	9955	9845	8606	8887	8736	12921	0	0	0	0	14326
I.	**Average Power Supply per day to**													
1.	Div. Head Quarters	23:52	23:54	23:48	23:48	23:51	23:47	23:50	23:56	0:00	0:00	0:00	0:00	21:09
2.	District Head Quarters	23:54	23:55	23:48	23:48	23:47	23:44	23:45	23:52	0:00	0:00	0:00	0:00	21:08
3.	Tahsil Head Quarters	23:50	23:53	23:43	23:44	23:48	23:42	23:47	23:52	0:00	0:00	0:00	0:00	21:06
4.	Rural -Mixed	23:36	23:46	23:34	23:29	23:40	23:35	23:43	23:47	0:00	0:00	0:00	0:00	20:59
5.	Rural -DLF	23:40	23:48	23:35	23:34	23:40	23:34	23:42	23:47	0:00	0:00	0:00	0:00	21:00
6.	Rural -Irrigation	9:54	9:57	9:53	9:53	9:53	9:51	9:54	9:56	0:00	0:00	0:00	0:00	8:47
J	LOAD FACTOR %	87.47	91.35	86.37	79.47	85.62	82.85	82.23	72.21	0.00	#DIV/0!	#DIV/0!	#DIV/0!	81.63

FREQUENCY ANALYSIS YEAR 2019-20

S.N	PARTICULARS	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Yr 19-20
A. INTGRATED FREQUENCY														
1	MAXIMUM	50.21	50.16	50.23	50.16	50.26	50.14	50.12	50.10	0.00	0.00	0.00	0.00	50.26
2	MINIMUM	49.81	49.81	49.80	49.83	49.81	49.80	49.88	49.85	0.00	0.00	0.00	0.00	0.00
B. INSTANTANEOUS FREQUENCY														
1	MAXIMUM	50.29	50.33	50.31	50.32	50.32	50.27	50.31	50.27	0.00	0.00	0.00	0.00	50.33
2	MINIMUM	49.65	49.65	49.63	49.64	49.55	49.62	49.67	49.65	0.00	0.00	0.00	0.00	0.00
C. AVG FREQUENCY		50.00	50.00	50.00	50.01	50.00	50.01	50.01	50.01	0.00	0.00	0.00	0.00	44.45
D. % TIME WHEN FREQUENCY WAS														
1	ABOVE 51.5 Hz	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	50.05 TO 51.5 Hz	20.14	19.14	19.79	24.64	20.03	20.18	19.77	19.77	0.00	0.00	0.00	0.00	18.14
3	49.9 TO 50.05 Hz	72.76	72.60	70.34	68.27	72.69	75.25	77.05	77.05	0.00	0.00	0.00	0.00	64.99
4	49.7 TO 49.9 Hz	7.10	8.26	9.87	7.09	7.28	4.57	3.18	3.19	0.00	0.00	0.00	0.00	5.61
5	49.5 TO 49.7 Hz	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	49.2 TO 49.5 Hz	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	48.8 TO 49.2 Hz	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	48.5 TO 48.8 Hz	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	BELOW 48.5 Hz	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hourly Average Own Generation, Schedule Drawal , Actual Drawal & Demand

Month :- October 2019

FIGURES IN MW

Hrs.	FREQ.	Own Generation								Schedule from																									Load Shedding				
		THER. Incl Aux	THER. Excl Aux	HYD.	ISP	OSP	Total IPPs Injection	Total CPPs Injection	Total	CSS	Net NR to MP	Sugen	Lanco	Sasan	Essar	JP Nigri	RUMS (SOLAR) REWA TO MPPMCL	MB Power	Jhabua Power	SSP	SCH to Railway	SEZ	Banking	Sale	Pur	STOA	Rihand+Matila-Rajghat	MTOA / STOA FROM RAJASTHAN	Total	Tot Avl.	Act. Drl	Deviation	Export to MS	DEMAND MET	SCH	UN SCH	TOTAL	REST. DEMAND	UNREST. DEMAND
1:00	49.99	818	750	461	515	241	310	246	2522	1849	16	0	214	1280	0	409	0	57	3	438	227	0	209	-204	0	-278	7	58	4284	6806	4154	-130	-7	6669	0	0	0	6673	6673
2:00	50.01	815	747	465	466	215	312	241	2448	1805	15	0	211	1247	0	407	0	44	0	511	227	0	209	-196	0	-280	7	58	4266	6713	4183	-83	-7	6624	0	0	0	6626	6626
3:00	50.01	823	754	471	469	207	317	243	2462	1840	15	0	209	1224	0	407	0	34	5	520	227	0	209	-190	0	-280	7	58	4286	6749	4226	-60	-7	6682	0	0	0	6683	6683
4:00	50.02	828	759	471	463	211	317	233	2455	1827	22	0	213	1191	0	407	0	47	16	510	227	0	209	-132	0	-281	7	58	4321	6775	4268	-52	-6	6716	0	0	0	6717	6717
5:00	50.00	844	774	478	490	223	320	228	2513	1894	22	0	214	1225	0	407	0	47	22	509	226	0	209	-150	0	-281	7	58	4410	6923	4300	-109	-7	6807	0	0	0	6809	6809
6:00	50.02	870	797	495	559	264	319	233	2668	2101	20	0	235	1268	0	407	2	113	48	467	226	0	209	-219	0	-280	7	58	4662	7330	4577	-85	-7	7238	0	0	0	7238	7238
7:00	50.02	875	802	545	639	304	321	285	2896	2122	19	0	239	1279	0	407	13	142	53	462	225	0	533	-222	0	-274	7	58	5063	7959	4951	-112	-8	7839	0	0	0	7842	7842
8:00	50.04	859	788	546	629	289	316	480	3048	2005	16	0	226	1276	0	406	108	104	39	458	225	0	569	-269	0	-299	7	58	4929	7977	4670	-259	-8	7710	0	0	0	7710	7710
9:00	50.03	843	773	555	600	268	313	659	3169	1850	15	0	200	1254	0	406	233	51	11	447	226	0	569	-401	0	-336	7	58	4589	7758	4474	-115	-7	7637	0	0	0	7638	7638
10:00	50.03	833	764	538	582	252	312	828	3276	1712	15	0	197	1207	0	406	317	28	6	402	226	0	569	-585	0	-359	7	58	4207	7483	4087	-120	-6	7357	0	0	0	7357	7357
11:00	50.02	811	744	510	556	234	312	923	3280	1557	15	0	188	1162	0	406	366	4	1	390	226	0	569	-646	0	-374	7	58	3929	7209	3759	-170	-6	7033	0	0	0	7035	7035
12:00	50.03	786	721	500	569	224	312	947	3273	1374	15	0	168	1138	0	407	382	1	0	372	223	0	569	-762	0	-377	7	58	3576	6849	3457	-119	-6	6724	0	0	0	6725	6725
13:00	50.04	764	700	475	567	218	311	908	3180	1292	15	0	172	1108	0	407	345	0	0	433	222	0	569	-721	0	-377	7	58	3530	6710	3526	-4	-6	6700	0	0	0	6701	6701
14:00	50.03	776	711	481	555	209	311	827	3095	1292	15	0	168	1121	0	407	288	0	0	415	223	0	569	-610	0	-364	7	58	3590	6685	3563	-27	-6	6652	0	0	0	6653	6653
15:00	50.00	808	741	487	565	220	312	686	3011	1630	16	0	196	1126	0	407	217	15	0	400	222	0	569	-812	0	-345	7	58	3706	6717	3670	-36	-6	6675	0	0	0	6678	6678
16:00	50.00	823	755	492	561	218	312	518	2857	1751	16	0	203	1160	0	408	109	32	5	415	222	0	569	-654	0	-323	7	58	3979	6836	3902	-77	-6	6753	0	0	0	6756	6756
17:00	49.98	838	769	494	601	237	313	303	2717	1898	17	0	215	1224	0	409	18	54	10	456	224	0	569	-497	0	-296	7	58	4367	7084	4289	-78	-6	7000	0	0	0	7006	7006
18:00	50.00	877	804	553	710	292	352	222	2933	2373	65	0	240	1269	1	418	3	193	87	453	225	0	569	-974	0	-258	7	58	4729	7662	4613	-116	-7	7539	0	0	0	7542	7542
19:00	50.04	898	823	584	719	318	366	243	3053	2417	43	2	253	1279	14	430	0	243	142	441	224	0	209	-674	0	-98	7	58	4990	8043	4855	-135	-8	7900	0	0	0	7902	7902
20:00	50.04	888	814	574	629	311	337	263	2929	2263	29	0	242	1271	13	432	0	174	103	477	226	0	209	-708	0	-104	7	58	4692	7621	4519	-173	-8	7440	0	0	0	7440	7440
21:00	50.01	887	813	561	584	279	328	252	2817	2119	20	0	224	1264	7	430	0	124	61	486	227	0	209	-675	0	-188	7	58	4373	7190	4271	-102	-8	7081	0	0	0	7084	7084
22:00	50.04	868	796	543	579	272	325	249	2765	2102	18	0	227	1267	3	427	0	105	60	422	224	0	209	-719	0	-238	7	58	4174	6939	4052	-122	-7	6809	0	0	0	6809	6809
23:00	50.02	846	776	516	553	261	317	245	2668	2104	17	0	226	1269	0	422	0	93	37	415	225	0	209	-492	0	-280	7	58	4310	6978	4288	-22	-7	6949	0	0	0	6950	6950
24:00	50.05	825	757	479	530	250	312	241	2569	1891	17	0	213	1270	0	420	0	38	2	421	224	0	209	-202	0	-280	7	58	4288	6857	4228	-60	-7	6790	0	0	0	6790	6790
Avg.	50.02	838	768	512	571	251	320	438	2858	1878	21	0	212	1224	2	413	100	73	30	447	225	0	387	-488	0	-285	7	58	4302	7161	4204	-99	-7	7055	0	0	0	7057	7057
00 TO 06 HRS.	50.01	833	764	474	494	227	316	238	2511	1886	18	0	216	1239	0	407	0	57	15	492	227	0	209	-182	0	-280	7	58	4371	6883	4285	-87	-7	6789	0	0	0	6791	6791
06 TO 12 HRS.	50.03	835	765	533	596	262	314	687	3157	1770	16	0	203	1219	0	406	236	55	18	422	225	0	563	-481	0	-336	7	58	4382	7539	4233	-149	-7	7383	0	0	0	7384	7384
12 TO 18 HRS.	50.01	814	747	497	593	232	319	577	2966	1706	24	0	199	1168	0	410	163	49	17	429	223	0	569	-711	0	-327	7	58	3984	6949	3927	-56	-6	6887	0	0	0	6889	6889
06TO 18 HRS.	50.02	824	756	515	595	247	317	632	3061	1738	20	0	201	1194	0	408	200	52	18	425	224	0	566	-596	0	-332	7	58	4183	7244	4080	-103	-6	7135	0	0	0	7137	7137
18 TO 24 HRS.	50.03	869	796	543	599	282	331	249	2800	2149	24	0	231	1270	6	427	0	130	68	444	225	0	209	-578	0	-198	7	58	4471	7271	4369	-102	-7	7162	0	0	0	7163	7163

Hourly Average Own Generation, Schedule Drawal , Actual Drawal & Demand
Month :- November 2019

FIGURES IN MW

Hrs.	FREQ.	Own Generation								Schedule from																										Load Shedding				
		THER. Incl Aux	THER. Excl Aux	HYD.	ISP	OSP	Total IPPs Injection	Total CPPs Injection	Total	CSS	Net NR to MP	Sugen	Lanco	Sasan	Essar	JP Nigri	RUMS (SOLAR) REWA TO MPPMCL	MB Power	Jhabua Power	SSP	SCH to Railway	SEZ	Banking	Sale	Pur	STOA	Rihand+Matatila-Rajghat	MTOA / STOA FROM RAJASTHAN	Total	Tot Avl.	Act. Drl	Deviation	Export to MS	DEMAND MET	SCH	UN SCH	TOTAL	REST. DEMAND	UNREST DEMAND
1:00	50.03	1981	1837	275	193	108	294	234	2940	2327	17	0	189	1334	0	405	0	200	100	246	244	0	532	0	0	-252	5	58	5406	8346	5338	-69	-7	8271	0	0	0	8273	8273
2:00	50.02	1949	1808	264	86	78	293	243	2772	2308	23	0	173	1343	0	405	0	149	74	234	228	0	532	0	0	-251	5	58	5282	8055	5055	-227	-6	7821	0	0	0	7822	7822
3:00	50.02	1964	1821	254	86	61	293	256	2771	2330	29	0	179	1359	0	405	0	137	70	155	222	0	532	0	0	-251	5	58	5231	8002	5225	-7	-6	7990	0	0	0	7991	7991
4:00	50.03	1982	1838	259	113	63	293	263	2829	2351	34	0	181	1370	0	405	0	132	75	154	225	0	532	0	0	-251	5	58	5272	8100	5281	9	-6	8104	0	0	0	8105	8105
5:00	50.03	2008	1862	256	146	84	294	270	2912	2357	32	0	179	1371	0	405	0	159	79	157	231	0	532	-4	0	-251	5	58	5312	8224	5221	-90	-6	8127	0	0	0	8128	8128
6:00	50.03	2026	1879	314	246	145	294	278	3156	2372	21	0	192	1337	0	405	0	221	102	190	243	0	532	-5	0	-251	5	58	5423	8579	5520	96	-7	8669	0	0	0	8670	8670
7:00	50.01	2031	1884	362	337	173	284	295	3334	2374	25	0	205	1336	0	407	4	216	101	364	230	0	1873	-31	0	-249	5	58	6919	10253	7003	84	-9	10328	0	0	0	10334	10334
8:00	50.04	2004	1859	407	399	189	286	492	3631	2347	18	0	200	1336	0	408	110	234	105	486	220	0	2132	-15	0	-274	5	58	7371	11001	7120	-250	-9	10742	0	0	0	10743	10743
9:00	50.03	1991	1847	393	356	162	285	655	3699	2304	14	0	179	1339	0	408	266	176	63	498	230	0	2132	-45	0	-310	5	58	7318	11017	7315	-3	-8	11006	0	0	0	11007	11007
10:00	50.02	1948	1807	331	327	145	286	803	3699	2273	13	0	162	1341	0	408	397	95	28	475	230	0	2132	-115	0	-342	5	58	7161	10860	7054	-107	-8	10745	0	0	0	10747	10747
11:00	50.02	1901	1762	285	213	117	288	908	3574	2244	13	0	162	1340	0	406	461	43	16	287	241	0	2132	-260	0	-360	5	58	6788	10362	6623	-165	-7	10189	0	0	0	10190	10190
12:00	50.04	1833	1700	258	155	91	292	918	3414	2059	13	0	155	1343	0	406	484	59	15	253	228	0	2132	-511	0	-369	5	58	6330	9745	6019	-312	-7	9426	0	0	0	9426	9426
13:00	50.02	1832	1699	239	122	74	292	851	3277	2157	13	0	154	1344	0	406	447	69	24	233	221	0	2132	-489	0	-366	5	58	6408	9686	6462	54	-7	9732	0	0	0	9735	9735
14:00	50.01	1883	1747	237	151	87	289	730	3241	2130	13	0	147	1344	0	406	375	79	14	218	224	0	2132	-355	0	-349	5	58	6442	9682	6462	20	-7	9695	0	0	0	9697	9697
15:00	50.01	1947	1806	251	213	102	289	571	3232	2196	14	0	170	1344	0	406	255	105	34	181	231	0	2132	-279	0	-329	5	58	6524	9755	6522	-2	-7	9746	0	0	0	9749	9749
16:00	49.98	1994	1850	279	283	128	289	332	3162	2289	15	0	183	1343	0	414	83	144	69	178	242	0	2132	-311	0	-300	5	58	6546	9708	6665	119	-7	9819	0	0	0	9826	9826
17:00	50.01	2040	1892	321	382	169	291	113	3167	2351	16	0	195	1343	0	424	8	215	103	273	230	0	2132	-369	0	-269	5	58	6714	9881	6630	-84	-8	9790	0	0	0	9794	9794
18:00	50.03	2083	1932	369	482	199	296	92	3370	2398	22	0	207	1343	8	429	0	257	137	284	221	0	1679	-511	0	-112	5	58	6425	9795	5992	-433	-9	9353	0	0	0	9356	9356
19:00	50.05	2069	1920	332	333	158	295	149	3186	2350	21	0	191	1343	8	431	0	244	127	188	225	0	532	-142	0	-93	5	58	5488	8674	5272	-216	-9	8449	0	0	0	8450	8450
20:00	50.05	1958	1816	294	168	106	292	202	2878	2284	19	0	162	1343	2	425	0	152	68	203	229	0	532	-168	0	-165	5	58	5148	8027	4964	-185	-9	7833	0	0	0	7833	7833
21:00	50.01	1882	1745	279	124	82	295	226	2752	2200	17	0	153	1340	0	415	0	104	48	243	243	0	532	-251	0	-254	5	58	4853	7605	4760	-93	-8	7504	0	0	0	7506	7506
22:00	50.05	1923	1783	286	151	89	295	247	2851	2209	15	0	161	1336	0	409	0	107	54	265	220	0	532	-83	0	-254	5	58	5034	7885	4870	-165	-8	7713	0	0	0	7714	7714
23:00	49.99	2074	1924	328	280	143	293	243	3211	2363	14	0	204	1336	0	406	0	247	123	298	221	0	532	-10	0	-255	5	58	5541	8752	5586	45	-7	8790	0	0	0	8796	8796
24:00	50.05	2090	1938	321	284	147	294	241	3226	2356	15	0	200	1336	0	405	0	253	114	246	231	0	532	-7	0	-256	5	58	5488	8715	5398	-90	-7	8618	0	0	0	8619	8619
Avg.	50.02	1975	1831	300	235	121	291	401	3179	2289	19	0	179	1343	1	411	120	158	73	263	229	0	1303	-165	0	-267	5	58	6018	9196	5931	-86	-7	9103	0	0	0	9105	9105
00 TO 06 HRS.	50.02	1985	1841	270	145	90	293	258	2897	2341	26	0	182	1352	0	405	0	166	83	189	232	0	532	-2	0	-251	5	58	5321	8218	5273	-48	-6	8164	0	0	0	8165	8165
06 TO 12 HRS.	50.03	1951	1810	339	298	146	287	678	3559	2267	16	0	177	1339	0	407	287	137	55	394	230	0	2089	-163	0	-317	5	58	6981	10540	6855	-126	-8	10406	0	0	0	10408	10408
12 TO 18 HRS.	50.01	1963	1821	283	272	126	291	448	3241	2254	16	0	176	1343	1	414	195	145	64	228	228	0	2057	-386	0	-287	5	58	6510	9751	6456	-54	-8	9689	0	0	0	9693	9693
06TO 18 HRS.	50.02	1957	1815	311	285	136	289	563	3400	2260	16	0	177	1341	1	411	241	141	59	311	229	0	2073	-274	0	-302	5	58	6745	10145	6656	-90	-8	10048	0	0	0	10050	10050
18 TO 24 HRS.	50.03	1999	1854	307	223	121	294	218	3017	2294	17	0	178	1339	2	415	0	185	89	240	228	0	532	-110	0	-213	5	58	5259	8276	5142	-117	-8	8151	0	0	0	8153	8153

Discomwise Hourly Average Schedule Drawal , Actual Drawal &Over(+)/Under(-) Drawal
Month :- October 2019

FIGURES IN MW

Hrs.	FREQ.	EZONE							CZONE							WZONE							Railway	
		SCH	Demand Met	O/U DRL	SCH LS	Unsch LS	Restricted Demand	Unrestricted Demand	SCH	Demand Met	O/U DRL	SCH LS	Unsch LS	Restricted Demand	Unrestricted Demand	SCH	Demand Met	O/U DRL	SCH LS	Unsch LS	Restricted Demand	Unrestricted Demand	Total Sch	Total Drawal
1:00	49.99	2165	2168	3	0	0	2169	2169	2469	2352	-117	0	0	2354	2354	1902	1918	16	0	0	1919	1919	227	230
2:00	50.01	2101	2115	14	0	0	2115	2115	2401	2317	-84	0	0	2317	2317	1922	1964	41	0	0	1964	1964	227	229
3:00	50.01	2065	2116	51	0	0	2116	2116	2344	2281	-64	0	0	2281	2281	2022	2062	41	0	0	2063	2063	227	222
4:00	50.02	2074	2122	48	0	0	2122	2122	2336	2251	-85	0	0	2252	2252	2089	2120	31	0	0	2120	2120	227	223
5:00	50.00	2104	2103	-1	0	0	2104	2104	2388	2276	-112	0	0	2277	2277	2136	2196	60	0	0	2197	2197	226	230
6:00	50.02	2142	2108	-34	0	0	2108	2108	2548	2483	-65	0	0	2483	2483	2341	2424	83	0	0	2424	2424	226	222
7:00	50.02	2240	2239	-1	0	0	2240	2240	2812	2685	-127	0	0	2685	2685	2631	2673	42	0	0	2674	2674	225	243
8:00	50.04	2241	2180	-61	0	0	2180	2180	2830	2590	-240	0	0	2590	2590	2630	2703	73	0	0	2703	2703	225	237
9:00	50.03	2184	2154	-30	0	0	2154	2154	2737	2615	-122	0	0	2615	2615	2592	2633	41	0	0	2633	2633	226	235
10:00	50.03	2102	2082	-20	0	0	2082	2082	2630	2536	-95	0	0	2536	2536	2480	2511	31	0	0	2511	2511	226	228
11:00	50.02	2046	2022	-24	0	0	2022	2022	2530	2412	-119	0	0	2412	2412	2362	2382	20	0	0	2382	2382	226	218
12:00	50.03	1960	1903	-57	0	0	1904	1904	2398	2316	-81	0	0	2317	2317	2226	2279	53	0	0	2280	2280	223	226
13:00	50.04	1905	1908	3	0	0	1908	1908	2299	2257	-43	0	0	2257	2257	2238	2323	85	0	0	2323	2323	222	212
14:00	50.03	1835	1848	13	0	0	1848	1848	2284	2226	-57	0	0	2226	2226	2297	2361	64	0	0	2361	2361	223	217
15:00	50.00	1836	1845	10	0	0	1846	1846	2289	2221	-67	0	0	2222	2222	2331	2372	41	0	0	2373	2373	222	237
16:00	50.00	1872	1886	15	0	0	1887	1887	2311	2259	-52	0	0	2260	2260	2358	2387	29	0	0	2388	2388	222	221
17:00	49.98	1955	1962	7	0	0	1963	1963	2439	2376	-64	0	0	2378	2378	2410	2432	22	0	0	2434	2434	224	231
18:00	50.00	2171	2254	83	0	0	2255	2255	2645	2559	-86	0	0	2560	2560	2413	2499	86	0	0	2500	2500	225	228
19:00	50.04	2487	2492	5	0	0	2492	2492	2796	2665	-130	0	0	2666	2666	2446	2525	79	0	0	2525	2525	224	218
20:00	50.04	2478	2396	-82	0	0	2396	2396	2694	2516	-178	0	0	2516	2516	2169	2293	124	0	0	2293	2293	226	235
21:00	50.01	2392	2333	-59	0	0	2334	2334	2516	2385	-131	0	0	2386	2386	2011	2151	140	0	0	2152	2152	227	211
22:00	50.04	2335	2235	-99	0	0	2235	2235	2451	2314	-136	0	0	2314	2314	1927	2049	122	0	0	2049	2049	224	211
23:00	50.02	2260	2275	15	0	0	2276	2276	2524	2455	-70	0	0	2455	2455	1934	2005	71	0	0	2005	2005	225	215
24:00	50.05	2166	2222	56	0	0	2222	2222	2477	2370	-107	0	0	2370	2370	1916	1943	26	0	0	1943	1943	224	255
Avg.	**50.02**	**2130**	**2124**	**-6**	**0**	**0**	**2124**	**2124**	**2506**	**2405**	**-101**	**0**	**0**	**2405**	**2405**	**2241**	**2300**	**59**	**0**	**0**	**2301**	**2301**	**225**	**226**
00 TO 06 HRS.	50.01	2108	2122	14	0	0	2123	2123	2414	2327	-88	0	0	2327	2327	2069	2114	45	0	0	2115	2115	227	226
06 TO 12 HRS.	50.03	2129	2097	-32	0	0	2097	2097	2656	2525	-131	0	0	2526	2526	2487	2530	43	0	0	2530	2530	225	231
12 TO 18 HRS.	50.01	1929	1951	22	0	0	1951	1951	2378	2316	-61	0	0	2317	2317	2341	2396	55	0	0	2397	2397	223	224
06TO 18 HRS.	50.02	2029	2024	-5	0	0	2024	2024	2517	2421	-96	0	0	2421	2421	2414	2463	49	0	0	2463	2463	224	228
18 TO 24 HRS.	50.03	2353	2326	-27	0	0	2326	2326	2576	2451	-125	0	0	2451	2451	2067	2161	94	0	0	2161	2161	225	224

Discomwise Hourly Average Schedule Drawal , Actual Drawal &Over(+)/Under(-) Drawal
Month :- November 2019

FIGURES IN MW

Hrs.	FREQ.	EZONE							CZONE							WZONE							Railway	
		SCH	Demand Met	O/U DRL	SCH LS	Unsch LS	Restricted Demand	Unrestricted Demand	SCH	Demand Met	O/U DRL	SCH LS	Unsch LS	Restricted Demand	Unrestricted Demand	SCH	Demand Met	O/U DRL	SCH LS	Unsch LS	Restricted Demand	Unrestricted Demand	Total Sch	Total Drawal
1:00	50.03	2329	2356	27	0	0	2356	2356	2899	2874	-25	0	0	2875	2875	2864	2805	-60	0	0	2805	2805	244	237
2:00	50.02	2159	2146	-13	0	0	2146	2146	2860	2694	-167	0	0	2694	2694	2782	2761	-21	0	0	2761	2761	228	221
3:00	50.02	2200	2245	45	0	0	2246	2246	2718	2721	4	0	0	2722	2722	2803	2810	6	0	0	2810	2810	222	213
4:00	50.03	2194	2248	54	0	0	2248	2248	2728	2729	0	0	0	2729	2729	2906	2909	2	0	0	2909	2909	225	219
5:00	50.03	2254	2263	8	0	0	2263	2263	2788	2776	-12	0	0	2777	2777	2916	2864	-52	0	0	2865	2865	231	224
6:00	50.03	2216	2251	36	0	0	2252	2252	2908	2937	30	0	0	2938	2938	3191	3244	53	0	0	3245	3245	243	235
7:00	50.01	2682	2739	57	0	0	2741	2741	3356	3456	99	0	0	3458	3458	3934	3908	-25	0	0	3910	3910	230	225
8:00	50.04	2809	2838	29	0	0	2838	2838	3625	3385	-240	0	0	3385	3385	4344	4303	-41	0	0	4304	4304	220	216
9:00	50.03	2819	2848	29	0	0	2848	2848	3628	3608	-20	0	0	3608	3608	4355	4325	-30	0	0	4325	4325	230	226
10:00	50.02	2770	2788	18	0	0	2788	2788	3631	3523	-108	0	0	3523	3523	4237	4213	-25	0	0	4214	4214	230	223
11:00	50.02	2721	2717	-4	0	0	2717	2717	3529	3399	-130	0	0	3400	3400	3852	3839	-14	0	0	3839	3839	241	234
12:00	50.04	2381	2330	-51	0	0	2330	2330	3346	3079	-267	0	0	3079	3079	3745	3797	51	0	0	3797	3797	228	221
13:00	50.02	2457	2485	28	0	0	2486	2486	3104	3106	2	0	0	3107	3107	3884	3929	45	0	0	3930	3930	221	212
14:00	50.01	2323	2389	66	0	0	2390	2390	3074	3043	-31	0	0	3044	3044	4012	4047	35	0	0	4048	4048	224	217
15:00	50.01	2324	2408	84	0	0	2408	2408	3020	3024	4	0	0	3025	3025	4089	4091	2	0	0	4092	4092	231	224
16:00	49.98	2325	2434	109	0	0	2436	2436	3013	3050	37	0	0	3052	3052	4097	4099	2	0	0	4102	4102	242	237
17:00	50.01	2496	2554	58	0	0	2555	2555	3214	3220	6	0	0	3221	3221	3875	3793	-83	0	0	3794	3794	230	224
18:00	50.03	2757	2728	-28	0	0	2729	2729	3461	3171	-290	0	0	3172	3172	3268	3238	-31	0	0	3238	3238	221	216
19:00	50.05	2798	2798	0	0	0	2798	2798	2989	2816	-174	0	0	2816	2816	2654	2617	-37	0	0	2618	2618	225	218
20:00	50.05	2748	2692	-56	0	0	2692	2692	2800	2587	-213	0	0	2587	2587	2320	2331	11	0	0	2331	2331	229	224
21:00	50.01	2580	2553	-27	0	0	2554	2554	2575	2430	-145	0	0	2430	2430	2237	2287	51	0	0	2288	2288	243	234
22:00	50.05	2390	2354	-36	0	0	2354	2354	2451	2394	-57	0	0	2394	2394	2771	2752	-19	0	0	2753	2753	220	213
23:00	49.99	2452	2496	44	0	0	2498	2498	2945	2990	45	0	0	2992	2992	3105	3090	-15	0	0	3092	3092	221	214
24:00	50.05	2382	2413	31	0	0	2413	2413	3016	2937	-80	0	0	2937	2937	3112	3042	-70	0	0	3042	3042	231	227
Avg.	**50.02**	**2482**	**2503**	**21**	**0**	**0**	**2504**	**2504**	**3070**	**2998**	**-72**	**0**	**0**	**2998**	**2998**	**3390**	**3379**	**-11**	**0**	**0**	**3380**	**3380**	**229**	**223**
00 TO 06 HRS.	50.02	2225	2251	26	0	0	2252	2252	2817	2789	-28	0	0	2789	2789	2910	2899	-12	0	0	2899	2899	232	225
06 TO 12 HRS.	50.03	2697	2710	13	0	0	2710	2710	3519	3408	-111	0	0	3409	3409	4078	4064	-14	0	0	4065	4065	230	224
12 TO 18 HRS.	50.01	2447	2500	53	0	0	2501	2501	3148	3102	-45	0	0	3103	3103	3871	3866	-5	0	0	3867	3867	228	221
06TO 18 HRS.	50.02	2572	2605	33	0	0	2605	2605	3333	3255	-78	0	0	3256	3256	3974	3965	-9	0	0	3966	3966	229	223
18 TO 24 HRS.	50.03	2558	2551	-7	0	0	2551	2551	2796	2692	-104	0	0	2693	2693	2700	2687	-13	0	0	2687	2687	228	222

ANNEXURE-5

System Disturbance / System Incidence

1. **System Disturbance on 04.10.2019at Tons HPS**: On dated 04.10.19 at 12.10 hrs. there was MP system was normal and frequency of National Grid was 50.03 Hz, at 12.14hrs, all the three units of Tons HPS tripped on "GT standby Earth Fault" protection, at the same time 220kv Rewa-Birsinghpurckt also got tripped.
   No any system and areas affected. There was a generation loss of 251 MW and no load loss.
2. **System Disturbance on 18.10.19 at ISP**: On dated 18.10.19 at 20.50 hrs. MP system was normal and frequency of National Grid was 50.02Hz, at 20.53hrs, while de-synchronizing unit# 7, LBB protection of 400kv Main bus 2 operatedwhich tripped following elements -
   400kv ISP-Satpurackt
   400kv ISP-Indore ckt-II
   Unit# 6
   The tripped elements have been normalized in due course of time.
   No any system and areas affected as load managed by elements on 400kv Main Bus-1 and nearby network.There was generation loss of 124MW and no load loss occurred.
3. **System Disturbance on 21.10.2019 at 400 kv s/s Bina**: On dated 21.10.19 at 21.50 hrs. weather in MP was normal and frequency of National Grid was 50.06Hz, at 21.59hrs220KV Bina- Gunackt tripped with operation of 220 KV Bus Bar Protection of Bus-I at 400kv s/s Bina. This led to the tripping of following feeders and X-mers of 220kv Main Bus-1:-
   220 KV Bina-Gwalior ckt,
   220 KV Bina-Ashoknagarckt
   220 KV Bina-Sagarckt
   220 KV Bina-Bina I/C-I &II ckt
   315MVA ICT –II & III
   220KV BUS Tie

   All the elements normalized subsequently, 220KV Bina- Gunackt charged through bus coupler because of breaker problem. No any system and areas affected as load managed by elements on 220kv Main Bus-2 and nearby network.There was noload loss and no generation loss.
4. **System Disturbance on 16.11.2019at 400kv Badnawar**: On dated 16.11.19 at 08.25 hrs, MP system was normal and frequency of National Grid was 50.02 Hz.At 08.30hrs, R-phase jumper from 220KV Line side Isolator of 315MVA ICT snapped between Breaker and Line side Isolator which led to the bus bar protection operation ; also ICT tripped on Differential protection, along which following elements tripped –

   220KV Badnawar-Badnagarckt I & II
   220KV Badnawar-Ratlamckt I & II
   220KV Badnawar-Kanwanckt I & II
   There was no generation loss and no load loss.All the elements normalized subsequently.

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Annexure-6.7

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
			JABALPUR REGION SE(T&C) JABALPUR				
1	JABALPUR-I	JABALPUR 220	33KV JABALPUR NO 4	3	0	20	23
			33KV JABALPUR NO 5	5	0	11	16
			33KV JABALPUR NO 6	1	1	10	12
			33KV JABALPUR NO 7	0	1	11	12
			33KV NTPC NO.1.	1	0	15	16
			33KV NTPC NO.2	3	0	23	26
			33KV RAMNAGARA NO 2	0	0	25	25
2		PANAGAR 220	33KV INDUSTRIAL SIHORA	8	0	23	31
3		PATAN 132	33KV KATRA-BELK	0	6	9	15
4		VFJ 132	33KV RICHHAI	2	5	6	13
			33KV ADHARTAL	6	2	2	10
			33KV SAE	1	7	2	10
			33KV GOKALPUR	2	7	2	11
5		SHAHPURA 132	33KV BELK-1	3	0	17	20
			33KV BELK-NO.2	0	2	15	17
			33KV SHAHPURA	6	0	13	19
6		MARHOTAL 132	33KV MARHOTAL	1	0	18	19
			33KV J P NAGAR	1	0	21	22
			33KV SEVER PLANT	5	0	21	26
7		SHRINAGAR 132	33KV GUNDRAI	0	1	15	16
			33KV PARAMHANSI	8	12	8	28
			33KV GOTEGAON NO.II NEW	1	16	1	18
			33KV BAGASPUR	1	6	18	25
8		KATANGI 132	33KV KYMORI	0	7	3	10
			33KV BORIYA	0	7	5	12
			33KV POLA	0	3	8	11
9	KATNI	KATNI 400	33KV KATNI -2	3	1	6	10
			33KV PURENA	0	0	16	16
			33KV DEVGAON	1	2	23	26
10		KYMORE 132	33KV BAMANGAON	1	1	17	19
11		KATNI 132	33KV KATNI IC	3	2	16	21
			33KV PAHARAUA	5	5	0	10
			33KV BILHARI	0	0	15	15
			33KV BADWARA	0	0	28	28
			33KV SLEEMNABAD	8	0	19	27
			33KV KATAIGHAT	9	0	1	10
			33KV NKJ	5	0	16	21
12		SLEEMNABAD 132	33KV DABAR	1	0	19	20
			33KV BAHORIBAND I	3	7	14	24
			33KV BAHORIBAND II	1	1	17	19
			33KV PANUMARIA-1	2	6	21	29
			33KV PANUMARIA-2	3	0	23	26
			33KV SLEEMNABAD	5	5	7	17
			33KV INDUSTRIAL	4	2	35	41
13		MANSAKRA 132	33KV SLEEMNABAD	0	0	45	45
			33KV SIHORA-1	0	0	18	18
			33KV MAJHOLI-2	0	0	23	23
			33KV INDUSTRIAL(UROBOND)	0	0	17	17
			33KV FANWAANI	0	0	31	31
14	JABALPUR-II	NARSINGPUR 220	33KV DEONAGAR.	5	5	0	10
			33KV GOTEGAON	4	6	4	14
			33KV BACHAI	0	13	0	13
			33KV JOBA	0	13	7	20
			33KV BASANPANI	0	16	0	16
15		CHHICHLI 220	33KV CHHICHLI	0	0	14	14
			33KV RUCHI SOYA (TENDUKHEDA)	0	7	6	13
			33KV NTPC I (RAIPUR)	7	8	0	15
			33KV IMALIYA	0	10	0	10
16		NARSINGPUR 132	33KV UMARIYA	9	4	9	22
			33KV GOTEGAON	1	3	29	33
			33KV THEMI	4	0	6	10
			11KV 5MVA TRANSFORMER NO.I	0	15	0	15
			11KV TOWN-I	0	10	0	10
			11KV TOWN-II	0	11	0	11
17		GADARWARA 132	33KV SALICHOUKA	10	5	2	17
			33KV GADERWARA	0	25	0	25
			33KV SAIKHEDA	12	8	0	20
			33KV ATTHAISA	0	11	0	11
			33KV RUCHY SOYA	0	7	14	21
			33KV BANSKHEDA	0	15	19	34
			33KV BLA	0	21	20	41
			33KV SIHORA	0	11	0	11
18		BARMAN 132	33KV DOBHI NO.-I	0	11	6	17
			33KV DOBHI NO.-II	0	19	0	19
			33KV BEETALI-I	0	10	8	18
			33KV BEETALI-II	0	7	8	15

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
19	JABALPUR-II	MANERI 132	33KV BARELA-I	0	39	19	58
			33KV BARELA(2)	0	10	6	16
			11KV INDUSTRIAL	0	23	1	24
			11KV MANERI GRAMIN	0	10	0	10
20		MANDLA 132	33KV BICHHIYA	0	17	0	17
			33KV POUNDI	1	24	0	25
			33KV PHOOLSAGER	0	25	0	25
21		KARAPGAON 132	33KV KARELI	0	10	4	14
			33KV KARAPGAON	0	11	0	11
Abstract of Trippings			**85**				**1651**
JABALPUR REGION SE(T&C) SEONI							
1	SEONI	SEONI 220	33KV CHHAPARA	3	0	22	25
			33KV GOPALGANJ	5	5	10	20
			33KV AKVN	0	1	9	10
			33KV KARIRAT	0	1	23	24
			33KV KALARBAKI	5	1	4	10
2		SEONI 132	33KV BARGHAT	2	1	14	17
			33KV KEOLARI	4	0	21	25
			33KV P.H.E.	2	0	13	15
			33KV KURAI	8	4	11	23
			11KV TOWN - I	1	1	15	17
			11KV TOWN - II	0	12	6	18
			11KV MUNGWANI	1	4	44	49
3		BALAGHAT 132	33KV LALBRRA	0	11	0	11
			33KV KHAIRLANGI	0	10	7	17
			11KV BHARVELLY	0	11	13	24
			11KV LINGA	0	19	5	24
4		KATANGI 132	33KV TIRODI	0	0	20	20
			33KV MOIL	1	0	10	11
			33KV WARASEONI	3	0	13	16
5		BHANEGAON 132	33KV KARANJA	0	11	0	11
6		BAIHER 132	33KV PARASWADA	2	1	19	22
			33KV MOHAGAON	0	0	19	19
			33KV UKWA	1	0	13	14
7		NAINPUR 132	33KV KEOLARI	2	4	14	20
			33KV KEOLARI-II	6	10	19	35
8		LAKHNADON 132	33KV BHEEMGARH	20	22	4	46
			33KV GHANSOUR-I	2	8	8	18
			33KV GHANSOUR-II	0	15	0	15
			33KV JHABUA	0	33	0	33
			33KV DHANORA	1	10	5	16
9		LALBRRA 132	33KV LAMTA	4	0	13	17
10		WARASEONI 132	33KV KHAIRLANGI	0	1	11	12
			33KV KOCHEWAHI	0	0	10	10
			33KV DONGARMALI	2	0	10	12
11		KIRNAPUR 400	33KV KIRNAPUR	1	0	13	14
12	CHHINDWARA	CHHINDWARA 220	33KV ROHNA KALA	5	4	2	11
			33KV CHAND-I	0	0	12	12
			33KV CHAND-II	3	3	10	16
			33KV BANGAON	0	0	11	11
13		PANDHURNA 220	33KV LINGA	0	0	10	10
			33KV JUNEWANI	0	0	10	10
			33KV NANDANWADI	0	2	8	10
14		CHHINDWARA 132	33KV SAORI-I	0	0	12	12
			33KV SAUSAR	1	2	22	25
			33KV THISGORA	0	0	23	23
			33KV UMRANALA-II	0	2	26	28
15		KHAPASWAMI 132	33KV CHANDAMETA	0	2	32	34
			33KV NAVEGAON	5	0	6	11
16		BORGAON 132	33KV RAMAKONA	0	13	1	14
			33KV BORGAON	0	0	10	10
			33KV PIPLA	2	2	9	13
17		AMARWARA 132	33KV SINGODI	0	0	13	13
			33KV CHHUEE	0	0	11	11
18		BICHHUA 132	33KV KHAMARPANI	0	0	13	13
19		SAORI 132	33KV LAWAGHOGRI	0	11	7	18
Abstract of Trippings			**55**				**995**
Abstract of Trippings (Jabalpur Region)			**140**				**2646**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
SAGAR REGION SE(T&C) SAGAR							
1	SAGAR	SAGAR 220	33KV MEDICAL COLLAGE	2	8	0	10
			33KV MAINPANI	1	9	0	10
			33KV JAISINAGAR	1	32	0	33
2		SAGAR 132	33KV NARIOLI	0	1	14	15
			33KV MOTHI	2	3	21	26
			33KV SEHORA	1	0	9	10
			33KV DHARAMSHREE	0	1	9	10
			33KV KAREELA	3	0	9	12
			33KV BANDA	0	1	13	14
			33KV HOUSHING BOARD (DD NAGAR)	5	0	5	10
			33KV CIVIL LINE	0	3	7	10
3		GARHAKOTA 132	33KV CHANAUWA	0	16	12	28
			33KV KEOLARI	0	15	13	28
4		GOURJHAMER 132	33KV BARKOTI	7	17	4	28
			33KV DEORI	6	28	10	44
			33KV MAHARAJPUR	2	19	3	24
			33KV KESLI -I	0	18	0	18
			33KV KESLI-II	1	19	2	22
5		BANDA 132	33KV BANDA	5	1	12	18
			33KV BHADRANA	8	0	2	10
			33KV DALPATPUR	3	5	10	18
6		DAMOH 220	33KV JABERA - I	6	0	4	10
			33KV BANSA	3	4	7	14
			33KV PATERA	2	5	7	14
			33KV PGCIL	5	6	4	15
			33KV NARSINGARH	4	4	15	23
7		DAMOH 132	33KV PHUTERA	4	0	14	18
			33KV IMLAI	7	0	8	15
8		HATTA 132	33KV HINOTA	19	0	43	62
			33KV MARIYADEO	3	0	83	86
			33KV PHATEPUR	3	0	38	41
			33KV BANGAON	41	0	9	50
9		BATIYAGARH 132	33KV BAXWAHA	6	7	47	60
			33KV MAGRON	5	0	8	13
10		TEJGARH 132	33KV TEJGARH/ HARRAI	1	0	9	10
			33KV TENDUKHEDA	3	7	12	22
			33KV JABERA	13	3	7	23
11		RAHATGARH 132	33KV SEHORA	7	5	0	12
12		PATERA 132	33KV PATERA	11	0	24	35
			33KV KUNDALPUR	2	13	5	20
13		RAHLI 132	33KV CHHIRARI	5	0	6	11
			33KV PATNA BUJURG	13	8	9	30
14	TIKAMGARH	TIKAMGARH 220	33KV MOHANGARH	6	2	17	25
			33KV DIGODA - I	0	2	11	13
15		TIKAMGARH 132	33KV AHAR	19	0	25	44
			33KV BADAGAON	26	0	23	49
			33KV MAWAI	10	3	11	24
			33KV DHONGA	7	2	11	20
16		PRITHIVIPUR 132	33KV NIWARI -2	7	4	15	26
			33KV NIWARI -1	14	11	16	41
			33KV MADIYA	5	7	40	52
			33KV PRATAPPURA	3	1	27	31
			33KV ZERON	1	5	31	37
			33KV ORCHHA	9	3	18	30
			33KV TEHARKA	18	3	4	25
17		JATARA 132	33KV HRIDAY NAGAR	3	9	2	14
			33KV BAMORI	**2**	**21**	4	27
			33KV VEERPURA	**11**	**8**	3	22
			33KV PALERA	16	**36**	1	53
18		DIGODA 132	33KV DIGODA	0	12	1	13
			33KV MOHANGARH	4	8	8	20
			33KV LIDHORA	3	2	5	10
19		BUDERA 132	33KV BALDEVGARH	3	8	53	64
			33KV KHARGAPUR	2	0	9	11
			33KV GHUWARA	1	11	38	50
			33KV BUDHERA	11	1	11	23
20		CHHATARPUR 220	33KV DHARARI	9	2	9	20
			33KV GARHI MALEHARA	4	8	24	36
21		BIJAWAR 132	33KV SATAI	2	8	1	11
			33KV CHHATARPUR	21	14	2	37
			33KV BHAGWA	4	11	8	23
			33KV MATGAWAN	14	8	3	25
			33KV KISHANGARH	3	9	2	14
			33KV GULGANJ	3	8	3	14
			33KV BADAMALAHARA	3	18	8	29
22	TIKAMGARH	KHAJURAHO 132	33KV BASARI	1	19	22	42
			33KV PANNA/KHAJURAHO	0	4	11	15
			33KV BAMITHA	0	2	9	11
			33KV RAJNAGAR + BASARI	2	4	14	20
23		NOWGAON 132	33KV MES	7	2	2	11
			33KV HARPALPUR	6	5	11	22
			33KV LUGASI	6	3	20	29
24		LAVKUSH NAGAR 132	33KV LAUNDI	3	0	41	44
			33KV DUMRA	9	18	21	48
			33KV BASANTPURA	5	0	49	54
			33KV CHANDLA	1	2	33	36
Abstract of Trippings			**86**				**2247**
SAGAR REGION SE(T&C) 400KV BINA							
1	BINA 400	BINA 220	33KV KOHA (KHURAI II)	11	0	16	27
			33KV MANDIBAMORA	3	6	6	15
			33KV KHIMLASA	9	0	12	21
			33KV BORL	1	0	16	17
2		KHURAI 132	33KV KOHA	1	0	12	13
			33KV BERI DHANORA	1	0	22	23
3		MUNGAWALI 132	33KV BAHADURPUR	5	3	9	17
			33KV PIPRAI	2	8	3	13
			33KV MUNGAOLI	2	0	10	12
			33KV SEHRAI	0	20	12	32
Abstract of Trippings			**10**				**190**
Abstract of Trippings (Sagar Region)			**96**				**2437**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
REWA REGION SE(T&C) SATNA							
1	SATNA	PAWAI 132	33KV PAWAI	2	15	0	17
			33KV MOHANDRA	1	27	3	31
			33KV AMANGANJ	4	31	0	35
			33KV GUNOR	2	35	0	37
2		AMARPATAN 132	33KV RAMNAGAR	31	28	0	59
			33KV TALA	2	16	0	18
			33KV SATNA	2	15	0	17
			33KV NADAN	22	11	0	33
			33KV KATHAHA	7	13	0	20
			33KV MUKUNDPUR	14	25	0	39
3		MAIHAR 220	33KV AMARPATAN	8	40	0	48
			33KV AMDARA	0	26	0	26
			33KV BADERA	11	27	0	38
			33KV UNCHEHRA	8	36	0	44
4		NAGOD 132	33KV JASO	0	11	4	15
			33KV SINGHPUR	0	11	4	15
			33KV NAGOD	5	10	0	15
			33KV RAHIKWARA	6	4	1	11
			33KV BASUDHA	20	9	4	33
5		KOTAR 220	33KV TIKURI	3	8	5	16
			33KV KOTAR	10	18	12	40
			33KV DAGDIHA LI	7	9	10	26
			33KV BIRSINGHPUR	6	8	10	24
			33KV SUKWAH	9	10	16	35
6		RAMPUR BAGHELAN 132	33KV BELA	1	2	12	15
			33KV MADAHWGARH	2	0	24	26
			33KV GORAIYA	4	7	9	20
			33KV KRISHNAGARH	0	4	58	62
			33KV CHIBOURA	5	13	12	30
			33KV SILPARI	9	1	10	20
7		PANNA 132	33KV PAWAI	5	36	0	41
			33KV AJAYGARH	32	17	0	49
			33KV DEVENDRA NAGER	2	22	0	24
			33KV BRIJPUR	7	19	0	26
8		MAJHGAWAN 132	33KV BARAUNDHA	0	2	11	13
			33KV CHITRAKOOT	3	3	23	29
			33KV MAJHGAWAN	3	2	10	15
			33KV KOTHI	0	6	8	14
9		SATNA 220	33KV JAITWARA	2	0	32	34
			33KV UNCHEHARA	18	8	4	30
10		SATNA 132	33KV KOLGAWAN	8	5	0	13
			33KV KS-1	2	14	0	16
11		SATNA-II 132	33KV TIKURIYA TOLA	11	0	10	21
			33KV ANIKET MATEHNA	1	0	9	10
12	REWA	REWA 220	33KV RATAHRA	1	2	10	13
			33KV SGMH	1	1	23	25
			33KV TEEKAR	14	0	11	25
			33KV MANIKWAR	1	1	11	13
			33KV GURH	1	0	18	19
13		SIDHI 220	33KV MADWAS	1	55	2	58
			33KV SEMARIYA	6	7	14	27
			33KV SIHAWAL(SIDHI)	10	14	2	26
			33KV JP-I	5	9	8	22
			33KV JP-II	5	4	4	13
14		SIRMOUR 220	33KV SIRMOUR	11	10	0	21
			33KV PATEHRA	1	15	0	16
15		REWA 132	33KV BANKUIYA (AKVN)	0	23	0	23
			33KV SEMARIYA	0	31	0	31
			33KV MARTAND SCHOOL	0	11	0	11
			33KV MOHRA	0	20	0	20
			33KV SIRMOUR	0	10	0	10
			33KV AIR	0	18	0	18
			33KV AMIRTI	0	11	0	11
16		SIDHI 132	33KV CITY II	10	1	0	11
			33KV REWA	1	19	0	20
			33KV PATPARA	5	47	0	52
17		MORWA 132	33KV SIDHI	0	2	14	16
			33KV BHIKHAJHIRIA	0	6	54	60
18		WAIDHAN 132	33KV NIGAHI	7	0	6	13
			33KV WAIDHAN	3	0	30	33
			33KV SASAN POWER	4	20	48	72
			33KV NAVJEEVAN VIHAR	9	0	28	37
			33KV NTPC	0	0	11	11
			33KV JAYANT	2	0	9	11
19		MANGAWAN 132	33KV GANGEO	4	18	4	26
			33KV MAUGANJ	2	11	1	14

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
20	REWA	KATRA 132	33KV KATRA	1	4	11	16
			33KV CHAKGHAT	1	10	15	26
			33KV NAIGARHI	4	5	3	12
			33KV TEOTHAR	2	9	11	22
			33KV JAWA	12	2	4	18
			33KV BANSAGAR	9	8	2	19
21		MAUGANJ 132	33KV HANUMANA	0	21	0	21
			33KV MAUGANJ	0	14	0	14
			33KV KHATKHARI	0	16	0	16
22		RAJMILAN 132	33KV KHUTAR	14	8	19	41
			33KV RAJMILAN	3	4	13	20
			33KV PGCIL	6	1	18	25
23		REWA-II 132	33KV RAIPURE	3	18	0	21
			33KV SIRMOUR	3	11	0	14
			33KV MOHRA	4	14	0	18
24		DEOSAR 132	33KV DEOSAR	2	10	0	12
			33KV BEHRI	7	47	0	54
			33KV CHITRANGI	8	47	0	55
25		RAMPUR NAIKEN 132	33KV KOTHIYA	0	17	0	17
26		DONGRITAL 132	33KV KHANUA KHAS	8	8	8	24
Abstract of Trippings (Rewa Region)			**96**				**2443**
SHAHDOL REGION SE(T&C) SATNA							
1	SHAHDOL	UMARIYA 132	33KV MANPUR-I	0	19	0	19
			33KV CHANDIYA-I	4	17	0	21
			33KV CHANDIYA-II	2	31	0	33
			33KV UMARIYA	10	2	0	12
2		BEOHARI 132	33KV BANSAGAR	13	14	0	27
			33KV JAISINGHNAGAR	1	25	0	26
			33KV PAPOUNDH	7	13	0	20
			33KV MADVAS	0	10	0	10
3		DINDORI 132	33KV SHAHPURA	7	12	0	19
			33KV GADASARAI	4	9	0	13
			33KV SAMNAPUR	5	23	0	28
			33KV DINDORI	8	24	0	32
4		BIRSINGHPUR 220	33KV SECL-I	5	29	0	34
			33KV SECL-II	1	11	0	12
			33KV ASCENT HYDRO	1	18	0	19
5		ANOOPPUR 220	33KV JAITHARI	6	33	0	39
			33KV D-OCM	0	25	0	25
			33KV KESHWAHI	3	41	0	44
			33KV NEW DOCM	4	17	0	21
6		SHAHDOL 220	33KV JAISINGHNAGAR	12	7	0	19
			33KV UMARIYA-I	8	10	0	18
			33KV DCL	0	24	0	24
			33KVPANDAV NAGAR (SINGHPUR)	5	24	0	29
7		KOTMA 132	33KV RAJNAGAR	15	0	0	15
			33KV KOTMA OLD	16	0	0	16
Abstract of Trippings (Shahdol Region)			**25**				**575**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
			BHOPAL REGION SE(T&C) BHOPAL				
1	HOSHANGABAD	SEONI MALWA 132	33KV SHIVPUR	0	0	30	30
			33KV DHARAM KUNDI	6	2	14	22
			33KV SURAJPUR	0	15	1	16
			33KV BABRI	7	1	2	10
2		HARDA 132	33KV HANDIYA	4	8	25	37
			33KV KANKARIYA	0	2	14	16
			33KV RAHAT GAON	7	4	15	26
			33KV TIMARNI	0	8	10	18
			33KV SONTALAI	4	0	37	41
			33KV KARTANA	2	3	8	13
			33KV GWAL NAGAR	5	3	3	11
3		PIPARIYA 132	33KV SOHAGPUR	6	4	7	17
			33KV SANDIYA	0	26	0	26
			33KV KANWAR	7	2	3	12
			33KV SHOBHAPUR	1	16	3	20
			33KV SHANKHANI	0	10	0	10
4		HOSHANGABAD 220	33KV HOSHANGABAD	6	1	3	10
			33KV DOLARIYA	6	2	2	10
			33KV SANGAKHEDA	4	1	11	16
			33KV MILK DAIRY	15	0	3	18
			33KV TUGARIY	8	0	15	23
			33KV BUDHNI	11	0	10	21
5		PIPARIYA 220	33KV PIPARIYA SOUTH	3	4	7	14
			33KV PIPARPANI	0	1	13	14
			33KV AKVN	4	1	20	25
6		BANKHEDI 132	33KV CHANDON	5	1	7	13
			33KV MACHHIRA	4	3	7	14
			33KV UMARDHA	7	5	13	25
7		SULTANPUR 132	33KV MAGARDAH	2	9	19	30
			33KV REHTA KALA	10	0	3	13
			33KV MOHAL KALA	1	0	21	22
8		SEMRI HARCHAND 132	33KV BABAI	7	0	10	17
			33KV SEMRI HARCHAND	7	2	20	29
			33KV KAMTHI	5	18	13	36
			33KV MOHASA 1	5	4	18	27
			33KV BHATWARI	5	2	32	39
9		KHIRKIYA 132	33KV KILLOD	1	4	9	14
10	BIAORA	BIAORA 132	33KV BIAORA	0	2	10	12
			33KV SUTHALIYA	0	7	11	18
			33KV KACHRI	0	13	24	37
			33KV DHOODI	0	9	10	19
			33KV SILAPTI	0	6	8	14
			33KV BHOORA	0	31	12	43
			33KV PAGARI BANGLA	0	10	7	17
11		PACHORE 132	33KV BODA	0	9	1	10
			33KV KARANWAS	0	10	1	11
12		SARANGPUR 132	33KV MANGLAJ	0	8	5	13
			33KV P.MATA-II	0	9	4	13
13		ZEERAPUR 132	33KV JETPURA	0	14	3	17
			33KV CHHAPIHEDA	0	14	3	17
			33KV MACHALPUR	0	6	19	25
14		KHILCHIPUR 132	33KV LAKHONI	0	11	12	23
			33KV BHOJPUR	0	11	10	21
			33KV KHAJLA	0	15	11	26
15		KHUJNER 132	33KV KALYAKHEDI	0	17	4	21
			33KV PALYAKHEDI	0	11	1	12
16		RAJGARH 220	33KV PIPLODI	0	4	27	31
			33KV WATER WORKS	0	20	4	24
17	ITARSI	ITARSI 220	33KV ITARSI -2	0	0	11	11
			33KV SPM	0	0	17	17
			33KV JAMANI	0	0	13	13
			33KV PROPLENT - 1	0	0	10	10
18		SARNI 220	33KV NCDC	0	10	0	10
			33KV GHORADONGRI	1	13	0	14
19		AMLA 132	33KV AMLA TOWN	0	2	12	14
			33KV PARSODI	0	5	5	10
20		BETUL 132	33KV PADHAR	2	7	1	10
			33KV HIWARKHEDI	0	1	9	10
			33KV HAMLAPUR	0	4	6	10
21		CHICHOLI 132	33KV SHAHPUR	2	0	15	17
22		MULTAI 132	33KV PRABHAT PATTAN	0	8	3	11
			33KV INDUSTRIAL	0	17	0	17
			33KV DUNAWA	1	10	0	11
23		GUDGAON 132	33KV GUDGAON	1	0	14	15
24	BHOPAL-I	BAIRAGARH 220	33KV 3 EME	0	0	13	13
			33KV NTRO	1	0	36	37
			33KV ITKHEDI	0	0	11	11
25		SEHORE 132	33KV BHAUKHEDI	2	5	3	10
			33KV THUNA	4	2	4	10
26		ASHTA 132	33KV DODI	0	0	13	13
			33KV KHACHROD	3	0	15	18
			33KV LASUDIA VIJAY SINGH	0	8	5	13
27		KURAWAR 132	33KV JHADLA	3	3	4	10
			33KV ACHHAROHI	2	3	6	11
			33KV JAMUNIYA GOP CHOUHAN	2	1	10	13
			33KV LASUDIYA BHAMA	0	0	11	11
			33KV KOTARA	0	0	18	18
28		SHYAMPUR 132	33KV KHAIKHEDA	1	1	9	11
			33KV AHMADPUR	2	2	10	14
			33KV KHAJURI KALA	1	0	11	12
			33KV MUGAWALI	0	0	12	12
29		ASHTA 400	33KV SEWDA	0	10	0	10
			33KV JAWAR	0	12	0	12
			33KV AMLA MAJJU	0	10	0	10
			33KV AMLAHA	0	18	0	18
			33KV KAJLAS	0	18	0	18
30		BILKISHGANJ 132	33KV NIBUKHEDA	1	2	9	12
	Abstract of Trippings		**97**				**1696**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
BHOPAL REGION SE(T&C) 400KV BHOPAL							
1	BHOPAL 400	CHAMBAL BHOPAL 132	33KV ANAND NAGAR	0	0	15	15
			33KV KILANDEV	0	0	16	16
2		AYODHYA NAGAR 132	33KV DAMKHEDA-II	2	1	14	17
			33KV NARMADA	0	4	8	12
			33KV TIRUPATI ABHINAV	0	0	10	10
3		AMRAWADKHURD 132	33KV VALLABHNAGAR 1	1	3	10	14
			33KV VALLABHNAGAR 2	0	3	10	13
			33KV AMRAWAD NO 1	0	3	12	15
			33KV KATARA II	0	1	11	12
4		BHOPAL 220	33KV BHOPAL-III	8	0	4	12
5		ENTKHEDI 132	33KV ENTKHEDI NO. 2	0	1	29	30
			33KV SUKHI SEWANIA	6	0	8	14
			33KV RATUA	4	2	17	23
6	BHOPAL-II	RAISEN 132	33KV GAIRATGANJ	1	11	0	12
			33KV BARLA	3	8	0	11
			33KV NAKTARA	2	14	0	16
			33KV NEEMKHEDA	0	15	0	15
			33KV SULTANPUR	0	12	0	12
7		MANDIDEEP 132	33KV BHOPAL-I	0	1	18	19
			33KV BHOPAL-II	1	0	10	11
			33KV KOLAR	4	1	17	22
			33KV RAMAKHEDI	0	0	11	11
8		MACT BHOPAL 132	33KV NJA	1	11	3	15
			33KV KOLAR	0	12	0	12
			33KV BADJHIRI	0	14	3	17
9		BARELI 132	33KV KUNDALI	1	9	5	15
			33KV HARSLI	6	19	0	25
			33KV KHARGONE	3	30	0	33
			33KV GURADIYA	4	17	0	21
			33KV BAGPIPARIYA	5	25	0	30
			33KV BARNA	3	25	0	28
10		NASRULLAGANJ 132	33KV CHAKALDI	3	41	4	48
			33KV REHTI	2	16	2	20
			33KV LADUKI	0	9	3	12
			33KV NEELKANTH	2	14	2	18
			33KV SEMALPANI	0	11	1	12
			33KV KANKARIYA	0	16	6	22
11		GAIRATGANJ 132	33KV BEGUMGANJ	5	50	8	63
			33KV SILWANI	2	7	5	14
			33KV DEHGAON	1	4	5	10
			33KV DHANDIYA	4	9	11	24
12		MANDIDEEP 220	33KV RELIANCE	0	7	4	11
13		SHAHGANJ 132	33KV NANDER	2	1	14	17
			33KV DIGWAD	3	0	20	23
14		TAMOT 132	33KV GOHAR GANJ	0	1	13	14
15		BAGRODA 132	33KV AKVN - I	2	6	4	12
			33KV DURGA STEEL	1	2	12	15
16		UDAIPURA 132	33KV BORAS	2	44	0	46
			33KV THALADIGWAN	5	45	0	50
			33KV VIKALPUR	14	61	0	75
17		SILWANI 132	33KV SAI KHEDA	2	0	10	12
			33KV BAKSHI	0	0	13	13
18	VIDISHA	VIDISHA 220	33KV LASHKARPUR	0	0	57	57
			33KV HANSUA	0	6	5	11
			33KV BAN	3	1	43	47
			33KV KARARIA	1	0	25	26
19		BERASIA 132	33KV SAPAUA	2	0	22	24
20		SIRONJ 132	33KV MURWAS	0	1	13	14
			33KV SHAHPUR	1	0	18	19
			33KV CHHAPU	1	13	0	14
			33KV UHAR	0	1	9	10
21		GANJBASODA 220	33KV SOMWARA	0	8	21	29
			33KV MASOODPUR	0	24	8	32
			33KV UDAIPUR	0	9	2	11
22		SHAMSABAD 132	33KV TINSHIYAI	1	8	16	25
			33KV GHOLANA	0	13	2	15
23		RUNAHA 132	33KV RUNAHA	0	0	12	12
			33KV NAZIRABAD	0	0	29	29
			33KV RAMGARHA	2	0	9	11
			33KV NAYASAMAND	0	0	16	16
24		SAHARWASA 132	33KV SAHARWASA	8	2	2	12
			33KV KURWAI	1	3	14	18
			33KV PATHARI	0	3	12	15
			33KV UDAIPUR	1	5	15	21
25	VIDISHA	LATERI 132	33KV ANNATPUR	1	0	10	11
			33KV MADAN KHEDI	3	0	16	19
26		SALAMATPUR 132	33KV DEWANGANJ	0	0	10	10
			33KV INDUSTRIAL	0	1	17	18
			33KV BARKHEDI	0	4	32	36
Abstract of Trippings			**79**				**1621**
Abstract of Trippings (Bhopal Region)			**176**				**3317**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
			GWALIOR REGION SE(T&C) GWALIOR				
1	GWALIOR-I	MAHALGAON 220	33KV SAF (POLYTECNIC)	1	0	9	10
			33KV DABKA	1	0	14	15
			33KV MELA	0	1	13	14
			33KV AIR FORCE	6	0	38	44
			33KV M.E.S.	0	0	20	20
			33KV BANDHOLI	0	2	23	25
2		MALANPUR 220	33KV FEEDER NO. 2	0	0	12	12
			33KV FEEDER NO. 4	9	0	16	25
			33KV FEEDER NO.8	0	0	10	10
3		GWALIOR-II 220	33KV BILAUA	11	23	9	43
			33KV INDUSTRIAL CRUSHER MARKET	19	72	6	97
			33KV CITY-I	4	5	10	19
			33KV DIG NAYAGOAN	0	6	6	12
4		MOTIJHEEL 132	33KV CARMEL CONVENT	0	0	15	15
			33KV STONE PARK	0	0	14	14
5		TIGHRA 132	33KV BARAI	8	0	53	61
			33KV GOL PAHIDIYA	2	0	9	11
			33KV DWARIKAPURI	4	0	13	17
			33KV P.T.S. TIGHRA	1	0	15	16
6		MORAR 132	33KV D.D. NAGAR	3	0	10	13
			33KV KALPI BRIDGE	3	0	7	10
			33KV MAHARAJPURA	3	0	21	24
			33KV BHADROLI	0	0	28	28
7		MOHNA 132	33KV GHATIGAON	1	14	1	16
			33KV SEHASRAM	2	14	5	21
			33KV SHUBHASPURA	2	19	0	21
8		HASTINAPUR 132	33KV SUKHLIHARI	20	7	8	35
			33KV HASTINAPUR	4	0	6	10
9	GWALIOR-II	MEHGAON 220	33KV GORMI	1	0	32	33
			33KV GATA	1	0	47	48
			33KV PIDORA	0	0	12	12
			33KV MOW	3	0	27	30
			33KV MEHGAON	8	10	0	18
10		DATIA 220	33KV SITAPUR	9	8	10	27
			33KV DABRA	8	17	17	42
			33KV BADONI	27	17	7	51
11		BHIND 132	33KV UMARI (LAHAR)	8	0	12	20
			33KV PHOOP	4	1	32	37
			33KV ROOR	8	1	34	43
			33KV MASOORI	1	0	9	10
			33KV ITI RURAL	0	16	0	16
12		SEONDHA 132	33KV SEONDHA	8	2	0	10
			33KV INDERGARH MAGROL	2	9	0	11
			33KV ALAMPUR	16	14	0	30
			33KV THARET(LANCH)	54	17	0	71
			33KV BHAGUAPURA (NEW BAY)	27	24	0	51
13		DATIA 132	33KV DAGRAI	0	8	4	12
			33KV RAJGHAT	0	0	10	10
14		DABRA 132	33KV CHHEMAK	19	0	18	37
			33KV BHITARWAR(KARAYAWATI)	10	0	33	43
			33KV LOHGARH	1	0	14	15
			33KV TEKANPUR	7	0	13	20
			33KV CHINORE	0	0	17	17
			33KV NEW PICHHORE	0	0	19	19
			33KV MASHUDPUR	0	0	15	15
			33KV MAGRORA	1	0	9	10
15		LAHAR 132	33KV MADORI	1	7	3	11
			33KV DABOH	3	7	4	14
			33KV SHYAMPURA	1	7	10	18
16		RON 132	33KV RON	10	0	2	12
			33KV MACHHAND	5	0	10	15
			33KV NAYAGAON	7	0	21	28
			33KV GORAE	1	0	12	13
17		GOHAD 132	33KV GOHAD FEEDER	1	15	3	19
			33KV ANDORI	4	25	27	56
			33KV CHITORA	1	19	8	28
18		PRATAPPURA 132	33KV PRTAPPURA	1	0	9	10
			33KV CHOAMO	5	0	22	27
			33KV SURPURA	21	0	7	28

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
19	GWALIOR-II	BHANDER 132	33KV MELA GROUND	8	0	4	12
			33KV T.V TOWER	6	0	26	32
			33KV SARSAI	1	0	27	28
			33KV PANDOKHAR	0	0	34	34
20		CHINNOR 132	33KV GHARSONDI	0	10	1	11
21		INDERGARH 132	33KV LANCH	9	0	28	37
			33KV RARUA RAI	19	0	69	88
22	MORENA	SABALGARH 220	33KV RAMPUR	3	0	8	11
			33KV JHUNDPURA	4	0	26	30
			33KV BADDHPURA	3	0	11	14
23		VIJAYPUR 132	33KV VIJAYPUR	2	3	7	12
			33KV AGARA	2	35	5	42
			33KV BEERPUR	6	67	17	90
24		AMBAH 132	33KV GOTH	0	0	16	16
			33KV ESHAH	1	0	29	30
			33KV GUNJBADA	11	0	14	25
			33KV THARA	2	23	0	25
			33KV RACHHED	10	7	3	20
25		PORSA 132	33KV KHERLY	2	0	9	11
			33KV MANPUR	0	0	26	26
26		MORENA 220	33KV BICHOULA	10	0	9	19
27		MORENA 132	33KV INDUSTRIAL	0	0	14	14
			33KV DEORI	6	1	21	28
			33KV MANDI	2	0	8	10
			33KV BEERAMPUR (BAGHCHINI)	0	0	18	18
28		BADAGAON 132	33KV BADAGAON	14	0	15	29
			33KV KHADIYAHAR	13	0	4	17
29		JOURA 132	33KV SUMAWALI	6	1	10	17
			33KV CHINNONI	3	0	14	17
			33KV NAVODAY	1	0	12	13
			33KV BAGCHINI	0	0	31	31
30	SHIVPURI	SHIVPURI 220	33KV SATANWARA	0	1	23	24
			33KV BHESANA	0	2	9	11
			33KV BANGANGA	0	2	16	18
31		SHEOPURKALAN 220	33KV GURUNAVADA	14	18	10	42
			33KV TILLIPUR	5	4	2	11
			33KV SOTHWA	8	5	5	18
			33KV DHIROLI	4	6	2	12
			33KV AASHIDA	0	10	14	24
32		SHIVPURI 132	33KV BHATNAWAR	14	0	8	22
			33KV PADORA	6	3	8	17
			33KV SHARDA SOLVENT	2	0	8	10
33		PICHHORE 132	33KV NAYA CHAURAHA	3	1	35	39
			33KV MAYAPUR	13	9	2	24
			33KV KHOD	10	8	12	30
			33KV KARARKHEDA	5	5	2	12
			33KV PADRA	2	19	3	24
34		SHEOPUR 132	33KV BARODA	1	8	1	10
			33KV GORUS	12	8	15	35
			33KV BAGDUA	2	6	3	11
			33KV DHONTI	3	16	3	22
			33KV PANDOLA	2	3	5	10
			33KV KALARNA	6	2	2	10
			33KV BHOGIKA (MAYAPUR)	2	8	0	10
			33KV RAMBADE	5	20	3	28
35		KARERA 132	33KV KARERA	2	7	9	18
			33KV BHAGEMA	1	2	16	19
			33KV DINARA	6	2	48	56
			33KV NARAUA	24	12	3	39
			33KV SIRSAUD	2	0	12	14
36		KOLARAS 132	33KV MADIKHEDA	10	10	5	25
			33KV BADARWAS	3	13	12	28
			33KV RAI	10	5	3	18
37		BARODA 132	33KV SALMANIYA	5	3	5	13
			33KV LALITPUR	3	0	14	17
			33KV BHURWADA	7	9	5	21
			33KV ALLAPURA	11	0	4	15
38		BAIRAD 132	33KV GOVRDHAN	3	4	12	19
39		MADA 132	33KV KHARE	3	0	7	10
			33KV INDAR	0	0	10	10
			33KV KHATORA	1	0	14	15
Abstract of Trippings			**140**				**3313**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
GWALIOR REGION SE(T&C) 400KV BINA							
1	GUNA	GUNA 220	33KV W/W	0	4	12	16
			33KV BEHTAGHAT	17	0	31	48
			33KV SINGWASA	3	1	15	19
			33KV BHADORA	0	0	39	39
			33KV MURADPUR	5	3	17	25
			33KV UMRI	0	6	35	41
			33KV GARHA	0	0	18	18
			33KV HARIPUR	0	0	16	16
			33KV NOVODAY	0	0	12	12
			33KV AIR	0	4	11	15
			33KV NANAKHADI	1	4	21	26
			33KV K.S.OIL MILL	0	0	15	15
2		ASHOKNAGAR 220	33KV MAHIDPUR	0	1	12	13
			33KV KHAJUIRY KALA	0	1	24	25
			33KV SEJI	0	0	15	15
			33KV SEMRAHAT	0	3	23	26
3		KAPASI 132	33KV KAPASI	10	3	15	28
			33KV FATHIYGARH	2	4	4	10
4		CHANDERI 132	33KV BANMORE	0	8	12	20
5		ESHAGARH 132	33KV NAISARAI	18	10	1	29
			33KV DHAKHONI	5	3	2	10
			33KV ESAGARH	2	20	1	23
			33KV PARSOL	0	14	1	15
6		MAKSUDANGARH 132	33KV MAKSUDANGARH	4	5	12	21
			33KV TALIGOAN	1	3	6	10
7		ARON 132	33KV RAMPUR	8	8	7	23
			33KV PANWARI HAT	0	1	10	11
			33KV BAROD	0	2	8	10
			33KV BHADORE	0	0	10	10
8		KOTHIYA 132	33KV SEJI	2	6	6	14
			33KV MAGRANA	3	0	11	14
			33KV CHAKCHOROLI	2	1	7	10
9		BHONRA 132	33KV GADLA	14	0	0	14
			33KV NEW GADLA	13	2	0	15
			33KV PARANT	14	0	0	14
			33KV PATHI	11	1	0	12
10		RAGHOGARH 132	33KV JAMNER	0	0	23	23
			33KV DHARNAWDA	0	0	10	10
			33KV KUMBHARAJ-II	0	0	20	20
Abstract of Trippings			**39**				**735**
Abstract of Trippings (Gwalior Region)			**179**				**4048**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
INDORE REGION SE(T&C) INDORE							
1	RAJGARH (DHAR)	RAJGARH (DHAR) 220	33KV HATOD	8	0	6	14
2		RAJGARH (DHAR) 132	33KV AMJHERA (DHAR)	4	1	6	11
			33KV DATIGAON (JHABUA)	0	1	13	14
			33KV ZHAKNAWAD (PETLAWAD)	2	5	3	10
			33KV BHARAT OMAN	1	8	6	15
			33KV PHE	0	0	16	16
3		KUKSHI 132	33KV BAGH	1	1	14	16
			33KV DHOLIYA	5	0	5	10
			33KV DEHRI	7	5	3	15
			33KV BHAVARIYA	8	0	14	22
			33KV DAHI	0	0	11	11
			33KV PHE	2	0	20	22
			33KV WATERWORK	0	0	20	20
4		ALIRAJPUR 132	33KV FLOROSIS	0	6	8	14
			33KV AMBUA	0	11	10	21
			33KV NANPUR (DABADI)	0	8	8	16
			33KV FULMAL (NEW SONDWA)	0	3	8	11
5		MEGHNAGAR 132	33KV KALAYANPURA	0	0	17	17
			33KV THANDLA	0	1	20	21
			33KV JHABUA	0	0	22	22
			33KV INDUSTRIAL	0	1	30	31
6		JHABUA 132	33KV JHABUA	1	0	13	14
			33KV KALIDEVI	0	11	6	17
7		PETLAWAD 132	33KV BAMANIYA	3	0	16	19
			33KV MAHI PHE(CHARAN KOTHRA)	1	11	9	21
			33KV BUS COUPLAR	9	0	10	19
8		JOBAT 132	33KV JOBAT	4	0	10	14
			33KV KALIKHETIYAR	6	0	15	21
9	INDORE 400	S/Z INDORE 220	33KV PAGNIS PAGA.	6	0	4	10
			33KV PITHAM PUR.	1	0	16	17
			33KV DAILY COOEGE.NO. I.	7	0	7	14
			33KV DAILY COOEGE.NO. II.	4	0	7	11
			33KV RAU.	4	0	12	16
			33KV TILLOR.	5	0	5	10
			33KV DATTODA.	1	0	10	11
			33KV INDIRA COMPLEX NO. II.	3	0	12	15
			33KV PALDA INDUSTRIAL.	3	0	20	23
			33KV COMPEL.	1	1	12	14
			33KV KANADIYA	7	0	3	10
10		JAMLI 132	33KV MANPUR	1	0	25	26
			33KV MHOW	5	0	7	12
			33KV MES (KARBALA)	3	0	9	12
			33KV AMBEDKAR	5	0	13	18
11		RAU 132	33KV MHOW	5	0	6	11
			33KV HARSOLA	7	0	5	12
			33KV PANTHER-1	3	3	5	11
			33KV SILICON CITY	11	0	3	14
12		SIMROL 132	33KV DATODA	0	4	16	20
13	INDORE-II	PITHAMPUR (SECT-I) 220	33KV MANPUR	0	3	9	12
14		INDORE WEST 132	33KV NAGIN NAGAR-I	1	0	13	14
			33KV NAGIN NAGAR-II	1	0	10	11
			33KV INDUSTRIAL	2	1	10	13
			33KV PLETHICO	0	0	10	10
			33KV AIRPORT	7	0	6	13
15		BETMA 132	33KV INDUSTRIAL	3	1	15	19
16		DHAR 220	33KV DHAR	9	0	2	11
			33KV TEES GAON	4	0	10	14
			33KV INDUSTRIAL	1	0	9	10
17		GHATABILLOD 132	33KV INDUSTRIAL	1	0	11	12
18		CHHAYAN 132	33KV NANDLAI	8	0	4	12
19		DEPALPUR 132	33KV BETMA	0	1	14	15
20		MANAWAR 132	33KV DCL	0	0	10	10
			33KV KAROLI	1	6	8	15
			33KV AJANDA	1	0	10	11
21		SINGHANA 132	33KV SINGHANA	6	18	2	26
			33KV LOHARI	3	11	3	17

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
22	INDORE-I	INDORE-II (JAITPURA) 220	33KV RAMA PHSPT.	0	6	5	11
			33KV INDUSTRIAL	0	16	9	25
23		BICHOLI (INDORE EAST)	33KV VANDANA NAGAR-II	4	5	10	19
			33KV SANCHAR NAGER-II	4	5	7	16
			33KV DUDHIYA	5	3	6	14
			33KV KANNOD- II	4	3	6	13
24		CHAMBAL INDORE 132	33KV H.T.INDUSTRIAL	0	7	16	23
			33KV GAMBHIR	10	1	3	14
			33KV MANORAMAGANG -I	1	2	12	15
25		N/Z INDORE 220	33KV SECTOR 'C'	1	0	14	15
			33KV HATOD	7	2	8	17
			33KV MANGLIA	5	0	7	12
26		SATYA SAI INDORE 132	33KV TULSI NAGAR	0	0	12	12
27		ELECTONIC COMPLEX 132	33KV E.S.I. -I	0	0	10	10
28		RAUKHEDI 132	33KV BHONDWAS	0	0	14	14
29		SIVANI 132	33KV KHUDEL	0	0	21	21
Abstract of Trippings (Gwalior Region)			**82**				**1257**
INDORE REGION SE(T&C) 400kv KHANDWA							
1	KHANDWA	CHHEGAON (TORNI) 400	33KV CHIRAGPURA	1	4	11	16
			33KV BHOJAKHEDI	0	10	0	10
2		NEPANAGAR 220	33KV NEPANAGAR	13	1	1	15
			33KV DABIYA	1	5	4	10
3		KHANDWA 132	33KV KHAR	3	3	20	26
			33KV GUDI	0	0	11	11
			33KV SIHADA	2	12	11	25
			33KV RANGAON	1	0	11	12
			33KV CHANDEL-I	3	5	10	18
			33KV INDORE ROAD	0	2	15	17
4		CHHEGAON 132	33KV KHANDWA-II	1	0	17	18
			33KV DULHAR	0	0	11	11
5		BAHADARPUR 132	33KV JAINABAD	6	0	13	19
			33KV SHAHPUR-I	4	0	10	14
			33KV INDUSTRIAL	9	0	13	22
			33KV CHAPORA	9	0	3	12
6		BADGAON 132	33KV BADGAON	10	2	1	13
			33KV MANJROD	5	17	23	45
7		MOONDI 132	33KV NARMADA NAGAR	4	1	9	14
8		CHHANERA 220	33KV ROSHANI	7	17	15	39
			33KV KHIRKIYA	1	5	4	10
9		PANDHANA 132	33KV DHULKOT-I	4	2	5	11
			33KV INDUSTRIAL	0	0	10	10
10		BHIKANGAON 132	33KV INDUSTRIAL	0	14	0	14
			33KV BHIKANGAON	8	4	1	13
			33KV BAMNALA	1	20	6	27
11		SINGOT 132	33KV POKHAR	0	24	0	24
12		PIPALPANI 132	33KV NIMANDHAD	0	0	16	16
13	BARWAHA	KHARGONE 132	33KV KHARGONE	4	0	9	13
			33KV AHIRKHEDA	3	0	11	14
			33KV NANDGAON	1	0	28	29
			33KV GOGAWA	3	0	7	10
			33KV MONGARGAON	1	2	11	14
			33KV BHAGWANPURA	11	0	18	29
			33KV NAGZIREE	9	2	3	14
			33KV P.F.C	6	0	4	10
14		KASRAWAD 132	33KV KASRAWAD	1	2	13	16
			33KV SAWDA	2	19	11	32
			33KV MAKADKHEDA	1	10	0	11
			33KV NTPC-II	0	1	9	10
15		ANDAD 132	33KV MULTHAN	0	6	5	11
			33KV DEWLA	0	10	7	17
16		NIMARNI 220	33KV BALSMOOD	3	2	6	11
			33KV DAWANA	1	10	6	17
17		DHAMNOD 132	33KV DHAMNOD	0	17	19	36
			33KV INDUSTRIAL	1	4	12	17
18		BARWAHA 220	33KV BAGOD	4	1	11	16
			33KV SANAWAD-II	3	0	16	19
			33KV JAIMALPURA	3	0	17	20
19		CHHOTI KHARGONE 132	33KV KARAHI	1	1	12	14
			33KV SUNDREL	0	0	14	14
			33KV PIPALGAON	4	0	11	15
20		SANAWAD 132	33KV BEDIYA	4	10	9	23
			33KV RODIYA	9	4	0	13
			33KV NHDC	15	2		17
			33KV DHAKALGAON	0	5	5	10
21		BALWADA 132	33KV BALWADA	0	1	11	12
			33KV CHOURAL	3	4	16	23
22	JULWANIA 400	SENDHWA 132	33KV PALSOOD	1	4	5	10
23		PANSEMAL 132	33KV PANSEMAL	7	3	0	10
			33KV KHETIYA	5	5	1	11
			33KV BADGON	0	12	0	12
24		ANJAD 132	33KV SURANA	1	9	10	20
			33KV SHIVAI	0	11	4	15
25		BARWANI 132	33KV BARWANI	0	12	0	12
			33KV PATI	3	6	3	12
			33KV SONDUL	0	13	0	13
			33KV REHGUN	1	9	2	12
26		SHAHPURA (BARWANI) 132	33KV BALWADI	5	0	5	10
Abstract of Trippings			**69**				**1136**
Abstract of Trippings (Indore Region)			**151**				**2393**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
			UJJAIN REGION SE(T&C) UJJAIN				
1	UJJAIN	BARNAGAR 220	33KV MULTHAN	0	8	2	10
2		GHONSALA 132	33KV KHEDA KHAJURIYA	0	12	0	12
			33KV BICHHROD	0	11	0	11
3		MAHIDPUR 132	33KV BANJARI	0	14	0	14
			33KV KHUNDI KHEDA	0	10	0	10
			33KV MAHIDPUR ROAD	0	14	0	14
4		BHERUGARH 132	33KV GARH KALIKA	2	5	6	13
5		MAKDONE 132	33KV RUPAKHEDI	10	0	0	10
6		RATADIYA 132	33KV CHANDUKHEDI	0	15	0	15
			33KV D/A -2	0	11	0	11
			33KV CHINTAMAN	0	13	0	13
7		AGAR 132	33KV KANAD	29	4	0	33
			33KV MADKOTA	56	1	0	57
			33KV MOYA KHEDA	9	6	0	15
			33KV AGAR	12	0	0	12
			33KV SUZLON-1	0	15	0	15
			33KV ENORCON-1	8	3	0	11
			33KV ENORCON-3	7	5	0	12
8		SUSNER 132	33KV NALKHEDA	0	0	22	22
			33KV SOYAT-1	2	15	0	17
			33KV AMLA	11	0	6	17
			33KV SUZLON-3	0	2	11	13
			33KV ENERCON	1	2	8	11
			33KV SOYAT-2	4	2	14	20
9		NALKHEDA 132	33KV KACHNARIYA	1	5	4	10
			33KV DHAROLA	1	7	4	12
10		UJJAIN 132	33KV WATER WORKS	6	9	0	15
11	DEWAS	DEWAS 220	33KV BHOURANSA	1	11	9	21
			33KV BALGARH	2	8	4	14
12		SHAJAPUR 220	33KV BERCHHA ROAD	9	11	7	27
13		BNP DEWAS 132	33KV SIYA	6	0	8	14
14		MSP DEWAS 132	33KV INDUSTRIAL IV	4	0	17	21
			33KV STEEL INGOT	1	0	9	10
			33KV INDUSTRIAL VI	0	0	11	11
			33KV BAIRAGARH	2	4	4	10
15		CHAPDA 132	33KV ENERCONE I	1	0	11	12
			33KV KAMLAPUR	0	0	10	10
			33KV HAT PIPLIYA	17	1	0	18
16		KANNOD 132	33KV KANNOD	18	0	3	21
			33KV OLAMBA (KHATEGAON)	6	0	5	11
			33KV MSK (KHATEGAON II)	14	0	1	15
			33KV DEHRIYA (SATWAS)	1	0	18	19
			33KV BIJWAD (CHAPDA)	6	0	8	14
			33KV VIKRAMPUR	3	0	9	12
17		SONKATCHH 132	33KV EKLERA MATAJI	4	0	12	16
			33KV TALOD	6	0	13	19
			33KV KHERIA JAGEER	0	0	11	11
18		SHAJAPUR 132	33KV MURADPURA	15	0	11	26
			33KV SHANKAR PURA	14	0	3	17
			33KV KANASIYA	3	0	9	12
19		MAKSI 132	33KV MAKSI	2	0	8	10
20		KHATEGAON 132	33KV NEMAWAR	5	0	21	26
			33KV MSK	0	7	7	14
			33KV SANDALPUR	2	0	15	17
			33KV AJNAS	2	0	11	13
21		SATWAS 132	33KV PALASI	1	1	15	17
			33KV BAI JAGWADA	7	0	11	18
22		BAROTHA 132	33KV BAROTHA	10	0	0	10
			33KV NEORY	0	0	19	19
23	SHUJALPUR	SHUJALPUR 220	33KV JETHDA	2	8	2	12
			33KV RAIPUR	11	0	9	20
24		SHUJALPUR 132	33KV AKODIYA	1	0	9	10
			33KV JAMNER	1	0	11	12
25		ARNIYAKALAN 132	33KV ARANDIYA	4	0	7	11
			33KV POCHANER	6	4	25	35
			33KV BERCHHA DATAR	4	0	11	15
			33KV ARNIYAKALA	7	0	20	27
26		BERCHHA 132	33KV SUNDARSI	0	13	0	13
			33KV LAHORI	0	10	0	10
27		POLAIKALAN 132	33KV AVANTIPUR BARODIYA	1	3	6	10
28		PANWADI 132	33KV PANWADI	1	0	13	14
			33KV SARANGPUR	5	0	9	14
29		MOMIN BARODIYA 132	33KV NAGZIRI	14	1	1	16
			33KV MOHNA	5	4	10	19
			33KV MANDODA	15	2	3	20
30		KALAPIPAL 132	33KV KALAPIPAL	2	3	7	12
			33KV NANDANI	1	1	14	16
Abstract of Trippings			**77**				**1216**

EXCESSIVE TRIPPINGS (10 & MORE THAN 10) OF 33KV 11KV FEEDERS EMANATING FROM EHV S/S'S DURING THE MONTH OF SEPTEMBER-19

SL.NO	NAME OF TESTING DIVISION	NAME OF SUB SATAION	NAME OF FEEDER	TOTAL FAULT TRIPPINGS			TOTAL TRIPPINGS
				O/C trip	E/F trip	O/C+E/F trip	
1	2	3	4				5
			UJJAIN REGION SE(T&C) NAGDA				
1	RATLAM	RATLAM 220	33KV MHW ROAD	8	9	0	17
			33KV SIMLAWADA	4	23	0	27
			33KV SHIVPUR	5	8	0	13
			33KV BILPANK	3	7	0	10
			33KV I.O.C.L.	10	9	0	19
			33KV GANGA SAGAR	2	11	0	13
2		RATLAM 132	33KV DHOLAWAD	2	8	0	10
			33KV MILK CHILING	6	4	0	10
			33KV DHONSWAS (OLD NAME NAMLI)	11	3	0	14
			33KV SHIVGARH	6	7	0	13
3		JAORA 132	33KV DHODHAR	5	0	6	11
			33KV KALUKHEDA	0	4	11	15
			33KV PIPLODA	5	0	11	16
4		A LOT 132	33KV KHARWAKALA	2	9	0	11
			33KV HANUMANTIYA	1	0	12	13
			33KV PATAN	7	0	20	27
			33KV CLEAN SOLAR POWER-I	1	1	8	10
			33KV CLEAN SOLAR POWER-II	1	1	9	11
			33KV NVR CKT-I	0	0	13	13
			33KV NVR CKT-II	0	0	13	13
5		SAILANA 132	33KV RAVATI (OLD NAME SHIVGARH)	8	3	0	11
			33KV DHAMNOD	7	9	0	16
			33KV BAJANA	6	6	0	12
6		BILPANK 132	33KV BIRMAWAL	5	5	0	10
			33KV RANISINGH	3	11	0	14
7		MANDSAUR 132	33KV BOTALGANJ	13	2	0	15
			33KV SONY BOI CAM	10	5	0	15
			33KV GUJARBARDIYA	8	2	0	10
			33KV AMLAWAD	10	6	0	16
8		SUWASARA 132	33KV DHALPAT	33	15	0	48
			33KV KAYAMPUR	14	10	0	24
9		DALODA 220	33KV KACHNARA	5	6	0	11
			33KV KARJOO	0	13	0	13
			33KV SUZLON -I	3	7	0	10
10		GAROTH 132	33KV BOLIA	5	15	0	20
			33KV BARKHEDAGANGASA	2	15	0	17
			33KV BHESODA MANDI	6	8	0	14
			33KV BARDIYA AMARA	5	11	0	16
			33KV SATHAKHEDA	2	15	0	17
			33KV BABULDA	3	7	0	10
11		SUWASARA 220	33KV KANTIYA	0	17	0	17
12	NEEMUCH	NEEMUCH 220	33KV DHANERIYA	8	0	4	12
			33KV NAYAGAON	2	8	0	10
			33KV MORVAN	6	2	3	11
13		NEEMUCH 132	33KV HARKIYA KHAL	10	2	6	18
			33KV SAVAN	8	1	10	19
14		MANASA 132	33KV RAMPURA	0	8	11	19
			33KV KANJARA	0	4	9	13
			33KV AANTRI	10	10	9	29
			33KV KUKDESHWER	8	5	4	17
15		RATANGARH 132	33KV SINGOLI	0	10	2	12
16		BHANPURA 220	33KV NEEMTHUR	20	1	20	41
17		MALHARGARH 132	33KV BUDHA	0	8	3	11
			33KV NARAYANGARH	2	3	7	12
18		SITAMAU 132	33KV NATARAM	2	8	9	19
			33KV MANPURA	2	4	7	13
19	NAGDA	NAGDA 220	33KV TAL	11	0	2	13
			33KV MAHU MATRA	20	1	23	44
			33KV UNHEL	0	0	12	12
			33KV MHETWAS	4	0	11	15
			33KV HATAI PALKI	14	1	2	17
			33KV MAHIDPUR ROAD	6	0	6	12
			33KV MOHANA	1	3	10	14
20		KHACHROD 132	33KV BURANABAD I	0	0	11	11
21		TAL 132	33KV LOD	3	2	10	15
			33KV TAL TOWN	11	0	1	12
Abstract of Trippings			**66**				**1043**
Abstract of Trippings (Ujjain Region)			**143**				**2259**

ANNEXURE-9.4

LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER				
SATNA CIRCLE				
SATNA 220				
1	**132 KV BUS TIE**	**MW/MVAR**	65/5	0/0
REWA220 KV S/S				
1	**220 KV BUS COUPLE**	CB	FAULTY	CLOSE
2	**132 KV SAGRA**	CB	FAULTY	CLOSE
JABALPUR				
LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER				
PANAGAR 220 KV S/S				
1	220 KV SUKHA 1	CB	FAULTY	CLOSE
SHAHPURA 132 KV S/S				
1	132 RTS	MW /MVAR	0	7/1
NARSINGPUR 220 KV S/S				
1	132 KV DEVNAGAR	CB /MW/MVAR	FAULTY / O	Process connection required
2	132 KV KARAKBEL1	CB /MW/MVAR	FAULTY / O	Process connection required
3	132 KV KARAKBEL2	CB /MW/MVAR	FAULTY / O	Process connection required
SAGAR				
LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER				
DAMOH 220 KV S/S				
Sr.	DESCRIPTION	Status	Telemetry value at SLD	Actual value at site
1	220 KV KATNI	CB	FAULTY	CLOSE
SEONI				
LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER				
KIRNAPUR 132 KV S/S				
Sr.	DESCRIPTION	Status	Telemetry value at SLD	Actual value at site
1	132 KV BUS BALAGHAT 1 & 2	MW/MVAR	26/16	;-40/20
ISP				
TU REPLACE --- UNDER OBSERVATION ------- DATA UPDATION SOME DELAY				
GENERATION				
	Name		at SLDC end	at site end
SATPURA T P S				
1	**400 KV SEONI**	**MW**	**99**	85
SINGHA JI phase 2 S T P S				
1	**GEN NO 3 & 4**	**RGMO**	**N/A**	
S G T P S				
1	220 /33 KV TR	MW/MVAR	NA	
2	**GEN NO.1,2,3,4**	**RGMO**	**N/A**	
BARGI				
1	132 KV BUS 2	VOLTAGE, FREEQUENCY	N/A	
2	**GEN NO 1 ,2**	**RGMO**	**N/A**	
GANDHI SAGAR H P S				
TELEMETRY OUT				
DEOLON				
1	ALL GEN	CB	CLOSE	OPEN
Sr	Name of Substation			
INDORE				

		INDORE 400 KV S/S		
2	220 Kv TBC	CB	Faulty	Open
		PITAMPUR 220 KV S/S Sector-III		
1	160 MVA X-mer-III HV & LV side	CB	FAULTY	close
2	132 Kv TBC	CB	FAULTY	Close
		PITAMPUR 220 KV S/S Sector-I		
1	160MVA TRF-1 LV Side	CB	Open	CLOSE
		INDORE SZ 220KV S/S		
1	132 Kv Main Bus-II	KV,HZ	N/C	
		132 KV S/S CHHEGAON		
1	132KV RAILWAY TRAC 2	CB	Faulty	Close
2	132KV RAILWAY TRAC 1	CB	Faulty	Close
		CHHEGAON 400 KV S/S		
1	All X-mer	OLTC	Not Coming	
2	160 MVA X-mer -III HV side	CB	Faulty	CLOSE
3	40 MVA X-mer-I HV Side	CB	Open	Close
3	132 Kv KHandwa	MW,MVAR	Not Coming	
		132 kv s/s khandwa		
1	132/33 kv X-mer	CB	FAULTY	CLOSE
		220KV S/s DHAR		
1	220 Kv bus coupler	CB	faulty	close
		JULWANIA 400 KV S/S		
1	400 KV TBC	CB	open	close
2	400 Kv Bus Tie	CB	close	open
3	220 kv Bus coupler	CB	faulty	close
4	160 Mva X-mer- I HV Side	CB	Not Coming	close
6	220 Kv Sendhwa Ckt-I&II	MW,MVAR	Not Coming	Close
		Pansemal 132 KV S/S		
1	20MVA&40 MVA X-mer	CB	Not coming	Close
		BHOPAL		
		LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER		
				04-01-2020
		ASTHA 400 KV S/S		
1	400 KV BUS-COUPLER	CB	FAULTY	
		SHEOPURKALAN 132 KV S/S		
1	BUS 1	VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
2	INTERCONNECTOR -2	MW/MVAR	NON CURRENT	
		HARDA 132 KV S/S		
1	132 KV KHIRKIYA	CB	NON CURRENT	CLOSE
2	CHANNERA(TAP KHIRKIYA RLY T	CB	FAULTY	CLOSE
3	132 KV KHIRKIYA RLY TRCN-1	CB	FAULTY	
		GUDGAON 220 KV S/S		
1	220 KV BUS-COUPLER	CB	FAULTY	
2	220 KV BUS-TIE	CB	FAULTY	
		BAIRAGARH 220 KV S/S		
1	TBC	CB	FAULTY	
		BHOPAL 220 KV S/S		
1	BUS 2	VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	

		BINA		
		CHANDERI 132 KV S/S		
1	132/33 X- MER 2	CB	FAULTY	
2	132 KV BUS	VOLTAGE	NON CURRENT	
3	132 KV BUS	FREQUENCY	NON CURRENT	
		DATIA 132 KV S/S		
1	132/33 X-MER1	CB	FAULTY	
		ESHAGARH 132 KV S/S		
1	GUNA	CB	FAULTY	
		VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
2	BUS COUPLER	CB	FAULTY	
		VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
		HANDIA 220 KV S/S		
1	ITARSI -2	CB	FAULTY	
		GWALIOR 220 KV S/S		
1	BC	CB	FAULTY	
		HOSHANGABAD 220 KV S/S		
1	TBC 132 KV END	CB	NON CURRENT	CLOSE
		MALANPUR 220 KV S/S		
1	220/132 X-MER 3	CB	FAULTY	
		VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
		BHOPAL 400KV		
		MANDIDEEP 220 KV S/S		
1	TBC	CB	FAULTY	
2	BC	CB	FAULTY	
3	BC132 KV END	CB	FAULTY	
		PIPARIA 220 KV S/S		
1	BUS 2	VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
		SABALGARH 220 KV S/S		
1	220/132 X-MER 1	CB	FAULTY	
		SATPURA 400 KV S/S		
1	220 KV END BUS -1	VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
	BUS -2	VOLTAGE	NON CURRENT	
		FREQUENCY	NON CURRENT	
		UDAIPURA 132 KV S/S		
1	BC	CB	FAULTY	
2	TENDUKHEDA	MW/MVAR	NON CURRENT	
		CB	FAULTY	
3	132/33	MW/MVAR	NON CURRENT	
		LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER		
	05-11-2019			
		ASHOKNAGAR 220 KV S/S		
1	132 KV BUS COUPLER	CB	FAULTY	
		ESAGARH 132 KV S/S		
1	132 KV BUS COUPLER	CB	FAULTY	
2	132 KV BUS COUPLER	MW/MVAR	NON-CURRENT	
LIST OF TELEMETRY DISCRIPIENCY AND NOT CONNECTED PARAMETER				

	04-01-2020			
220 KV S/s VIDISHA				
1	132 KV SALAMATPUR	MW	NON-CURRENT	
UJJAIN				
Dewas BNP 132KV				
1	40 MVA X-mer HV side	CB	Faulty	Close
132 KV S/S AGAR				
1	132kV Buscoupler	CB	Faulty	Close
SHUJALPURR132 KV S/S				
1	132 Kv Sujalpur INCT Ckt -II	CB	Open	Closed
2	160 MVA X-mer -II	CB	Faulty	CLOSED
220 KV S/S JAORA				
1	220 Kv Buscoupler	CB	Faulty	close
2	220 KV & 132 KV Main Bus	KV , HZ	Not coming	
3	220 Kv DALODA	CB	Faulty	close
132 KV S/S SAILANA				
1	132 Kv Sailana Inc-II	CB	Not coming	close
220 Kv Nipaniya				
1	All 220 Kv side Ckt	CB	not coming	CLOSE
400 KV Badnawer				
1	400 Kv TBC	CB	Faulty	Close

ANNEXURE-9.7

SOE VERIFICATION PENDING	
400 KV	Astha
132 KV	Harda
132 KV	Udaypura
132 KV	VFJ
220KV	GUDGOAN
132 KV	KURAWAR